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Using the Internet to Support Libyan In-service EFL Teachers' Professional Development

R e d a   E l m a b r u k

Thesis submitted to the

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for

the degree of Doctor of Philosophy

March 2008

Declaration

I declare that this thesis is the product of my own work, which has not, whether in the same or different form, been presented to this or any other university in support of an application of any degree other than that for which I am now a candidate.

Signed: …………………………………………………

Reda Elmabruk

March 2008

Abstract

Libyan in-service teachers of English with poor INSET provision and low-resourced school environments stand to gain a great deal from Internet-based Continuing Professional Development (I-CPD). The aim of this exploratory and descriptive study was threefold: first, to understand current practices and conditions pertaining to CPD provision for Libyan teachers; second, to explore the potential of Internet-based CPD for Libyan teachers through a bottom-up informal approach; third, to develop an I-CPD model appropriate for the Libyan context.

A mixed-method interventionist case study approach formed the methodological framework of the research. Fact Finding (Phase 1) was carried out to scout the field using a teachers' questionnaire and semi-structured interviews at six language schools in Tripoli. In the Case Study (Phase 2) a typical language institution with in-house Internet access was selected to deliver a progressive intervention course designed to meet the needs of teachers in low-resourced school contexts, but with access to public Internet cafés. Eight case teachers were engaged in problem-based learning to enhance their Internet skills, then using instructional, peer and task support teachers were engaged in blended learning via a web-based Yahoo Group. A ten-week long Extended Case Study (Phase 3) merged Case members from Phase 2 with other teachers from Libya and the UK, forming a larger online group (60 participants) facilitated by a web-hosted Virtual Learning Environment (Merlin).

The Fact Finding phase revealed an overall intermediate level in Internet skills and encouraging attitudes towards I-CPD. A more organised petroleum sector emerged, where professional development was assigned higher priority than in the public or private sectors. The Case Study data showed moderate teacher participation in blended learning while task responses reflected minimum engagement with tasks, and little critical reflection. The low response in the Extended Case Study phase prompted attention to the possible causes of low online participation.

In addition to generic barriers to asynchronous online learning, such as lurking and the lack of time, underlying context-specific causes have emerged which point to what is termed *intellectual-error phobia (ie-phobia)* within unbonded groups: while teachers readily participated in low-level tasks, when faced with high-order group-based tasks, they admitted fear of posting trivial responses that were archived and perhaps criticised by other teachers. To minimise ie-phobia and encourage online interaction, a blended multi-dimensional support model is proposed in which f2f orientation and social cohesion precede Internet-based learning that adopts progressive online activities, thus gradually fostering teacher independence and promoting sustainable I-CPD that is holistic and optimised.

Dedication

To my dear wife, I dedicate this work of mine

Through times, hard and fraught with turbulence

She patiently stood by

Cheering, comforting… hardly ever the whine

Inspiring in me strength and confidence

To conquer reams of paper mountains high

Never could I have summoned such competence

No matter how hard I try

In dedicating due gratitude… nevertheless;

And for that professional ego of mine,

It was simply, a matter of do… or die.

And hence, for the sake of remembrance,

(Reda Elmabruk, September 2007)

I shall be telling this with a sigh

Somewhere ages and ages hence:

Two roads diverged in a wood, and I-

I took the one less travelled by,

And that has made all the difference.

(Robert Frost: Extract from The Road Not Taken, 1915)

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List of Abbreviations

CPD ....Continuing Professional Development
CS ....Case Study
ECS .... Extended Case Study
EFL .... English as a Foreign Language
ELT .... English Language Teaching
f2f ....Face-to-face (mode of teaching)
FF ....Fact Finding
I-ELT ....Internet-based English Language Teaching
I-CPD ....Internet-based Continuing professional Development
I-LD...Internet-based Language Development
INSET .... IN Service Education of Teachers
LD ....Language Development
NB...Notice Board
NNEST...Non-Native English Speaker Teacher
OET ....Online Education and Training
PAQ..Pre-intervention Assessment Questionnaire
PAT .... Post-intervention Attitude Test
PBL...Problem-Based Learning
PCQ...Pre-intervention Course Question
RD..Reflective Diary
TED ....Teacher Education and Development
VLE .... Virtual Learning Environment
WELL...Web Enhanced Language Learning
YG ....Yahoo Group

Chapter 1: Introduction- Background to the study

As an individual passes from one situation to another, his world, his environment, expands or contracts. He does not find himself living in another world but in a different part or aspect of one and the same world. What he has learned in the way of knowledge and skill in one situation becomes an instrument of understanding and dealing effectively with the situations which follow (Dewey J, 1938: 44).

1.1 The macro context:

The Internet has been available in Libya since 1998, but Internet-based learning has yet to be implemented in professional development and higher educational contexts. Given the lack of INSET (In-Service Education and Training) provision for EFL teachers, using the Internet as an alternative platform for enhancing CPD (Continuous Professional Development) seems an opportunity missed. This thesis reports on an exploratory case study describing attempts to engage and support public and private in-service secondary EFL teachers in constructivist Internet-based Continuous Professional Development (I-CPD) activities set within the pedagogic context of an intervention course, whilst recording and evaluating participants' responses to and contributions in such activities.

Although in-service teachers are encouraged to pursue informal self-directed study to enhance their own development and compensate for the INSET gap, the I-CPD intervention course, carried out as a context for data collection, may be perceived as top-down intervention. While this may be true, a research activity often constitutes an intervention into the social order under investigation (Wolff, 2002). It is therefore hoped that, as a result of this study and the planned intervention, EFL teachers in both government and private schools will be empowered to assume control of their own I-CPD.

A macro context for the research is provided in sub-sections 1.1.1 to 1.1.4. Because the Libyan e-learning context has not been academically researched as far as teachers' CPD is concerned, it was appropriate to present a brief account of the Libyan education system, a background of Teacher Education and Development (TED) and the present status of English Language Teaching (ELT) in Libya. To complete the context-setting perspective, a historical account and an overview of the economic and educational background under which in-service English language teachers and institutions function in Libya are provided. A micro context follows in sub-section 1.2, in which a rationale for the research is linked

with my teaching background. The problem statement and the main research questions
are also outlined.

1.1.1 Economic and historical background:

Figure 1.1: Map of Libya

The official name for Libya (Figure 1.1) since 1977 has been the 'Great Socialist People's Libyan Arab Jamahiriya'. Located on the North African coast of the Mediterranean Sea, Libya has a population of about 5.5 million, with the capital Tripoli estimated at 1.7 million. In geographical terms, Libya has an area of approximately 1,760 square kilometres, which is about twice the size of France and Germany put together (Vimpany, 2004).

Libya is a major oil producer with significant resources and is one of Europe's biggest North African oil suppliers. Oil revenues account for approximately 95% of export earnings, and 30% of the Gross Domestic Product (GDP). As an indication of economic growth, per capita GDP is one of the highest in Africa, and in 2003 was estimated at $6,400 compared with, for example, Egypt's $1,470 (International EFL Cafe, 2005).

In the 7th Century AD Libya was conquered by the Arabs, who brought with them the Islamic religion, culture and Arabic language which influenced political, economic and social life in the whole of North Africa. In the mid-16th century, Libya was annexed to the Islamic Ottoman Empire until the Italian colonisation in 1911 (Wikipedia, 2005), which met fierce resistance by Libyans. During the Italian colonisation, however, Libyan education suffered badly as Italy did not seek to develop education as other colonial powers had done, such as the French in Algeria, for example. On the contrary, during the Italian annexation of Libya, complete neglect of education for Arabs prevented the development of professional

and technical training, creating a shortage of teachers, skilled workers, technicians and administrators (Country Studies, 1987).

Following the end of World War Two and the defeat of the Italians in Tobruk in 1945, Libya's relationship with Britain grew. For an interim period of seven years from 1945 to 1952, Libya was overseen by Britain through a United Nations mandate. During this period, education in Libya was gradually modelled on Egypt's education system. As Libyan-British relations developed, new trade and economic links were established between the two countries and consequently, English became more or less the language of business (Blackwell, 2003).

Libya eventually achieved full independence and was declared a constitutional monarchy under King Idris on 24 December 1951. Two years later, in 1953, Libya formalised its relations with Britain under the Anglo-Libyan treaty of friendship and alliance. This treaty gave the British land and transport facilities for military purposes in exchange for aid (UK Embassy, 2005).

Oil exploration in Libya began in 1955 and oil was first exported in 1961. The discovery of oil transformed Libya from a relatively poor country to one of the wealthiest. However, popular resentment grew as wealth was increasingly accumulated in the hands of the elite. Eventually, the bloodless Al-Fatah revolution, led by Colonel Muammar Al-Qadhafi on 1st September 1969, toppled the Kingdom and a revised constitution was established. The British and American military bases in Libya were declared closed in March and June of 1970, respectively. By 1971, libraries and cultural centres operated by foreign governments, including the British Council office, were also ordered to close.

In 1973, Al-Qadhafi announced the start of a "cultural revolution" in educational institutions. 1977 was the beginning of "people's power" where authority was handed down to the people through the General People's Congress. On 2 March 1977, the constitution was amended accordingly and the era of 'Jamahirya' (state of the masses) began (International EFL Cafe, 2005).

In April 1984, Britain severed its diplomatic links with Libya as a result of the killing of

policewoman Yvonne Fletcher, as she was on duty during a demonstration by Libyan

opposition outside the Libyan embassy in London. In 1985, the consequences of this

incident impacted on the academic life of Libyan students in Western countries as they

were recalled to Libya and their study grants terminated.

A bombing at a discotheque frequented by American military personnel in West Berlin in

1986 caused the US to point the finger at Libya and retaliate in an air raid on Tripoli. In

the same year, 1986, the US imposed unilateral economic sanctions on Libya (Country

Profile, 2005). It was against this backdrop of the American air raid and the US sanctions

on Libya that an Arabisation campaign took place, in which Libya sought to eliminate

Western influence, including English language, which was withdrawn from the school

curriculum. The withdrawal of English from the Libyan education system lasted for six

years, between 1986 and 1992. More about the consequence of this is discussed in sub-

section 1.1.2.2.

The Lockerbie disaster, in which Pan Am flight 103 was bombed over Scotland, took place

two years later, in 1988. As Libya was implicated in the Lockerbie bombing, the UN too

imposed sanctions on Libya in 1992. The years of isolation, due to the US sanctions

against Libya between 1986 and 2004 and the UN trade embargo from 1992 to 1999, took

their toll. As a result of these sanctions, access to equipment and technology was

restricted and the physical infrastructure deteriorated (MBendi, 2000).

> The 1990s were years of political and economic isolation and decline for
> Libya. The sanctions and trade embargoes brought about rising import
> costs and inflation in Libya's domestic economy, resulting in a
> deteriorating standard of living for most of its citizens (Country Profile,
> 2005: 3).

It was not until 1999, when Libya handed over the two suspects associated with the

Lockerbie disaster of 1988, that the UN sanctions were suspended. In the same year,

1999, the British Embassy reopened in Tripoli as the Libyan government paid

compensation for the death of policewoman Yvonne Fletcher. Soon after, an office for the

British Council was opened at the British embassy.

In 2003, the UN completely lifted the 11-year-long sanctions because of Libya's commitment to compensate the victims and relatives of the Lockerbie disaster. Finally, and as a result of Libya's declaration to dispose of its Weapons of Mass Destruction, the United States' commercial sanctions on Libya were removed in September 2004.

With the 11-year old economic sanctions lifted, Libya has now re-emerged in international, political and trading circles and looks forward to re-establishing commercial and investment activities with the rest of the world. In consequence of renewed relations with the West, Libya has also announced plans to attract foreign investment in the rebuilding of its weakened infrastructure, such as its telecommunications network (Country Profile, 2005).

On the academic front, the Middle East Institute at SOAS (School of Oriental and African Studies) hosted the second British-Libyan relations conference in London, between 26 and 27 July 2004 (the first conference was organised by the University of Al-Fatah and the British Council, Libya in 2000). As the conference was attended by academics and practitioners from both sides, 'it comes at a time as Libyan's relations with the UK and the rest of the world are witnessing major improvements' (The News, 2004). Following an English Language Training Conference and Exhibition (ELTEX) held in Tripoli in March 2005, the British Ambassador in Libya emphasised that

> the United Kingdom and Libya have a long history of mutual co-operation and friendship in the Oil and Gas sector. We look forward to seeing a similarly close relationship developing in the education sector too, against the background of the current steady improvement in UK/Libyan government relations (HM Ambassador, 2005: 2).

1.1.2 Educational background:

According to Abou Jaafar (2003), the objectives of the Libyan education system stress the importance of developing new ways to advance technical and professional development and supporting individual capacities; education programs should empower learners by equipping them with the latest Information and Communication Technology (ICT) skills, distance learning and online learning techniques, so that they can rely on themselves as independent self-directed learners. However, the mere provision of online learning technologies may not necessarily lead to self-directed learning. For novice learners, there

is an obvious need to harness digital technology with appropriate skills and the provision of

pedagogic support until learners feel able to interact and develop independently.

Established in 1993, the National Centre for Educational Planning and Training (NCEPT)

assumed responsibility for school inspection and aims to enhance in-service teachers'

professional competence through structured training and development programmes

including distance education (NCEPT, 2005). In discussing the advantages and

disadvantages of online learning, an NCEPT delegate concluded that although 'virtual

education' underwent some difficulties in the West, online learning should not be excluded

altogether, but adapted to suit local educational and institutional needs (NCEPT, 1999).

Unfortunately, up to the time of writing, no steps have been taken to put this perspective

into practice.

1.1.2.1 Distance education:

The Libyan Open University (LOU) was established as a distance education provider in

1987, its aims being, as Abou Farwa (2003) explains, to promote continuing professional

development, support independent learning skills and encourage disadvantaged female

learners. The LOU runs a teacher training programme in which in-service teachers are re-

trained to teach in other relevant disciplines according to schools' needs. The 19 study

centres of the LOU provide distance learning using textbooks, paper-based material,

television broadcasts and video, all of which are combined with face-to-face seminars and

summer schools.

According to Abou Farwa (2003), the Internet was introduced to the LOU in 2002 and e-

mail was incorporated to enhance distance learning. However, such reference to the use

of the Internet proved to be misleading. An interview with the LOU President (conducted

in Arabic) revealed that 'the Internet' consisted of no more than a single computer with an

Internet connection, solely for the use of teaching staff. As Fullan (1991: 22) observes,

innovations are sometimes adopted for 'symbolic rather than real change', either to appear

innovative or gain resources. To support the claims for using the Internet, the president

pointed to an LOU website. Rather than providing teaching material, the site merely offers

information about various departments and courses, guidelines about acceptance and enrolment, and dates for examinations.

During the interview, the LOU president did not appear enthusiastic about the prospects of online higher education in Libya under current conditions. For him, my research seemed like 'putting the cart before the horse'. While he acknowledged the potential of the Internet for providing flexible learning, he pointed to a major drawback: the lack of financial resources. He also pointed out several social, technical and bureaucratic obstacles within the Libyan context, such as teachers' low motivation, low pay, poor computer and Internet skills, lack of incentives for good teachers, and family commitments - particularly of female teachers. He summed up by saying that the problem in implementing online education in Libya was that of allocating adequate resources not of policies or principles.

1.1.2.2 The context of ELT:

Since 1954 (following the Anglo-Libyan friendship treaty), English continued to be taught from primary year 5 (age 10) until the completion of secondary education (see Appendix A for an outline of the Libyan education system). Following the cultural revolution in 1973, ELT was pulled back to year 7. This continued until English was withdrawn altogether from the school system between 1986 and 1992, following an Arabisation campaign in the aftermath of the American air raid and the US sanctions on Libya (see sub-section 1.1.1). The consequences of this ill-advised withdrawal of English were far reaching, not just for learners, but also for teachers and inspectors alike.

In 1986, new pupils at the year 7 had no English language classes at all, and those who moved on to secondary education could not improve upon their existing English. Subsequently, apart from a fortunate few who could afford private language tuition, a whole generation of undergraduates entered higher education in 1992 with hardly any knowledge of English.

Moreover, from 1986 to 1992, teachers of English had no jobs and many took on alternative positions, such as teaching history or geography. A lucrative private market for ELT had been inadvertently created, through which public-sector teachers competed for

part time positions to supplement low earnings. Similarly, school inspectors too were

obliged to resort to private language teaching along with other teachers of English.

Due to the improvements in Libya's relationship with the West and the suspension, in

1999, of the UN embargo, English has regained its status in Libya as an international

language. While English will continue to be the main language of communication within

the petroleum sector, an influx of foreign companies seeking local offices in Libya is

creating a need for English speaking staff. Developments in the tourism sector are also

creating the need for local agents and guides able to communicate with tourists and tour

operators.

In response to such educational and market requirements, the Libyan government

reviewed its ELT policy. In addition to introducing a new English syllabus for secondary

schools, English is now taught from primary year 5 (age 10), beginning from 2006/07, just

as it was 42 years ago. The ELT initiative also coincided with the introduction of ICT at

year 5, both of which are supposed to enhance pupils' achievements and learning

outcomes in English and computer literacy.

1.1.3 The context of in-service teacher development:

1.1.3.1 INSET policy and provision:

The General People's Committee for Education (Ministry of Education), which is attached to

the General People's Congress (equivalent to the Parliament in the UK), is the highest

executive power in Libya with regard to education. It is the responsibility of this

committee, as stated by Abou Jaafar (2003: 16), to 'set education and training plans,

provide teachers, trainers… to meet the training needs of different sectors and organize

and execute educational programs in schools', which can include teacher training

programs. Abou Jaafar (2003) emphasises that

> laws and legislations have been adopted in order to regulate the
> educational system and to give executive powers (Secretaries of
> Education, Training and Scientific Research) all the needed powers to
> develop education and to renew it, through the development of
> educational programs and teaching methods (p. 21).

However, based on interviews with EFL teachers, inspectors and some officials, a grim status of INSET provision has been revealed. In practical terms, INSET provision appears to be erratic and rather responsive, that is, arranged as and when pedagogic needs arise rather than stemming from a long term proactive policy for continuing development (Inspectors A, B, E and F).

Following the launch in 2000 of the new, and relatively more difficult, secondary *English for Libya* syllabus, existing teachers were struggling to cope with the rich English content, which resulted in low standards of pupil achievements (Inspectors A and B). With respect to the new ELT syllabus, levels of graduates' competence were described by Inspector E as inadequate:

> *The first problem is, most of the new teachers are not qualified*
> *enough… for this new [secondary] course book.*

Inspectors A and B argued that the level of the new secondary syllabus was higher than the level of many university graduates. Teacher G echoed that the need was for:

> *more qualified teachers to suit the high level of the new syllabus. Now*
> *the syllabus is OK, but the teachers are not OK. We have an advanced*
> *syllabus, more advanced than the teachers.*

With reference to this and to Initial Teacher Education, the Libyan Minister for Higher Education expressed concern about the present levels of teacher competence, observing that graduate teachers of English simply lacked competence to teach the new syllabus effectively (Cultural Corner, 2004). Subsequently, the demand for more qualified and competent teachers to cope with the new syllabus grew sharply.

Consequently, a summer training course for in-service teachers had to be abruptly organised by the education authorities in association with *Garnet Publishing* in 2003; there had been no other INSET courses for EFL teachers since the withdrawal of the English syllabus from schools in 1986 (Inspectors D and E). Inspector E noted that some progress in teacher performance had been observed as a result of these refresher courses, but overall, standards are still in need of improvement. To teach the new syllabus effectively, future graduates of English will be required to complete a six-month teacher training course (Official C).

1.1.3.2 Lack of incentives:

For over a decade, public school teachers have been underpaid despite rises in inflation.

According to Headmaster D and Teacher C, newly appointed public school teachers (grade

7) are paid a gross monthly salary of 175 LD (Libyan Dinars), which is equivalent to $134

(2004 exchange rate of 1.305 LD to the Dollar). A grade 11 teacher with about 15 years

of experience may earn up to 300 LD. Even though all public school teachers in Libya were

promised a pay rise, in 2006/07, commensurate with the cost of living, this has yet to take

effect. Rises in inflation in Libya are difficult to measure because little data are available on

general price changes (Country Profile, 2005). The forecast for 2007, however, was 6.5%.

On the other hand, the average annual income in Libya, in 1999, as reported by the

National Information and Documentation Assembly, NIDA (2001), was 6707 LD, that is

559 LD ($428) per month. It is no wonder, then, that the relatively low pay and the lack

of incentives in the public school sector have seriously discouraged graduates from

considering teaching as a lifelong profession (Mabrouk, 1997) and, as Official A points out,

are viewed as a major cause of teacher attrition, especially males with families to support.

1.1.4 Information and Communication Technology context:

1.1.4.1 Internet provision

In 2004 (the time of the field study), private Internet connection was comparatively slow

with dial-up speeds of about 25Kbs (kilobytes per second), which was tolerable for text-

based downloads, but rather slow for graphics or video. Commercial Internet connections

used an ISDN (International Subscriber Dialling Network), which provided up to 10 times

the speed of ordinary telephone lines.

In 2005, LTT (Libyan Telecommunications and Technology), a major Libyan ISP,

introduced higher Internet speeds using Digital Subscriber Line (DSL) technology (Engineer

B). DSL is a broadband Internet access method that uses standard phone lines to send

data at speeds of up to 7 Mbps (Kaplan-Leiserson, 2005). Since 2005, this commercial

broadband service has been fully functional and available to private and public users.

1.1.4.2 Internet access:

For the wider public, including students and teachers, access to the Internet is mostly available via public Internet cafes, or "café nets", as Libyans say. These cafés normally stay open till late (12 midnight) and charge one Dinar per hour (equivalent to about 40 pence). Since the Internet became commercially available in Libya in 1998, Alwaseea (2003) reports that over 40 Internet cafes have been established in Tripoli, but this figure is expected to have risen since the date of this report.

While most users can access the Internet via local cafés, comparatively few people have private Internet connection. For example, in the teacher questionnaire conducted as part of the Fact Finding phase of this study, six respondents out of 37 had home Internet (a modest 16 percent).

1.1.4.3 ICT at schools:

ICT facilities at public schools at the time of fieldwork (July-November, 2004) were relatively poor. Apart from one or two PCs intended for administrative purposes, schools had little technological infrastructure, and no ICT skills training was provided. At one secondary school, Computer Technology was taught in theory, but there were no computers on site for the practical part.

However, a large-scale national ICT project to integrate computer literacy into the schools curriculum commenced in 2006/07. This ICT project is set not only to benefit pupils' learning, but also that of teachers, who are expected to upgrade their computer and Internet skills in line with the ICT initiative. As a first stage of this ICT project, up to 60 secondary schools in Tripoli are to be equipped with 4000 computers that will be wired up to the Internet (Engineer A). Under the contract, 20,000 teaching staff will be trained to run the computer labs. Currently, the priority is to train ICT teachers who will be directly involved with the project, but plans to train other teachers, including teachers of English, are under way (Official B).

Provision of ICT facilities at private schools is commercially oriented and varies according to market needs. Those that offer Internet facilities do so to attract students to enrol on

computer and Internet courses. At the time of fieldwork, the Foreign Languages Institute

(FLI), for example, offered computer training (20 positions) and an Internet room/café

with eight PCs for commercial purposes. A school website was used to advertise courses,

invite registration and upload course results.

A private Teacher S, whose school had no ICT facilities, pointed out some concerns and

hoped for change:

> *Here in this school we don't have computers yet. It's money wise, it's*
> *financially [meaning the reasons]. Maybe in the future, we are thinking*
> *about it… that each class will have a computer set placed in it and most*
> *of members of staff will be trained to use computers, because*
> *nowadays computers are great help in teaching English language and in*
> *doing all sorts of things.*

ICT facilities at petroleum sector institutions, on the other hand, are more sophisticated, as

most have on-site computer and Internet facilities. For example, the Petroleum Training

and Qualifying Institute (PTQI) has an Internet hall with 25 PC positions, to which

employees have continuous access. The Waha Oil Company has 15 positions with a similar

arrangement. The Petroleum Companies Language Centre provides English language

training for petroleum sector companies which do not have their own training department,

but apart from local administrative use, no ICT facilities are available.

1.1.4.4 Teachers' ICT skills:

Provision of ICT skills for public-sector teachers is as scarce as that of INSET training.

There have been promises to update teachers' technical skills since the launch of the 'ICT

in schools' initiative in 2003, but so far none of these has materialised for EFL teachers. In

a recent television interview (July 2007), the director of national curriculum at the Ministry

of Education, Abou Ghnaia (2007), stated that an online learning programme for in-service

teachers is planned to take place in the same year, in which teachers are expected to

upgrade their Internet skills and adapt to online pedagogy, thus equipping teachers to act

as agents and facilitators of knowledge. Again, these promises have yet to materialise. A

detailed discussion of teachers' Internet skills at the time of the study can be found in sub-

sections 4.3.7 and 4.6.3 of the Fact Finding phase.

1.2 The micro context:

In this section, I position myself in the research context and explain how I, as a teacher

educator, became involved. A rationale for the research focus is provided from which the

problem statement and the main research questions are drawn.

1.2.1 My teaching context:

I have been a lecturer in Applied Linguistics and ELT Methodology at the University of Al-

Fatah and at Higher Institutes for Teacher Training in Libya since 1992. My teaching

context throughout has been that of traditional f2f contact in on-campus settings. Mainly

in the summer vacations, I have taught English at several private schools, basically to

refresh my teaching skills (as opposed to teaching about teaching) and maintain contact

with language teachers and inspectors. These contacts proved valuable later on, when I

conducted fieldwork.

During my time of teaching in Libya, I became aware of certain shortcomings within the

language teacher education and development context. In addition to the scarcity of INSET

provision and the shortage of spare time for in-service teachers to pursue development,

the economic embargo which was imposed on Libya in the 1990s, as Abou Jaafar (2003:

8) points out, had 'unfortunate consequences… on development' and consequently, the

shortage of specialist textbooks in teacher education was made worse by a lack of access

to research journals, which meant that one's appetite for development diminished rapidly.

The emergence of the Internet in Libya in 1998 and its availability to the wider public by

1999, via Internet cafés, was a great relief to teachers and academics alike. The Internet

became a means of accessing a wide range of literature after years of isolation and

Internet-based knowledge was viewed as a potential solution to support teacher learning

and, hence, compensate for the poor INSET provision.

1.2.2 Rationale for research:

It is often a researcher's personal background, involvement in certain educational contexts,

or academic interest in a particular field of study, observes Flick (2002), that guide

decisions about research questions. My personal experience as a lecturer in TEFL contexts

and my involvement as a language teacher within low-resourced ICT school conditions in Libya have inspired my interest in Internet-based development. In a situation characterised by a dearth of organised CPD provision, the expansion of the Internet to the wider public during the late nineties provided a good opportunity for practising teachers to take advantage of, as (Price, 2007) points out, the flexible anytime anywhere access to web resources.

The state of low-tech school environments (at the time of research) hardly offered the climate for Internet-based development. However, since Internet facilities were available via many Internet cafés, it seemed logical to exploit the potential of the Internet to support teachers' CPD, hence, compensate for the impoverished top-down INSET provision, particularly as teachers were busy teaching even in their spare time. This allowed teachers to access Internet-based learning at times that suited them. As Dede (2006) points out,

> the need for professional development that is tailored to teachers' busy
> schedules, that draws on valuable resources not available locally, and
> that provides work-oriented support has stimulated the creation of online
> teacher development (p.2).

Independent and collective I-CPD, where the Internet is the 'vehicle for delivering professional development' (Duffy *et al*, 2006: 179), is thus feasible for Libyan teachers, despite the low-resourced school environments. The issue with teachers is of possessing appropriate Internet skills and of being adequately supported to engage with Internet-based environments to enhance development. But, as Bassey (1999: 106) argues, responsibility for promoting CPD may lie with education authorities through staff development policies, or with schools by providing training opportunities, but teachers as professional individuals *also* 'have a responsibility for their development'.

Taking account of the micro and the macro contexts discussed thus far, the rationale for the research was a combination of the following:

- The gap in INSET provision.

- The shortage of local CPD resources for teachers.

- The Internet's flexibility as a platform for self-directed CPD.

- The lack of previous research into any form of Internet-based learning for EFL teacher education or development in Libya.

1.2.3 Developing the research questions:

As teachers' need for an alternative solution to compensate for the top-down INSET gap was recognised, bottom-up Internet-based development was identified as a viable route. Consequently, the problem statement underpinning the research was:

Is Internet-based development a possible solution to compensate for the INSET gap for Libyan in-service EFL teachers? And

How can I as a teacher educator and researcher engage and support Libyan EFL teachers in appropriate Internet-based learning environments within low-resourced school contexts in such a way that would lead to self-directed Internet-based Professional Development?

Based on this underpinning problem statement, preliminary research questions developed (see section 3.2 of the Research Design chapter for further details):

1. *What is the present CPD provision and what options are available to Libyan EFL teachers?*
2. *Are teachers' attitudes and skills with respect to CPD and the Internet conducive to Internet-based CPD (I-CPD)?*
3. *How can I-CPD support best be provided to Libyan EFL teachers in view of the current low-resourced conditions outlined in this Chapter?*

1.2.4 The solution: An interventionist approach

To answer question 1 above, concerning current CPD provision and practices, semi-structured teacher interviews were conducted. Question 2, about teacher skills and attitudes, was initially tackled using a questionnaire, but was later complemented by interviews. In question 3, the main concern in providing I-CPD support was *how*? i.e., how can in-service teachers, new to the technology and situated in low-resourced ICT contexts, be appropriately scaffolded through Internet-based environments such that they may positively engage in and interact with different modes of Internet-based learning?

Since the majority of Libyan teachers have not had the opportunity to develop Internet skills and the concept of Internet-based learning for professional development is still relatively novel in Libya, it was appropriate to carry out some kind of educational intervention to execute the Internet-based support strategies and, on the other hand, evaluate their impact on teacher learning.

Consequently, taking account of the low-tech school conditions at the time of research, an I-CPD intervention course was designed in order to scaffold teachers' Internet skills and engage them in appropriate online learning environments. Hence, the course was a means of intervening into the Libyan CPD context with intent to obtain answers to particular research questions.

The intervention course employed a loop approach (Woodward, 1991) in which learning activities from a classroom level are borrowed, or looped, into the teacher training level with a change in content. Thus, while the medium of learning was the Internet itself, the message carried by the intervention course was the nature of online learning and using the Internet for language learning and teaching, hence the loop. Appendix E (CD) contains the learning material (three parts) for the I-CPD intervention course.

1.2.5 Structure of the thesis:

The thesis is divided into seven chapters. In this first chapter, the macro context (including a historical background and the Libyan economic and educational framework) and the micro context (relating to my personal background and that of the research) have been presented.

Chapter 2 sets out a theoretical framework for the study. It constitutes a critical review of the relevant concepts and perspectives that characterise the area of study. The Literature Review is concerned with two main strands: Continuing Professional Development and Internet-based environments. The Review draws upon discussions in the field of teacher development, and interpretations of professional development. It also discusses constructivist theories of learning, the nature of Internet-based learning, scaffolding strategies, blended learning and barriers to online participation.

Chapter 3 is concerned with the research design and methodology. It outlines the research questions and the merits of a mixed-method design. A case study design is then described and related issues pertaining to data collection, data analysis, validity, reliability and research ethics are discussed.

Chapters 4, **5 and 6** present and discuss data collected during the three phases of the study. Chapter 4 deals with Fact Finding, the first phase of the research, in which initial information about the field setting were gathered using a teachers' questionnaire about Internet skills and attitudes (section 4.3), which then guided the intervention course design. Interviews with teachers, inspectors and heads are also included. Discussion of data resulting from the questionnaire is interwoven with interview data in sections 4.4, 4.5 and 4.6.

Chapter 5 gives an account of phase two of the research, where, based on Fact Finding data, a typical representative Case Study was selected and provided the context for the intervention course (f2f and blended learning). Chapter 6 gives an account of the third phase (Extended Case Study) of the data collection, in which case participants were joined by other teachers from Libya and the UK in distance online learning.

In the **final chapter**, findings are summarised, conclusions drawn, limitations of the research acknowledged and recommendations made for further research.

Chapter 2: Literature Review

The Internet's pace of adoption eclipsed all technologies before it. Radio existed for 38 years before it gained 50 million listeners and television took 13 years to reach that point. But the Internet crossed that line in four years: in 1994 three million people were connected and by March 1998 the figure was 119 million. Traffic on the Internet doubles every 100 days (Lynch, 1998: 2).

2.1 Introduction:

The Review is perceived as a theoretical framework in which relevant key themes, reflected by section titles, are highlighted, discussed and conceptualised. While the Review draws upon a wide range of relevant literary readings from books, journals and the Web, some are considered seminal to this study. These are, (a) references for CPD: Head and Taylor (1997), Roberts (1998), Day (1999), Neil and Morgan (2003), Pickering, Daly and Pachler (2007); (b) references for Internet-based learning: Kearsley (2000), McConnell (2000), McLoughlin and Marshall (2000), McLoughlin (2002), Salmon (2002a), Andrews and Haythornthwaite (2007) and Kress and Pachler (2007).

Section 2.2 discusses conceptualisations of Continuing Professional Development (CPD) in EFL contexts, followed by interpretations from three different perspectives: the government, the schools, and the teachers (section 2.3). Holistic CPD in relation to the Libyan context is outlined in section 2.4, followed by optimised CPD views in section 2.5.

Section 2.6 addresses conceptualisations of Internet-based development, some definitions and a conceptual framework for Internet-based environments. Section 2.7 outlines important online learning models including Salmon's (2002a) used in this study, while section 2.8 discusses certain pedagogic concerns related to moving online. In light of the pedagogic concerns, the next section highlights blended learning as a favourable paradigm followed by an outline of useful models in Section 2.9. Section 2.10 draws upon theories of constructivist support and discusses how they might be interpreted to support CPD in Internet-based environments, building up to a model for multi-dimensional scaffolding. Section 2.11 discusses learner participation and the possible barriers to online learning, which may influence teachers' contribution in Internet-based learning. The last section reviews key empirical research studies, which helps to position the present study within the relevant methodological literature.

2.2 Conceptualising CPD:

As a term, Continuing Professional Development (CPD) has been used interchangeably with Professional Development and Teacher Development (John and Gravani, 2005). Central and inherent to the concept of CPD is its continuity, which has been stressed by Underhill (in the foreword to Head and Taylor, 1997: vii) emphasising that 'teacher development is a continuous process of transforming human potential into human performance, a process that is never finished'. For professional practitioners, the importance of CPD originates from an understanding that it is 'bound with the model of professionalism itself' (Friedman, Davis, and Phillips, 2001: 173) to which in-service teachers aspire to belong.

The label CPD has also been used in the literature, e.g. by Neil and Morgan (2003), to embrace reoriented conceptions of top-down organised INSET as well as school-based teacher-led development. A reoriented view of INSET, Richards (1991: xiv) argues, is one in which perceptions of teacher training shift from traditionalist views typified by short-term objectives of merely imparting teaching skills, towards the notion of the teacher as a 'critical and reflective thinker'. This oriented view of development therefore aims to create space for training options (Woodward, 1991) that are bottom-up, teacher-led and open for individuals to contribute to. It means that development grows out of actual teaching contexts and, as Roberts (1998) puts it, the notion of CPD thus implies:

> more divergent objectives, which allow for teachers' individual
> differences and which are determined by teachers' sense of their own
> learning needs… It can be associated with the notion of a teacher as
> professional/ independent problem-solver, who takes responsibility for
> personal and professional development (p. 222).

It can be noted how CPD implies 'divergent objectives'; allows for independence while led by collective needs; and how it can encompass both 'personal' and 'professional' development. Pointing out such divergent objectives, John and Gravani (2005: 109) contend that CPD still 'suffers from semantic confusion', for its implementation in practice has proved problematic and its flexible nature has led to 'numerous definitional problems'. Therefore, rather than extracting different definitions of CPD by different writers, the next

section examines three conflicting, but nonetheless relevant, interpretations of CPD from

the points of view of the main stakeholders: education officials, school heads and teachers.

2.3 Interpretations of CPD:

As pointed out by Neil and Morgan (2003: 1), different key players have each interpreted

CPD from their own particular perspective. According to Roberts (1998) and Neil and

Morgan (2003), interpretations of CPD have, thus far, been based on three perspectives:

1. **Official interpretation:** How education policy makers, at local or national

   government level, set out to interpret and carry out development.

2. **Schools' interpretations:** How school heads perceive CPD based on interpretation of

   policies and regulations in light of localised contexts and learning conditions.

3. **Teachers' interpretation**: How teachers perceive CPD in relation to their own

   personal and professional needs.

2.3.1 Official interpretations of CPD (top-down INSET):

An official perception of CPD is likely to view teacher development or INSET as a

centralised top-down intervention, where delivery and management of such intervention is

imposed by officials in authority and is frequently politically driven and focuses more on

structure than education (Goodlad, 1992). In top-down INSET programmes, training

rather than development is the objective of the exercise. Training, as Freeman (1989: 39)

explains, is a 'strategy of direct intervention by the collaborator [trainer] to work on

specific aspects of the teacher's teaching'; thus, official CPD is likely to focus on imparting

pedagogic knowledge and on drilling specific observable or 'trainable' activities to be

mastered within a set period of time.

Further, to assess teacher performance, the INSET trainer often determines quantifiable

criteria with which to grade teachers. It is, therefore, assumed that once teachers master

a repertoire of discrete teaching skills, in association with certain content and pedagogic

knowledge, they can improve their classroom effectiveness through experiential learning,

ultimately achieving teaching competence (Freeman, 1989). Therefore, as was the case in

the Libyan secondary schools context (see Chapter one) the official interpretation of CPD is that of a top-down INSET intervention initiated by education authorities at local or national level, such that training is characterised by 'externally identified solutions to problems associated with curriculum delivery' (O'Neil, 1994: 286). Faraj and Tarvin (1989: 567) refer to these as 'ad hoc forms of INSET' where a [training] programme ceases to run as soon as specific goals are achieved, normally in terms of the number of teachers receiving training. Thus, while a top-down interpretation of CPD may be well institutionalised, opportunities for training are, all too often, 'sporadic, constrained and compartmentalised' (Medgyes, 1994).

Despite the criticism of centralised top-down CPD, there is a need for in-service teachers to engage in it 'so that they remain up to date with curriculum content knowledge, continue to develop their classroom organisation and teaching and assessment strategies' (Day, 1999: 48). Kennedy (1995) also argues that the needs for training or mentoring will persist after completing Initial Teacher Training, either because of inadequacies in teacher preparation, or because of changes in the national curriculum which demand increased levels of teaching skills, such as those occurring as a result of having introduced the new secondary curriculum in Libya.

Moreover, for NNESTs in under-resourced environments, top-down INSET opportunities, however scarce or disorganised, constitute, as Hayes (1997: 83-84) puts it, a welcome change from 'watershed' situations where teachers feel they are 'no longer progressing and that their whole teaching life had become sterile'; organised INSET training can, hence, be 'a way of regaining momentum and enjoyment from teaching'.

2.3.2 Schools' interpretations of CPD:

A school's perspective of CPD may fall under the rubric of 'staff development' in which teachers are developed as members of staff at a particular school (O'Sullivan, Jones and Reid, 1988). However, Hargreaves (1994: 436) argues that while professional development of school teachers 'must be set within the context of institutional development', collectively, teachers must be able to 'choose and direct their own

professional development' (Brown, Edmond and Lee 2001, cited in Neil and Morgan, 2003:63). Referencing Darling-Hammond (1993) and Hargreaves (1994), Day (1999: 1) emphasises that 'it would be reasonable to expect that teachers will have opportunities to participate in a range of informal and formal activities…and that these will focus upon personal and professional purposes'.

Hence, within a school interpretation of CPD, there can be two perspectives to development: one *formal* perspective in which schools (as government agents) organise training to meet local needs on behalf of education authorities; and another *informal* perspective which evolves collaboratively by school teachers themselves. I dare say that both situations, formal and informal CPD, may well be encouraged to exist at the same school. Thus, under this rubric of teacher development, one often hears of 'educators' or 'facilitators', but not 'developers', for the developers are the teachers themselves (Freeman, 1989:40). That is, the educator or facilitator can provide the right conditions for teacher learning, but the development, as a cognitive process, is a personal endeavour that has to come from within.

Moreover, school-based development (at the school level) means that teachers gain a collective sense of ownership of their own development, particularly when implementing change in teaching practice at classroom level. Bax (1995: 353) argues that an approach that is more sensitive to teachers' needs because derived from their own context is more motivating and 'might therefore lead to more effective change than trainer-derived [top-down] approaches'.

However, within school-based CPD, as Neil and Morgan (2003) point out, problems can surface when dealing with a cohort of teachers wanting to pursue different priorities. Some teachers may perceive their practices as appropriate and not in need of change; others may openly discuss options for change but have no intention to implement it; some may want to change but have problems with implementation; while others may focus on external reactions to change and attempt to appease, or impress, others in the process (Roberts, 1998). Moreover, a development activity that works well for some teachers may

not work for others simply because it has not emerged as a result of *individual* needs or inner desire which, in turn, motivates teachers to self-develop (Head and Taylor, 1997).

While school-based CPD may focus on teachers' collective needs (whether formally organised or informally initiated by teachers), independent development by teachers, as individuals, can take on different meanings and may be implemented in different ways depending on prevailing conditions, needs and objectives of development (Head and Taylor, 1997). Within a typically centralised policy-driven INSET conditions, it is unlikely that - in the near future – Libyan schools will be granted autonomy to organise their own training agenda. This, in turn, leads to a discussion of the remaining option left to teachers in resource-poor environments: that of independent development in which teachers, as individuals, take it upon themselves to set their own objectives in the form of self-directed independent study.

2.3.3 Teachers' interpretations of CPD:

In an attempt to interpret development from the teachers' point of view, Maley (1990: 67) asked a number of school teachers to explain what teacher development meant for them. The responses are summarised with my own subtitles:

1. Handling stress (personal development): A teacher feels stressed. After reading about stress treatment, he or she decides to set aside a daily 30 minutes of "quiet-time".

2. Higher qualifications (individual development): A teacher decides to gain a higher qualification by joining a postgraduate course.

3. Extracurricular courses (individual development): A teacher decides to join a non-ELT course to gain new insights into the profession, such as counselling skills, Neuro-Linguistic Programming and so on.

4. Trying new ideas (collaborative development): A teacher comes across a teaching idea and decides with a colleague to try it out in class for a month and discuss progress each week.

5. Study group (collaborative development): A group of teachers at a school meet each month to discuss an interesting book or article they have decided to read.

6. Self-help group (collaborative development): A group of teachers at a school decide to meet monthly and discuss pedagogic problems using an open agenda.

7. Action research (collaborative development): Two teachers set up a small action research group to implement a new idea on learner independence. They later present their findings at a conference.

Although more examples of collaborative than individual development are projected by Maley's study, a common feature shared by all the teachers was that their interpretations of development were based on independent bottom-up perceptions, i.e. engendered by their needs and what they can do, individually or collectively, within their own contexts.

Therefore, teachers' interpretations of CPD are driven by bottom-up perspectives of development, which can be independently and/or collaboratively oriented, according to the stage and context of collaborative development. That is, an element of inter-dependency, or collaboration, can be accommodated in a teacher's perception of CPD, such that collective experience, as Day (1999) has suggested, grows out of individually oriented learning to open collaboration with outsiders, thus:

- The closed individual cycle - where teachers learn privately;

- The open individual cycle - where teachers learn from colleagues at school;

- The closed collective cycle - where groups of teachers share collective wisdom;

- The open collective cycle - where outsiders are admitted to add a further dimension (p. 177-179).

Obviously, there is some overlap between a teachers' collective interpretation of CPD and an informal perception of school-based CPD (discussed in sub-section 2.3.2), where the school may simply be used by teachers as a local venue for holding discussions and sharing ideas. Such bottom-up interpretations of CPD often arise as a result of deficiencies in formal CPD provision by schools or government, as is the case in the Libyan context.

Even though research evidence seems to favour collaborative development in that individually oriented CPD is not as effective in changing teacher practice compared with collaborative modes (EPPI, 2005), Day (1999: 2) argues that individual development is a logical step towards collaborating with peers and that sustained development is seen as a co-ordinated effort that takes place when the planning and implementation of CPD is a 'joint responsibility of teachers, schools and government'. In the next section, this proposition is carried forward in a discussion of a holistic CPD approach.

2.4 A holistic approach to CPD:

Having presented three rational perspectives of CPD based on an official view, schools' perception (both formal and informal) and a teachers' interpretation, a holistic approach to CPD is envisaged (Figure 2.1). In agreement with Day (1999), Fullan (1994) also supports a holistic vision of CPD that integrates all three interpretations discussed thus far. Fullan concludes that neither top-down nor bottom-up strategies work sufficiently well on their own and that a sophisticated blend of the two is needed. That is, in addition to organised top-down training, however scarce, Libyan teachers should also be supported through a bottom-up approach, in which they can take control of their own development independently (as individuals) and inter-dependently (in collaboration with others) to create CPD activities that are teacher-led and relevant to their own pedagogic contexts. A holistic approach along these lines might look like this:
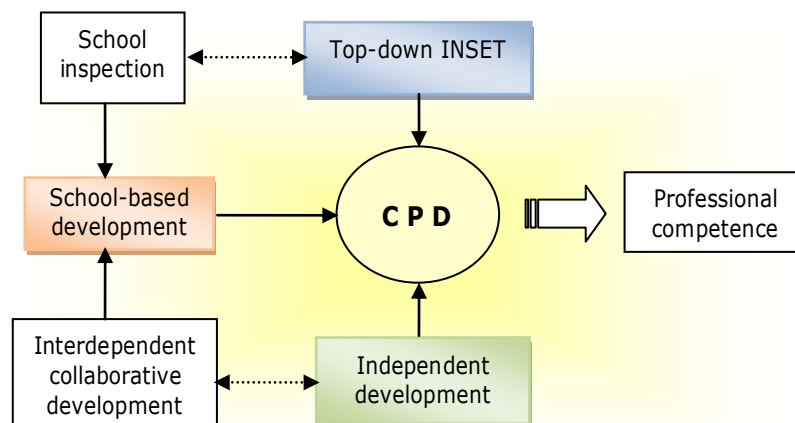
Figure 2.1: A holistic approach to CPD

Although it is the norm that INSET provision is provided either by education authorities, through top-down centralised training or school-based development of some kind, certain

shortcomings can and do occur. Thus, the need for in-service teachers to act

independently and/ or collaboratively in order to supplement learning, through a bottom-

up approach, is often born out of such shortcomings in organised INSET provision.

Therefore, a holistic approach to CPD views development as a sustainable co-ordinated

effort which, as Day (1999: 2) emphasises, takes place when the planning and

implementation of CPD is a 'joint responsibility of teachers, schools and government'.

Here, top-down or bottom-up development are not seen as opposing poles (Woodward,

1991), but rather as co-existing components that combine and converge at the school

interface for the purpose of promoting professional competence as the ultimate goal of

development.

2.5 Optimised CPD:

As pointed out by Pachler, Daly and Lambert (2003: 9) optimised CPD is 'sought out

proactively according to intrinsic [teacher-led] training needs' rather than in response to

extrinsic policy directives. In supporting optimised CPD, Unwin (2007), argues that

teachers should also be provided with opportunities to question prevailing policy and

practices, to deliberate theoretical principles and make sense of them in connection with

their professional lives.

Therefore, embedded in an optimised notion of CPD is the involvement of teachers in

articulating their own development needs in order to create opportunities to enhance their

teaching practice (Dede, 2006). But as Rubin (1978: 136) points out, such articulation

need not spell out exactly what teachers need in all respects, but the articulation process,

with adequate support and resources, is 'a major way of securing involvement and

commitment to personal growth'. In emphasising a bottom-up route to development,

Rossner and Bolitho (1990: 328) argue that teachers can play an active role in challenging

policy decisions which affect their professional lives and that they should be able to

'articulate their concerns publicly, and to play a leading part in their own development'.

Therefore, optimised CPD must be motivated by teachers' inner desires and interest with

which to satisfy their individual and collective needs under varying contexts. That is why

generic CPD, mirrored by current INSET policy in Libya, is impracticable, as argued by Neil

and Morgan (2003),

> there is no longer any prescribed syllabus or format which CPD must take, and with the opportunities open in different arenas and support mechanisms available, teachers should be encouraged to develop their own interests (p. 3).

More recently, Pickering, Daly and Pachler (2007: 5-6) argue that optimised approaches to

CPD focus on three themes, the outcome of which will be characterized by mixed-modes of

learning, drawing upon a range of resources, as well as collaboratively oriented and

supported by online networking:

- **Shared practice:** That is, development is more than just the exchange of teaching

  experience; it should proactively lead teachers, as change agents, into changes in

  practice. This involves empowering teachers to be potential agents for change, rather

  than passive recipients of policy directives, for best practice is not merely that which is

  delivered as top-down models by experts, but that which is informed by research,

  debate and contextualised experience.

- **Collaborative CPD:** This draws upon the collective knowledge and experience of

  teachers across learning networks, thus enhancing constructivist collaborative

  development. Here, collaborative learning networks are classroom-focused and can

  be based on a subject, phase or experience, but can also be 'non-hierarchical, cross-

  phase, cross-subject or cross-experience' (p. 273).

- **Scholarly reflection on practice:** This is the kind of critical reflection that draws

  upon theoretical and pedagogic principles and brings them to bear on teaching and

  learning practices, rather than seeing them as separate complementary entities.

  Here, a good balance between individual and collaborative reflection is supported to

  enrich and enhance teachers' professional knowledge.

An optimised approach to CPD thus rejects the prevailing knowledge transmission model of

development that is typically skills-based. Rather, it encourages teachers, as change

agents, to be, independently and collaboratively, proactive learners and be more critical in

their pursuit of best practice;

> to challenge and contest constructively the perceived givens of evidence-
> informed policy and practice. This will be achieved through a
> collaborative orientation, characterised by shared practice and a focus on
> scholarly teaching in learning networks (Pickering, Daly and Pachler,
> 2007: 6).

The concept of "online networking" is very much linked to "communities of practice".

Whereas online networks constitute groups of practitioners who have the freedom to

express their views, share experiences and construct new knowledge through computer-

mediated communication (Daly and Pachler, 2007), communities of practice, as Wenger

(2007: 2) points out, are basically groups of people, whether at work, school or home, who

are, in one way or another, engaged in

> a process of collective learning in a shared domain of human
> endeavour… [They] share a concern or a passion for something they do
> and learn how to do it better as they interact regularly.

Utilising online learning networks to create communities of practice for in-service teachers

will, undoubtedly, provide excellent opportunities for development, hence, optimising CPD,

particularly in contexts experiencing shortages of organised development. Consequently,

parallel to a holistic CPD approach, discussed in the previous section, I support an

optimised approach in which Libyan teachers, as communities of practice, are involved in

articulating their development needs and supported to pursue and adopt best practice

using a variety of resources, and to 'draw on their own and others' practice-based evidence

to change theirs and others' (Pickering, Daly and Pachler, 2007). Particularly with respect

to the launch of the new English language syllabus and the difficulties some teachers have

encountered (see chapter one), holistic and optimised CPD approaches are likely to

enhance and support professional development needs of Libyan teachers in particular and

NNESTs situated in foreign language environments in general.

Having examined stakeholders' interpretations of conventional CPD underpinned by holistic

and optimised approaches, the following section draws upon the nature and characteristics

of the Internet as a tool for supporting such optimised perceptions in low-resourced in-

service conditions, at the time of the study. For the purpose of the present study, the

focus is on Internet-based CPD, or I-CPD, as a potential option of bottom-up teacher-led

(independent or interdependent, i.e. individual or collaborative) development. Hence,

while reviewing potential web-based tools and technologies, the underpinning question

guiding the review is how Internet-based technology can help to support the holistic and

optimised forms of CPD discussed thus far.

2.6 Conceptualising Internet-based CPD:

Undeniably, the Internet constitutes a potential source of a wide range of information for

formal and informal learning alike. As pointed out by McConnell (2000: 70), the Internet

offers learners access to vast resources of knowledge, which will contribute as much to

their 'self and professional development as with their academic learning'. For professional

development purposes, the enormity and flexibility of the Internet has enabled it to be

extensively used both as a learning environment and a gateway to information resources

(McPherson and Nunes, 2004). Since the Internet has been made available to the public,

EFL teachers in Libya can, thus, tap into millions of websites, a vast number of which are

dedicated to ELT and CPD (see sub-section 5.5.7).

The main advantage of Internet-based development, or I-CPD, for teachers is that it can

take place individually or collaboratively 'free from the constraints of time and distance'

(Jennings, 1995: 104). In addition to satisfying individual needs and pace of learning, the

Internet facilitates teacher interaction through e-mail or discussion forums through which

they can raise important issues about 'things that matter most for them, day or night, at

the touch of a keyboard' (Hargreaves and Fullan, 1989: 72). Nowadays, mobile computer

technology can be used anytime anywhere where there is a wireless Internet connection,

thus enabling users to be even more flexible with their learning and networking, rather

than being fixed to one geographical location (Price, 2007).

2.6.1 Definitions and insights:

Generally speaking, the terms online learning and e-learning have been used

interchangeably to imply distance online study delivered via Internet-based technologies

(Clarke, 2002). Online learning, thus, covers a wide range of pedagogic applications and

activities which include the delivery of learning material via the Internet, intranet (private

Internet), audio and video-streaming, satellite broadcast, interactive TV, and CD-ROM. For

Clarke (2002), online learning encompasses

> a whole range of options that include individual and collaborative
> learning, formal and informal learning, downloading learning materials,
> conferencing systems, student support, student/tutor interaction,
> student/student interaction and administration (p. 13).

Recently, growth in digital online media for education has also embraced 'gaming

environments, podcasting based on MP3 players, video streaming and mobility inherent in

cell and mobile phones, PDAs, and laptops' (Andrews and Haythornthwaite, 2007: 21).

The latest diffusion of 'Web 2.0' has also had a 'tremendous effect and change on the way

people search, find, collaboratively develop and consume information and knowledge'

(Sigala, 2007: 1). See sub-section 2.6.3.3 for a discussion of web-based groups.

A useful distinction between online learning and e-learning is made by Al-Khatib (2003: 1)

who points out that since the 'e' in e-learning assumes 'electronic support to the learning

process', e-learning will then, as Arabian Campus (2006) note, imply

> the use of online techniques such as email, websites, multimedia,
> information from the Internet, discussion groups or chat in learning and
> teaching. It is an anywhere, anytime, self-paced instruction without
> geographical barriers (p.1).

As Andrews and Haythornthwaite (2007) observe, e-learning subsumes as many

technologies as pedagogically appropriate. E-learning may then include the application of

a wide range of digital technology, such as video, television, radio, facsimile, telephone,

mobile phone, computer-assisted learning, as well as the Internet.

Andrews and Haythornthwaite (2007: 21) advance a new dimension for e-learning, by

assuming an 'E + learning' interrelationship, where they see this as 'more than the use of

technologies' and 'more than a communications and delivery tool'; they argue for a co-

evolutionary perception which emphasises the social and emergent nature of e-learning,

and one in which there is, in addition to the provision of appropriate technological media

and a teaching presence (see Anderson and Garrison, 2003), 'directed, purposeful pursuit of understanding, with resultant changes in knowledge, skill and/or practice'.

2.6.2 A conceptual framework for Internet-based environments:

The reason for adopting the term "Internet-based", rather than "web-based" CPD, in this study, is due to the fact that the Internet, with its functionality as a communication system (e-mail, chat, discussion forums and conferencing systems) is seen to encompass the Web, which mainly consists of a network of computers providing access to information and communication facilities (Kaplan-Leiserson, 2005). According to Atkinson (2002:2), the World Wide Web is 'part of the Internet and is particularly concerned with the provision of information within a specific format that allows text, graphics, sound, animation, and video to be displayed on pages that can be linked to and from many other pages on this Web'.
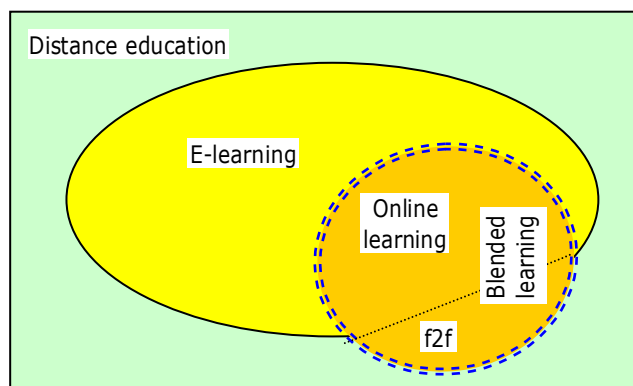
Figure 2.2: A conceptual framework for Internet-based environments

Figure 2.2 represents a framework for Internet-based environments (the orange circle). Here, online learning is viewed as a subset of e-learning, which is in turn part of distance education with its traditional methods of delivery, e.g. surface post, paper-based material as well as (but not necessarily) face-to-face (f2f) contact. Internet-based CPD is then perceived to encompass both distance online learning and blended forms of learning that combine f2f contact with aspects of online technology.

Bearing in mind Andrews and Haythornthwaite's (2007) co-evolving perception of e-learning, this conceptual framework for Internet-based CPD is not supposed to be a static representation of the environment. On the contrary, it reflects as a result of evolving ICT,

a 'continuously emergent' form of e-learning generated by 'instructors and learners, and created and recreated by use' (Andrews and Haythornthwaite, 2007: 21).

Internet-based CPD for EFL teachers may therefore be conceptualised as the socio-cognitive outcomes of interacting and collaborating with tutor and/or peers, either locally, nationally or internationally, via a range of fixed or mobile Internet-based resources and communication technologies that converge to support and enhance teachers' professional development. Due to the resource-poor conditions that characterise the Libyan context, holistic and optimised notions of I-CPD (as outlined in sections 2.5 and 2.6) can be focused to accommodate the articulated and contextualised needs of teachers, both independently as individuals and collaboratively as groups, rather than being solely based on intermittent and poorly-delivered top-down INSET (seen Introduction chapter).

Internet-based CPD for NNEST participants may also be supported, through online discussion groups, to gain access to native speakers across national boundaries. In addition to collaborating to construct knowledge, taking part in online discussion can definitely contribute to the language development of Libyan teachers, particularly those with perceived weaknesses in English, who, as Lavender (1997) argues, are more conscious about their language competence and, unlike their NEST counterparts, are likely to worry about their performance. Accordingly, as reflected in the data collection (see section 3.5.2), two strands of Internet-based development are investigated in this study: I-CPD and I-LD (Internet-based language development).

As discussed in the following section, I- CPD solutions can simply be supported via e-mail, text or voice chat messaging, or web-based groups, e.g. Yahoo or MSN, which constitute low-cost platforms for delivering learning material, asynchronous messaging (taking place over time) including tutor or moderator feedback.

2.6.3 Potential platforms for Internet-based CPD:

The following is an outline of Internet-based platforms which Libyan teachers may engage or be engaged in to promote CPD. Bearing in mind the low-resourced public school contexts, these platforms are presented in order of complexity and expenditure.

2.6.3.1 E-mail:

E-mail exchange is asynchronous and is the foundation of all forms of online interaction. 'It's easy to use, it's cheap, fast and reliable' (Dudeney, 2000: 10). Thus, in low-resourced environments, it is quite possible for a tutor to use nothing else but e-mail to communicate with learners (Kearsley, 2000). Working with minimum facilities and cost, file attachments containing study material, links to supplementary web resources, as well as feedback could all be sent by e-mail. Although a kind of threaded discussion can be kept as e-mails accumulate, the drawback is in the lack of a collective pool of single e-mails covering the topics discussed.

Hanson-Smith (2001: 10) points out that learners' interaction through e-mail and discussion boards can create language encounters that are hardly possible face-to-face, in that communication can be supported by online grammar and spelling checks which provide a kind of "buffered" authenticity giving learners time to look up words and seek better ways of expressing themselves.

2.6.3.2 Real-time chat:

The simplest form of synchronous messaging is real-time chat, in which participants exchange instant messages on screen (Kearsley, 2000). Although abbreviations and slang (Netspeak - a mix of spoken and written language used in text-based communication) are more common in chat than e-mail, chat messages are automatically deleted at the end of a session. Thus, synchronous chat messaging may be viewed as an informal unthreatening mode of communication, which might appeal to apprehensive and novice NNEST users of the technology before moving on to asynchronous communication in online discussion forums, a feature which is used to support online orientation (see the Conclusion chapter, sub-section 7.3.1.6)

Moreover, synchronous chat, as pointed out by Almeida d'Eça, (2005: 30), makes members feel 'related and connected to each other in a community, the next best thing to being with them face-to-face'. The author adds that two excellent features offered by Yahoo Messenger, voice and video, are useful for supporting and enhancing social bonding in online environments; 'the sense of "belonging to a community of like-minded peers" has

always been very strong among us and is one of the essential characteristics of community

building online' (p. 33).

2.6.3.3 Web-based groups:

Yahoo, Microsoft and other group-based messaging are open source Internet tools that

facilitate the setting up of low-cost asynchronous online solutions appropriate for low-tech

environments. As Russell (2001: 157) points out, the Yahoo Groups facility 'can be useful

because of its web-based location', i.e. can be accessed from any computer linked to the

Internet and does not require participants to log on to a particular ISP. These groups often

offer discussion forums and file storage for uploading learning material and photos. Hunter

(2006) notes that

> Yahoo Group membership allows continual communication, enabling
> practitioners to seek advice, share experiences and resources, and set up
> student and cultural learning projects across the globe using Internet
> technologies (p. 18).

Webheads in Action, for example, was created in 2002 as a community of practice for

TESOL professionals. Its purpose was to help participants appreciate the potential benefits

of integrating Internet-based technology into their teaching practice, and to share open

source Internet tools. The web-based group provided support for online development in

non-threatening collaborative environments by enabling participants to self-direct their

professional growth, motivated by their enthusiasm and the sense of belonging (Hunter,

2006). Eight years later, Webheads in Action has developed into an emerging new

technology called Web 2, which integrates 'wikis, blogs, podcasts, vodcasts, and other

open, collaborative platforms'; where users can 'create content and interact and

collaborate online… create their own learning spaces in the learning process' (Hunter,

2006: 17).

2.6.3.4 Online forums:

Online discussion is a developed form of e-mail, hence usually text-based, and can take

the shape of discussion forums, online conferencing, online networking, mailing lists, news

groups or simply online groups. As in e-mail, online messages include sender's name,

subject header (useful for selecting important messages) and message text. In addition,

online discussions maintain a digital record of messages; a thread of exchanged messages within each topic area is saved on computer. Therefore, knowledge is not only presented or generated, but can also be shared, constructed and preserved as part of a learning community (Andrews and Haythornthwaite, 2007).

Online discussion forums thus have the capacity to invoke deliberative thought and facilitate critical reflection. According to Vygotsky's (1978) constructivist theory (see sub-section 2.10.1) , this fosters higher/ deeper levels of knowledge processing and hence promotes professional development. Harlen and Doubler (2007) emphasise that, through online discussion, teachers can share knowledge perceptions and concerns about their practice;

> through online discussions they can apply their learning to the reality of their school, become familiar with perspectives of other teachers, and a wider range of practical applications for their learning (p. 458).

Moreover, constructively-oriented online discussion has the capacity to invoke deliberative thought through reflection afforded by the time delay between messages, and hence, according to Vygotsky's constructivist theory facilitates higher levels of cognitive processing. Lapadat (2002) explains that when participants endeavour to express their thoughts in electronic writing, they will take time to compose messages, thus are more likely to reflect, be more critical and apply higher order levels of thinking. For further discussion of the pedagogic concerns associated with the asynchronicity of online discussion, see sub-section 2.8.8.

FL Teach (Foreign Language Teaching Forum) is a typical example of an online discussion forum for FL teachers, which integrates Web resources, an e-mail list for academic discussion, access to list archives, and FL News. First Class is also an online text-conferencing system, which was used by the University of London's Institute of Education's OET (Online Education and Training) programme (see section 7.7 about Reflections on personal development). As part of the present study, a Yahoo Group called la-tefl was created to support Libyan EFL teachers' online interaction (see sub-section 5.3.2.2).

2.6.3.5 Virtual Learning Environments (VLEs):

A VLE is an online study software designed to enhance the learning experience of participants both personally and within a social learning network (VLE, 2002). Virtual learning platforms are asynchronous and come under various categories: They can be referred to as Managed Learning Systems (MLS), Computer Supported Learning (CSL), Computer Mediated Conferencing (CMC) or Asynchronous Learning Networks (ALN). Accessed by a personal ID and password, a VLE offers combinations of learning and assessment material together with support for collaborative methods of communication with peers and tutor (VLE, 2002).

Different VLE platforms have different features, but typical functions provide curriculum mapping, a notice board, e-mail communication, an online forum or threaded discussion, technical support and student tracking. Some VLEs also offer multimedia sharing capabilities, self-assessment tools and web links to useful resources (CPD Centre, 2003).

According to status, VLE users are assigned either a student ID or tutor ID. The tutor can see what students see, but the tutor is allowed to create or modify curriculum content and track student performance. Popular types of VLEs are WebCT, Blackboard, Lotus, LearningSpace, eCollege, etc. The Merlin VLE, which has been used in the online part of this study, is described in more detail in sub-section 3.3.3.

The pedagogic purpose of a VLE is to create a community of learners and support asynchronous threaded discussion in learning networks where, by integrating social and technical aspects (Internet technology), 'students and faculty [teachers] communicate and work together to build and share knowledge' (Hiltz, Turoff and Harasim, 2007: 57). Salmon (2000) however, rightly argues, as does Pincas (2002), that the availability of online platforms, however sophisticated, does not necessarily guarantee participation or collaborative learning; some sort of support strategies need to be in place, in addition to learners' motivation to contribute to the transformative process. A discussion of online scaffolding support strategies can be found in section 2.10.3.

2.6.4 Benefits of Internet-based CPD:

The real potential of the Internet for teachers in resource-poor conditions is its low-level technical infrastructure and its functionality as a single medium. That is, the multi-sensory nature of the Internet encompasses almost all other means of ICT: Fax, e-mail, telephone, voice-mail, chat, audio and video conferencing, live radio, television, video, film, news groups and discussion forums (Clarke, 2002), rendering Internet-based learning a potential route to CPD through instant access to a global network of like-minded professionals (McConnell, 2000).

The main advantage of Internet-based development for in-service teachers lies in its flexibility. As in-service teachers are 'hard pressed to take time off work' to attend teacher development courses (McConnell, 2000: 192), open access to Internet-based CPD independently of time or space, '24 hours a day, seven days a week all year round' offers a flexible CPD solution for teachers in low-resourced contexts. VLEs which are accessed by invitation (ID and password) facilitate new ways for teachers to share and construct new knowledge in collaborative communities of practice (Daly and Pachler, 2007).

Moreover, for female teachers with family commitments and underprivileged teachers in remote rural areas, Internet-based learning provides a valuable platform through which knowledge and expertise can be shared (Neil and Morgan, 2003). As emphasised by Porter (1997), e-learning will particularly appeal to homebound female teachers who can learn from the comfort of their homes.

Flexibility of I-CPD is also characterised by the order in which teachers access information by moving down a page linearly or across pages in a non-linear fashion (Porter, 1997). This hyper textual flexibility thus 'introduces a fundamentally different process into literacy' (Pincas, 2002: 8), thereby changing the nature of education from a linear to a non-linear process, such that

> learners can follow their thought processes. They can learn as much
> about a subject as they need or want and their interests can prod them
> to find additional links to more information (Porter, 1997: 202).

Unlike f2f teaching, I-CPD also facilitates access to national and international communities.

This has been evident in the increased number of mailing lists and news groups providing

access to expert knowledge in a wide range of specialisations. 'Learning communities

extend beyond the timeframes of a particular course or conference and allow students to

interact over an extended time period' (Kearsley, 2000: 12), which is ideal for professional

development. Networked learning communities, as Salmon (2002b) stresses, create

opportunities for collaborative learning to develop through the sharing of teaching

experiences, resources and the meaningful construction of knowledge.

I-CPD affords forms of group-based interaction that engage users in asynchronous

communication for the purpose of completing a particular task, discussing a relevant issue

or exchanging opinion, thus leading to the construction of new knowledge. Hiltz (1990:

128) asserts that Internet-based interaction is particularly suited to collaborative learning

strategies such that knowledge is not only delivered to users, but 'emerges from active

dialogue among those who seek to understand and apply concepts and techniques'.

As summarised by Kaye (1992), the potential of collaborative learning afforded by

Internet-based discussion lies in: (a) the fact that learning is a communal activity involving

the social construction of knowledge; (b) the sharing of different perspectives and the

obligation to communicate and make explicit one's own ideas to others through writing; (c)

peer collaboration and the development of problem-based skills through the internalisation

of cognitive processes.

2.7 Models of online learning:

This section reviews three online learning models that are suited to pedagogic

environments with potential for implementation in I-CPD contexts. These models, namely

Laurillard's (2002) conversational model, Garrison and Anderson's (2003) community of

enquiry model, and Salmon's (2002a) five-stage model, adopt educational technology as a

platform for asynchronous communication between learners and between instructor and

learners.

2.7.1 Laurillard's conversational model:

Laurillard's conversational model was developed by analysing research findings based on

student learning mainly within formal university-level education. These research findings

were then used to generate a pedagogic framework for learning processes common to other environments (Laurillard, 2002). The author claims that four main aspects, or dimensions, to the pedagogic process can be utilised by different educational media.
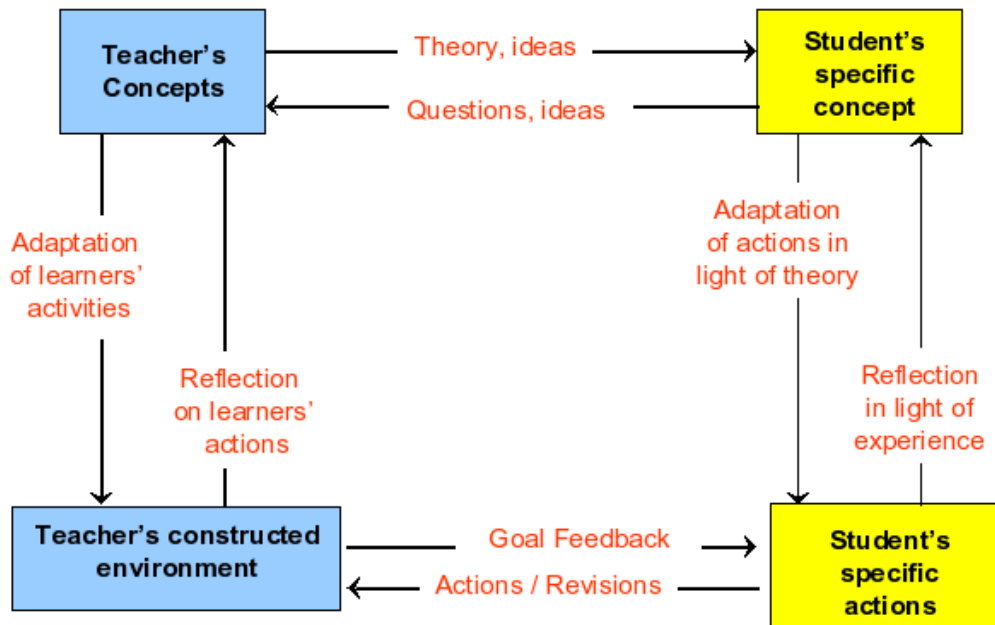
Figure 2.3: Laurillard's Conversational Framework (Edutech wiki, 2006a)

Therefore, as Figure 2.3 illustrates, associated pedagogic strategies consider forms of communication and related mental activities that normally occur within educational settings, such as discussion, adaptation, interaction and reflection. These components are the teacher's concepts, the teacher's constructed learning environment, the student's concepts and the student's specific actions.

Typically, a pedagogic scenario is said to include all four kinds of components, thus resulting in four kinds of mental activities and eight pathways:

1. Discussion: This takes place between the teacher and learners, where ideas and conceptions about a particular subject should be mutually accessible and where both sides should agree on learning objectives.

2. Adaptation: The teacher must adapt leaning objectives with regards to existing conceptions. While the teacher must give appropriate feedback, learners must integrate it into their own conceptions.

3. Interaction: This involves interaction between learners and the environment as defined by the teacher, who creates an environment that is adapted to the task. The teacher must focus on supporting learners during a learning task and give appropriate feedback.

4. Reflection: Both teacher and learners reflect on their performance; the teacher supports learners to revise conceptions and to adapt the task to their learning needs. Learners should reflect on all stages of the learning process.

Although the model claims to be adaptable to computer-mediated technology, including distance and blended learning (Laurillard, 2007), it appears to be more applicable to environments where interactions are up and running within communities of learners. Moreover, the model does not appear to spell out specific stages of development within an online learning environment. For teachers who are new to asynchronous computer mediated technology, social, pedagogic and technical support may need to be made more explicit at predefined and progressive stages of development, so that scaffolding support can be tailored to learner needs. It can also be argued that, since Libyan EFL teacher are being engaged in I-CPD for the first time, the extent of online participation is, at this point, unpredictable and thus there would be a need to support teachers one stage at a time, even though they may not all progress evenly throughout the stages.

2.7.2 Garrison and Anderson's model:

Garrison and Anderson's (2003) community of enquiry model (Figure 2.4) is an instructional design framework for facilitating communities of practice in e-learning environments. Through cognitive and social functions, the model claims to encourage both independent and interdependent experience through Computer Mediated Communication (CMC). As pointed out by Garrison and Anderson (2003: 23), a critical community of e-learners interacts with a specific purpose in mind, that of 'facilitating, constructing, and validating understanding…. Such a community encourages cognitive independence and social interdependence simultaneously'.
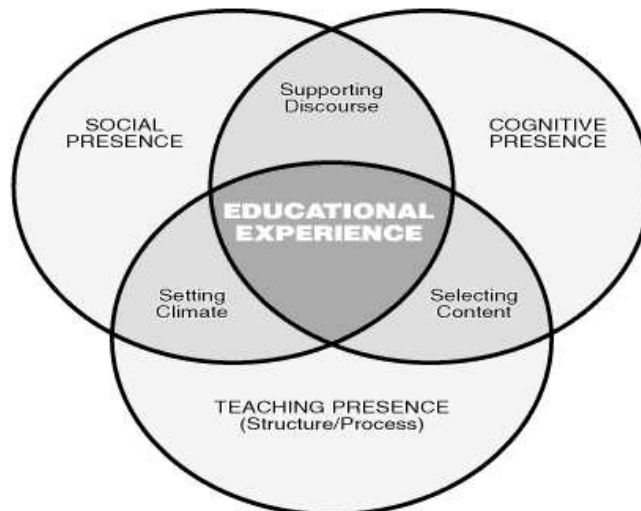
Figure 2.4: Garrison and Anderson's community of inquiry model (Edutech wiki, 2006b)

The community of enquiry model defines an optimum e-learning environment through a functional relationship between three interconnected components: Cognitive presence, social presence and teaching presence, where the resulting educational experience is a community of enquiry that is said to be an outcome of the interaction between the three components:

1. **Cognitive presence:** This is the extent to which learners are able to construct their own meaning through sustained communication with both teacher and fellow participants.

2. **Social presence:** This is the ability of participants in e-learning communities to present their personality and social character, thereby supporting discourse and projecting themselves as people in a realistic community.

3. **Teaching presence:** This relates to the material structure and facilitation of cognitive (selecting content) and social processes (setting climate) by the instructor in order for participants to achieve meaningful educational experiences.

As the community of enquiry model defines functional roles of teacher and participants by way of characterising cognitive, social and teaching presence, it seems to be more concerned with assessing and/or categorising participants' messages, e.g. Daly and Pachler's (2007) study, a summary of which can be found in sub-section 2.12.5. In

addition, the model does not make explicit specific stages of development, which are

thought to provide explicit constructivist support to novice e-learners.

2.7.3 Salmon's five-stage model:

Salmon's (2002a) five-stage model of teaching and learning online (Figure 2.5) has been

researched and developed as a grounded model at the Open University's business school

over several years, but since then it has been applied to corporate training and a variety of

learning disciplines and contexts (Salmon, 2002a). The model provides a framework for

supporting and building a 'scaffold' to facilitate online participation in five stages of

development, from initial access and motivation to independent personal development.
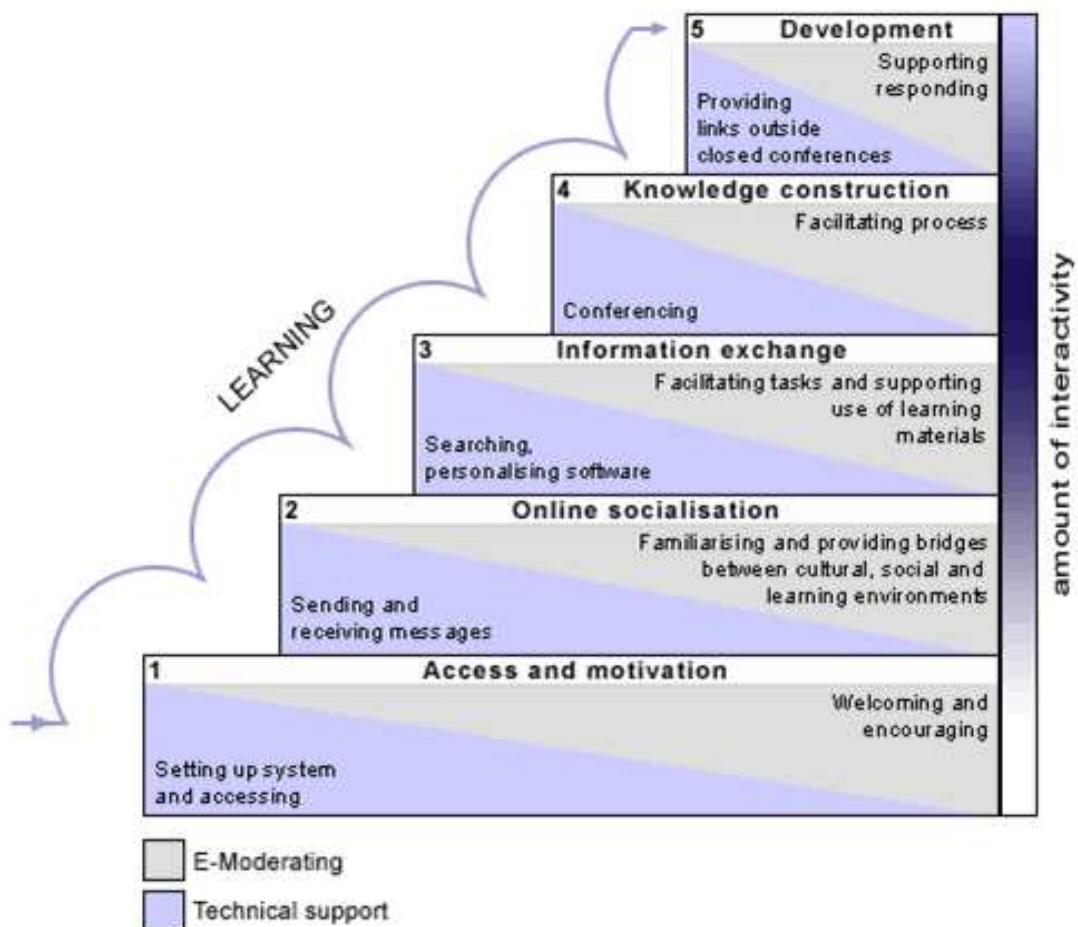
Figure 2.5: Salmon's five-stage e-learning model (Salmon, 2004)

The model is discussed in detail in Chapter 2 of Salmon (2002a), from which – unless

otherwise stated – this subsection is summarised. It is noted that while the five-stage

model was designed for distance online learning, in principle, it can also be applied to

online components in a blended learning approach (see Blended learning in section 2.9).

Figure 2.5 has been reproduced to illustrate the five-stage structure of Salmon's model.

The left of each flight of steps (learning stage) shows the kind of technical support

provided, while the moderator's roles are displayed on the right. In facilitating clearly

structured activities, Salmon's model builds on learners' previous experience to provide

> a framework on how to set up an online conferencing environment to
> maximise the experience to gradually build on participants' experience,
> maximise individual contribution and interaction and active learning and
> minimise barriers. In short to build a 'scaffold' to successful participation
> (Salmon, 2002a: 6).

2.7.3.1 Stage 1: Access and motivation:

At stage 1 of online learning, participants are allowed individual access to the learning

environment (username and password), where the moderator welcomes and encourages

learners and directs them to the next stage. Obtaining quick and easy access to the online

environment is important at this initial stage. While stage 1 is viewed as an induction

stage for individual access, Salmon thinks it is not a good idea to offer f2f sessions to

demonstrate online access and software features to participants and then expect them to

take part successfully. Salmon's alternative is to demonstrate features of the system

whilst learners are taking part in online activities. Another reasoning by Salmon (p. 12) is

that learners, while attending the f2f session, would 'spread the myth that e-learning

'doesn't work'!'. Here, Salmon is making the assumption that novice participants have

negative predispositions about e-learning, which may or may not be true.

Once participants are familiar with accessing the system, it is important for them to be

sufficiently motivated to return again and again to take part in learning activities, not just

read what is on the screen. Stage one activities should therefore enable participants to

feel more comfortable with the technology and be able to navigate easily around the VLE

using the different software tools.

2.7.3.2 Stage 2: Online socialisation:

At stage 2, participants establish their own user identities and are encouraged to socialise

by sending greeting messages to co-learners. Besides providing communication practice,

this online socialisation is thought to create a sense of belonging and promote friendly

bonds between group members, paving the way for an online learning community where

participants can collaborate more productively. As Phillips (2000: 4) emphasises,

participants need a sense of 'who the other person is' before feeling comfortable about

sharing ideas and contributing to discussion.

2.7.3.3 Stage 3: Information exchange:

Stages 3-5 are more productive in the way of exchanging information, constructing

knowledge and gaining of professional development. Two kinds of interactions can be

manifested: one with course content and another with people (co-learners and tutor).

Course content is usually provided by the tutor as files uploaded onto the VLE, or

alternatively on CD ROMs. Embedded links to other web resources can also be included.

Activities at this stage require participants to discover and retrieve aspects of information

for a particular task and share results. Task instruction should be unambiguously clear and

concise, thus, not diverting learners' attention from interactive learning. Until participants

are fully familiar with the learning environment, demands for help with navigation and

locating information are expected to be considerable at this stage.

2.7.3.4 Stage 4: Knowledge construction:

From this stage onwards, learners should be encouraged to develop their own

representations of knowledge and link it to their personal experience. Cognitive activities

can be developed to promote critical reflection (evaluating, comparing and contrasting)

and creative thinking (discovering, imagining and hypothesising) (Sternberg, 1999). The

idea of constructing knowledge at this stage is to actively draw upon previous experience

and apply it to current situations thus developing new insights into practice: participants

become 'online authors rather than transmitters of information' (p. 31).

Instructor skills in initiating and sustaining interaction are crucial at this stage. The

instructor should enable participants' experiences to surface and encourage comments, but

should not attempt to respond to every posting, as this is likely to discourage learners.

Instead, participants should be supported to comment, critique, and debate. Participant

contributions need to be acknowledged and main points summarised/ synthesised at the

close of each activity.

2.7.3.5 Stage 5: Development:

While at stages 3 and 4 the degree of interactivity is maximised, at stage 5 interactivity

decreases as participants move towards personal developmental goals. By stage five

participants should have stopped wondering about the merits of online learning and will

have become more independent and committed. Participants will be able to relate to ideas

gained in previous stages and apply them critically to their own practical contexts. The

purpose of stage 5 activities is to help participants develop meta-cognitive awareness and

present them with opportunities to reflect critically and make value judgements, thus

becoming more responsible for their own development.

As a result of the scaffolding process throughout stages 1-5, participants should have

developed confidence in reflecting, defending their positions and critically commenting on

other contributions. It is expected that participants will start to interact more effectively

and often guide, and perhaps peer-teach, each other. As Mason (1998: 23) puts it, online

discussion is the 'ideal medium to realise the teaching potential of the student, to the

advantage of all participants'.

2.7.3.6 Critique of the five-stage model:

Although some critics of Salmon's model, e.g. Unwin (2007: 178), describe it as being

'simplistic and mechanistic in parts', it can be said that, compared with those of Laurillard

and Garrison and Anderson discussed in sub-sections 2.6.7 and 2.6.8, Salmon's model

provides a structured, albeit simple, framework for supporting novice e-learners (and

tutors) stage by stage from initial access to personal independent development. The

'complexities of teachers' learning' (Unwin, 2007: 178) may well be the focus of attention

in up and running online environments, but as the present study attempts to introduce

Libyan teachers – for the first time - to this kind of technology-supported learning, a simple

straightforward model is thought to suffice.

Moreover, at each stage of learning in Salmon's five-stage model, the kind of technical

support needed, as well as the moderator's cognitive and social roles, are pointed out. It is

worth noting that a study by Motteram (2006), a summary of which can be found in sub-

section 2.12.4, has successfully manipulated Salmon's five-stage model in the context of

blended in-service teacher education. It remains to be said, however, that there can be no guarantee for success in using any particular model or models of online learning, 'but by being alert to the nature of online learning and the underlying pedagogic principles which shape delivery, the likelihood of success is significantly enhanced' (Compton, 2004: 20).

Although the stages of development are clearly defined in Salmon's model, from a practical point of view learners often project varied levels of cognitive, social, and technical skills and hence are unlikely to progress in a linear succession. Thus, at any one time, participants may be situated at different levels of development (Cazden, 1983). Even though Salmon acknowledges that participants are likely to progress at different rates, it is unlikely that an instructor would be able to support all the learners stage by stage all of the time. Therefore, while the five-stage model serves as a useful framework for online support, care should be taken to address individual learners' needs and contexts at different stages to minimise lurking, distress or abandonment of learning. Accordingly, while some participants may be able to progress smoothly stage by stage, others may require some kind of 'facilitating strategies' (Ge, Yamashiro and Lee, 2000) where more instructional support and time to absorb information (e.g. at the knowledge construction stage) are needed.

It could also be argued that, contrary to Salmon's opinion, an orientation stage is missing from the model, where, according to social constructivism, novice learners can benefit from f2f induction support. The purpose, in addition to enhancing group socialisation, is to familiarise novice learners with the online learning tools in the presence of tutor and peers, perhaps through a live demonstration, thus creating opportunities for instructional and peer scaffolding as needed (see McLoughlin's scaffolding elements in sub-section 2.10.5). Incorporating a f2f orientation stage in Salmon's model can also help to assess participants' ICT skills at first hand and the extent to which they are able to cope with technology-based instruction, in case further support is required.

2.8 Associated pedagogic concerns:

Despite the benefits of Internet-based CPD outlined thus far, the transition from well-established f2f teaching and learning into Internet-based or online paradigms carries with it an array of pedagogic concerns, for both the instructor and participants. What follows is a discussion of the main pedagogic concerns associated with a transition to Internet-based environments relevant to novice learners.

2.8.1 Impersonal interaction:

Social f2f interaction common to traditional teaching does not develop in the same way as online interaction, which is often asynchronous and limited to exchanges of text-based messages. Such impersonal interaction misses out on social paralinguistic features of spoken language (McConnell, 2000), such as stress and intonation, facial expressions or eye contact. Pincas (1998) argues that while the use of colour or bold typeface may convey textual emphasis, such tools do not have the same impact as f2f cues. Despite incorporating "emoticons" in text-based messages to simulate facial expressions, these remain a form of 'quasi-non-verbal feedback' (Locke, 2007: 190).

Vonderwel (2003: 6) also reported that a common disadvantage in online learning was the lack of 'one-on-one relationship' with the instructor; students spoke of not having the teacher as a dynamic figure to manage classroom interaction; the delay in getting immediate feedback and prolonged response time from peers was frustrating compared to f2f interaction, where learners receive immediate answers to their questions.

Noting the merits of personal interaction in f2f teaching, Tibbetts (2004) points out how it can score over the Internet:

> Interaction with a web page is still not as immediate or satisfying as interaction with people. Teachers want to help, most teachers want to know about their students' lives, thoughts, opinions. The web page does not really care, however much the Java expert tries to humanise things (p. 1).

2.8.2 Isolation:

Due to a lack of social interaction in e-learning environments, one of the consistent problems is the sense of isolation (Bennett, Priest and Macpherson, 1999). An e-learner with little or no f2f contact is not only isolated, but is more likely to feel frustrated and

distressed (Salmon, 2002b). Such remote and solitary nature of online learning poses

significant challenges for novice learners, for 'relying on well-born strategies, and working

from common assumptions about how groups work in face-to-face environments, is not

always the best orientation to take' (McConnell, 2000: 72).

While learner isolation is characteristic of online environments, it can put pressure on

participants to manage their time more efficiently, be self-sufficient and handle the

material independently with the minimum of support (Clarke, 2002). That is why new

online paradigms are not entirely based on distance learning, for f2f interaction is needed

not only to compensate for periods of isolated study (Salmon, 2002a; Pincas, 2004), but

also to impart knowledge or teach skills that cannot be adequately conveyed through

distance learning.

2.8.3 Invisibility:

The isolation of online learners is often associated with their invisibility to each other and to

the tutor. Tutor invisibility, in particular, can encourage non-participation or lurking by

certain users who, in the absence of tutor control, do not feel obliged to contribute

(McConnell, 2000). In this way, online learning 'seems to offer an electronic mask' behind

which online participants may hide (Grint, 1989: 13), thus lurking occurs. The inherent

remoteness and invisibility characteristic of online learning also enables non-contributors to

make 'rapid exits from unpleasant or threatening encounters' (Grint, 1989: 13) without

any pressure to participate or justify their withdrawal. To compensate for user invisibility,

and create some sort of group bonding, online participants are encouraged to post their

personal profiles to help them get to know each other and behave more like a group in a

real class (Salmon, 2002a).

Unlike the physical world of f2f teaching, tutors are incapable of immediately knowing if

learners are actually attending to a task or not. Online presence can, however, be

monitored using a tracking facility (time and frequency of logging on and pages visited) in

most VLEs, but this does not mean participants are actively working on a task. Such a

tracking facility is not available in web-based groups, for example Yahoo, which only show who is online (see sub-section 2.6.3.3 for more details).

2.8.4 Learner skills:

In accommodating constructivist pedagogies brought about by a transformation to Internet-supported technologies, Mallinen (2001) argues that learners need to develop a range of high-level technical and cognitive skills that include familiarity with technology (e.g. a new VLE), communication skills and the ability to be critical and reflective. Consequently, adequate 'support structures are required to overcome participants' unfamiliarity with technological environments or with the experience of communicating primarily in writing' (Whitehouse *et al*, 2006: 26).

Active participation in Internet-based environments also requires adequate 'writing and communication skills', which are deemed 'one of the common reasons why students have difficulties with online learning' (Kearsley, 2000: 13). Reasonable reading and writing skills, as emphasised by Harlen and Doubler (2007: 448), are 'central to learning from the Internet, particularly when a constructivist view of learning is embraced'. Online learners communicating in a foreign language, however, are more likely to feel under increased pressure to convey correct meanings and perfect messages before sharing them with others (Salmon, 2002a). Increasing anxiety or pressure of perfecting text-based messages by non-native learners can also turn into what has been termed online error-phobia, as elaborated in sub-section 2.11.1.5.

2.8.5 Learner independence:

As a consequence of learner-centred online pedagogy, McLoughlin (2000: 2) observes that e-learners are faced with an expectation that 'they will have independent learning skills and the capacity to engage in activities that require self direction and self management of learning'. Encouraging 'independence from the teacher' has also been one of the impacts of ICT on pedagogy (Pachler, 2005: 133). Online earners must learn to draw less on the teacher as the 'fountain of all knowledge', and more on available resources, such as their meta-cognitive abilities, those of their peers, and the web-based tools (Herrington, Oliver,

Herrington *et al.*, 2000), for it is feared that learners who lack these skills are unlikely to succeed as online learners (Kearsley, 2000).

Since online interaction has the potential to free learners from immediate teacher control, online learning arguably provides more appropriate contexts for independent learner-centred pedagogy than conventional transmission models. Therefore, according to Palloff and Pratt (2001), traditional f2f courses do not necessarily prepare students for the level of independence required in online environments. It follows that online users must be supported to adapt to independent learning and seek active strategies to enhance their learning experiences and participate more effectively; to apply meta-cognitive skills to organise, plan, monitor and self-evaluate their learning, while reflecting on previous knowledge, and as a result construct their own meanings (Reed and Woodruff, 1995).

2.8.6 Collaborative learning:

Collaborative learning has been described by Lattuca and Creamer (2005: 3) as the 'personal and shared construction of knowledge' where peer learners are active participants who seek to create personal meanings of their collective experiences. Though the climate of Internet-based interaction may seem less threatening or intimidating (no interruptions and more time to reflect on messages) compared with f2f modes, forms of online collaboration, or interdependence, require a high degree of commitment and involvement, a willingness to share knowledge with others and 'a belief that independent development is enhanced by working with others around issues of mutual interest' (McConnell, 2000: 71).

Swan (2006) emphasises that both active participation and collaboration are requirements for promoting successful online learning. As Daly and Pachler (2007: 53) argue, computer-mediated communication should enable teachers to 'develop critical and agentive ways of thinking through collaborative practices involving the sharing of electronic writing'. However, some self-conscious learners, who are not used to group work, may find the open and collaborative emphasis of online learning somewhat intimidating (Salmon, 2002a). That is because when working collaboratively, learners are required to

perform at higher levels of intellectual reasoning or cognitive skill than when they work

alone (Swan, 2006; Unwin, 2007).

Whitehouse *et al* (2006) argue that

> encouraging the articulation and exchange of practice knowledge,
> creating opportunities for collaboration around common objectives,
> developing a common language, and developing a culture of professional
> learning are among the desired educational improvements that
> communities of practice are intended to support (p. 18-19).

This seems to assume that a sense of online community should be present for participants

to constructively collaborate with each other and enhance understanding (Hiltz, Turoff and

Harasim, 2007). Since this is not necessarily the case and that collaborative practice 'is

not the natural way of doing things due to participants' competition being the norm, it

requires some scaffolding', for it to be successful (Miyake (2007: 257). Suggestions for

facilitating collaborative peer support can be found in sub-section 2.10.5.3.

2.8.7 The role of the tutor:

In a constructivist learner-centred online pedagogy, where more responsibility for self-

regulated learning is passed on to the learners, the underlying pedagogical role of the tutor

remains that of facilitating the learning process and providing appropriate and timely

support strategies (Salmon, 2002a). Thus, a constructivist online paradigm does not

overlook the role of the tutor, who acts as facilitator and manager of learning, promoting

independence and supporting the shared construction of knowledge, hence becoming a

provider of knowledge in a management of learning posture (Pincas, 2002).   In a study by

Jiang and Ting (1998:1), students' perceptions of Internet-based learning were congruent

with the constructivist view that they learn better through the social construction of

meaning and that 'the instructor's role has transformed from an authoritative figure into a

facilitator providing scaffolding and support during the learning process'.

From a learner's point of view, however, this new tutor's role may not necessarily dispose

of the customary perception that the tutor is a 'significant figure of authority who should be

there to tell them what to do' (Scharle and Szabo, 2000: 5). Herington *et al* (2000: 1)

stress that in spite of popular dissatisfaction with traditional instruction which is 'teacher-

centred, hierarchically organised and individually assessed', it has 'recently relocated to the

World Wide Web and is adapting comfortably to the new technology'. The fundamental

argument, here, is that no matter how learner-centred online pedagogy is, the tutor's role

in constructivist online paradigms remains "central", but not in an authoritarian sense.

That is, online tutors continue to have an important role to play in organising and

managing teaching as a 'system' of learning and in supporting independent and

collaborative learning processes (Eisenstadt and Vincent, 1998: 25).

One important aspect of a tutor's role in online environments is therefore to facilitate

learning, by supporting the construction of knowledge through discussion rather than the

mere presentation of material (Hiltz, Turoff and Harasim, 2007). While learners must not

be overwhelmed by the nature of online tasks, they must learn to draw less on the tutor

and more on their own meta-cognitive skills (Herrington *et al.*, 2000). However, while

clearly structured instructional support is important in asynchronous environments it is

important to avoid communication gaps (see sub-section 2.10.5.1 for further discussion of

instructional support).

Thus, the role of an online instructor is to help identify learning goals, design intelligent

content, set achievable tasks and facilitate learning in independent and collaborative

contexts; participants are encouraged to reflect on the content by independent study, then

interact with each other to co-construct meanings, and engage in assimilating tasks and

projects (Kearsley, 2000). Providing structured and timely feedback is also critical,

particularly in distance online environments where learners are more susceptible to the

lack of social interaction (Hiltz, Turoff and Harasim, 2007). Salmon (2002a) has summed

up the role of online tutors:

> They know how to welcome and support learners into the online world
> and to build effective online groups. They know how to build gradually on
> the processes of exchanging information and how to turn this into
> knowledge sharing and ultimately into knowledge construction. They
> know when to take part as a tutor, when as a peer and when to stay
> silent (p. 5).

To facilitate effective learning and provide the necessary technical and pedagogic online

support for teachers' I-CPD in this study, I had completed an online course in Online

Education and Training before carrying out fieldwork (see section 7.7 for more details).

2.8.8 Asynchronicity of online discussion:

The term "asynchronous" refers to computer-mediated communication systems that allow 'anytime' communication via the Internet, systems such as computerised conferencing or bulletin boards that support threaded discussions' (Hiltz, Turoff and Harasim, 2007: 57). Asynchronous online interaction is therefore characterised by time-delays in communication where two things happen: participants are allowed time to 'think about, consult references, compose and revise their contributions' before posting them; and an electronic 'verbatim transcript of the discussion' (Hiltz, Turoff and Harasim, 2007: 59) is archived. Salmon (2002b: 2) points to such advantages in asynchronous interaction where 'all contributions are recorded and explored in a way that rarely happens face to face'. Harasim (2007) emphasises that the asynchronicity of online communication should contribute to more thoughtful, critical and reflective interaction than oral discussion.

However, unlike synchronous chat, it is not uncommon that online messages are unanswered or ignored, particularly when participation is not obligatory. Hiltz, Turoff and Harasim (2007) point to this frustration caused by a decreased immediacy of response as a disadvantage in asynchronous networks. The authors suggest that delayed responses may even cause 'communication anxiety' where senders can experience concern as to whether their messages were sent to the intended destination, or are 'deemed unworthy of reply' (Hiltz, Turoff and Harasim, 2007: 59). Selwyn (2000) reports that up to a third of the requests for information in online discussion forums remain unanswered, suggesting that while participants may have expressed readiness to participate, they were not always willing to respond. Even though asynchronous time delays associated with online learning were appreciated by non-native learners of English (Ehrmann, 2003), Peters (2001) argues that such students find text-based media more discouraging than speech in class, because it requires more advanced proficiency of the English language.

Moreover, while novice participants tend to readily engage in social real-time chat, their level of cognitive engagement in asynchronous discussion for academic purposes may be low (Ragan, 1998). Explanations for this lack of participation in online discussions may include inadequate discussion management strategies (Collins-Brown, 1999), poorly

constructed discussion topics or difficulty in sustaining the momentum of discussion

(Beaudin, 1999). Non-existent, irrelevant or negative tutor feedback also influences

participation (Rossman, 1999). Sub-section 2.11.1 discusses the factors which can

influence online participation.

2.9 The reflux of virtuality, rise of blending:

Despite the initial euphoria which coincided with virtual education (online learning wholly at

a distance), in the mid-nineties, virtual education has suffered a reflux. Oblinger and

Hawkins (2005: 1) note that 'numerous grandiose claims and promises were made, [but]

few were fulfilled'. Salmon (2000a: ix) maintains that 'the 'hype' around e-learning as the

panacea and the trigger for changes in education is dying away'. Moreover, distance

online programs have reported greater attrition rates than conventional f2f programs;

according to Carr (2000), drop out rates associated with distance online learning range

from 20 to 50 percent. A prolonged sense of isolation (see sub-section 2.8.2) by distant

online learners has also been linked with attrition, failing academic achievement, negative

attitudes and dissatisfaction with the learning experience (Thomerson and Smith, 1996).

In the light of insights into pedagogic concerns associated with online environments

discussed in the previous section, and the declining popularity of virtual education, current

approaches to Internet-based CPD have therefore shifted from fully online approaches, to

the integration of computer mediated technology to deliver *aspects*, rather than all, of

teacher development (Pincas, 2002), thus highlighting the important roles of both the

instructor and the technology (Al-Khatib, 2003) characteristic of blended learning. As Hiltz,

Turoff and Harasim (2007: 70) maintain, 'blended courses are once again in vogue, and

are the fastest-growing forms of online learning'. It has also been argued (e.g. Price, 2007:

32) that learning theories do offer 'compelling rationales' for the positive impact of

augmenting conventional learning with digital technology, as a whole, on learning

outcomes.

Since the Libyan context has been deeply rooted in traditional transmission models, it

would be unrealistic as well as impractical for teachers and educators, to *completely*

abandon f2f contact with tutor and peers for the sake of virtual education. As Al-Khatib

(2003: 5) argues, 'technology cannot replace the oldest form of learning', a standpoint that

Salmon (2002b) strongly supports:

> Moving online does *not* have to mean a loss of active and social learning.
> The key to success is a balance between applying useful older concepts
> about learning and the implementation of innovation using the best of
> networked technologies (p. 2).

The question is, however, what is a blend and what constitutes a balanced blend? And

what kind of blending can be considered appropriate for a particular teaching context?

2.9.1 Understanding blended learning:

The literature reflects different interpretations of blended learning according to teaching

purposes and contexts. Blended learning has been defined as the 'learning events that

combine mixed aspects of online technology and face-to-face instruction' (Kaplan-

Leiserson, 2005: 7). Graham (2005) points out that blended learning has been used to

refer to combinations of delivery media, instructional methods, or of online and f2f

teaching modes, thus *hybrid* or *mixed-mode* or sometimes *distributed* learning. However,

the author goes on to explain that the first and second positions define blended learning so

broadly that any learning system can hardly be excluded from the definition; consequently

he adopts the third position, which 'more accurately reflects the historical emergence of

blended learning systems… and emphasises the central role of computer-based

technologies' (p. 3). In this sense, Stockley (2006a) defines blended learning as

> the term used to describe learning or training events or activities where
> e-learning, in its various forms, is combined with more traditional forms
> of training such as "class room" training (p.1).

Klein, Noe and Wang (2006) view blended learning as specifically referring to teaching

situations where an instructor combines occasional f2f interaction with online learning,

reflecting the significance of the degree of the blend. However, the authors assert that the

vast majority of learning should occur via distance online learning, where 'the learner

interacts with course materials, the instructor, and other trainees using Web-based

electronic media' (p. 666). Mason's (1998) content + support model (sub-section 2.9.3.1),

however, takes into consideration the novelty of online interaction for new learners and

advocates that online interaction should not occupy more than 20% of participants' study time. In Salmon's (2002a) five-stage model, a similar progressive approach to online interaction is advocated, where interaction increases as learners gain more confidence in engaging with the online environment.

2.9.2 Optimising blending:

The answer to the issue of optimal blending must pedagogically lie in the situational context under consideration; in learners' needs and in what kind of "blend" an instructor considers appropriate to support progress at each stage of teaching. That is, what kind of technology is available and suitable for the learning process, to what extent f2f support is required and what kind of tasks best promote online interaction and contribute to professional development objectives.

Blended learning can then be delivered in a variety of ways, but 'the diversity of online pedagogic contexts makes it rather difficult to predict a successful working model for all blended learning requirements' (Stockley, 2006a: 2). The success of blended learning ultimately lies in an appropriate mix of online material and technologies that fit the needs of particular learners in particular conditions with appropriate amounts of f2f interaction.

Exactly how blended learning can be organised or delivered is not quite clear from the literature. Rossett, Douglis, and Frazee (2003: 3) note that 'the topic calls out for empirical research, stymied to date by murky definitions for blends and their ingredients'.

Stockley (2006a: 2) believes that a common blended learning model involves the

> delivery of "theory" content by e-learning prior to actual attendance at a training course or program to put the "theory" into practice. This can be a very efficient and effective method of delivery, particularly if travel and accommodation costs are involved. This mixture of methods reflects the hybrid nature of the training.

According to Pincas (2002), an appropriate selection of blending appears more eclectic and pragmatically driven. Therefore, the *degree* of blending (proportion of f2f to online contact) and the *contents* of a blend (ingredients) are left to providers' judgement according to users' pedagogic needs and contexts.

While Stockley's position appears to facilitate independent and collective CPD where teachers can meet in f2f workshops to put theory - learnt online - into practice, Pincas's eclectic approach opens up choices for educators to select the degree and content of blending to suit particular pedagogic needs and contexts.

A distinct advantage of blended learning is to enable groups to socialise and build up rapport with the instructor as well as the ability to cater for individual needs, as a follow up to attendance at practical f2f sessions (Stockley, 2006). On the other hand, the f2f component can be used to offer appropriate emotional support to lurkers by discussing the relevant circumstances or causes of non-participation.

2.9.3 Blended learning models:

Three progressive models of blended design have been proposed by Mason (1998) to support novice users of online technology: a content + support model, a wrap-around model and an integrated model. These will be considered below.

2.9.3.1 Mason's content + support model:

The content + support model relies on the separation between course content, which could be paper-based or computer-based, and tutorial support, which can be delivered by e-mail or through online discussion, where collaborative activity and peer commenting are supported and encouraged. In this model, Mason suggests that the online component represents no more than 20% of participants' study time. Such a moderate proportion of online interaction suits novice learners who are not used to independent online learning and continue to rely on instructional and peer support through f2f contact.

2.9.3.2 Mason's wrap-around model:

When users become more familiar with online interaction and participation, they can be moved on to a wrap-around model. In this model, a blended combination of 50/50 is proposed, where online interaction occupies half of participants' time and the preset content takes up the other half. Online material, e.g. study guides, task activities and discussion, is tailor made to suit participants' needs and is wrapped around existing non-online material, such as textbooks, CD-ROM resources or tutorials.

The wrap-round model tends to give more responsibility to students in interpreting the course for themselves, since a resource-based approach to learning is favoured. Consequently, the role of the instructor is more demanding than in the content + support model, because more of the course content is developed by participants through discussions and activities.

2.9.3.3 Mason's integrated model:

The integrated model supports more online collaborative activities than in the previous models. Participants are also expected to be more independent as learning develops through online discussion, accessing resources and engaging in set tasks, rather than through set material. Hence, course contents are more dynamic as they are largely determined by individual participants and group interaction. In contrast with the content + support model, the distinction between content and support is removed and development relies on the establishment of a learning community, thus no restriction on the extent of online interaction is determined.

The issue of providing optimised constructivist support within Internet-based environments, whether in blended or distance online models, is of focal concern, since learners are expected to engage in independent self-regulated study away from instructor and peers (see section 2.8 about pedagogic concerns). Due to the significance of constructivist online support to the present study, it is discussed in a separate section. First, though, the theories underpinning constructivist strategies in conventional teaching are considered.

2.10 Principles of constructivist support:

This section considers how principles of constructivist theory born out of f2f modes might be conceptualised and then implemented in Internet-based environments, whether wholly online or blended. The rationale is the 'drawing [of] elements from relevant [pedagogic] theories to form a new synthesis or to provide a new insight' (Hart, 1998: 8) into the 'how' of scaffolded instruction, thus providing a pedagogic framework for constructivist support to be relocated on the Internet, or online.

According to learner-centred pedagogy associated with online environments, participants are no longer treated as passive reproductive learners who regurgitate pieces of information 'transferred from experts to novices' (Salmon, 2002b: 3). The underlying assumption is that constructivist techniques born out of conventional teaching will continue to relocate themselves on the Internet (Eisenstadt and Vincent, 1998), and that a constructivist pedagogic approach to Internet-based learning promotes a kind of learner centredness, which 'draws heavily on the notion of the construction of knowledge' and emphasises the role of social interaction as a key factor in enhancing the learning process (Salmon, 2002a: 211).

Therefore, to arrive at an appropriate pedagogy for technology-based environments in general, educational research has turned to social constructivist theory (McLoughlin and Oliver, 1998). Dene (2006) confirms that across a range of studies reviewed, most adopt a social constructivist stance. In particular, Vygotsky's socio-cognitive constructivist theory has had significant repercussions on technology-supported instruction.

2.10.1 Vygotsky's constructivism:

Vygotsky's theory of socio-cognitive constructivism suggests that learning is strongly influenced by the social environment surrounding the learner. Learning then is said to take place in meaningful contexts that are supported with learner-centred active learning experience (Vygotsky, 1978). Vygotsky further asserts that knowledge is culturally and socially constructed through interacting with more experienced individuals, e.g. a teacher or peer. Therefore, through social discourse, a learner makes sense of new information 'in such a way as to transform it into meaning, and that this meaning is defined (or 'constructed') via the learners' existing knowledge, beliefs or values' (Roberts and Lund, 2007: 488).

This constructivist perspective led to the notion of the Zone of Proximal Development (ZPD), in which learning is said to take place by bridging the gap between what the learner can do unassisted and what he/she can do with assistance (Conway, 1997). Hence, as the teacher provides appropriate support, students learn further than they would alone

(Vygotsky, 1962). The ZPD thus refers to a learner's optimal developmental potential, when assistance that is timely and appropriate is provided by another more knowledgeable person (Vygotsky, 1978).

Vygotsky (1978) argues that the interactive dialogue or discussion that takes place between peers increases learners' conceptual skills and the gap between actual and potential development is narrowed when the interaction is with more knowledgeable peers, hence, peer scaffolding. Accordingly, knowledge is not so much transmitted intact from one person to another, as it is collectively created or 'constructed' by group members attempting to bring meaning to new information while integrating it with prior experience (Rourke and Anderson, 2002).

Scaffolding is then a way of presenting new knowledge adjusted at a level just above the learner's current stage of development, so that he or she can easily understand and relate to new information by building on previously acquired knowledge and hence the learning gap is reduced or bridged. Thus, socio-cognitive constructivism distinguishes between higher and lower levels of cognition and, accordingly, instructional strategies must support higher levels of social interaction and discussion of meaning, where individuals are encouraged to make their thinking explicit, and hence attain higher levels of cognition for themselves.

Consequently, constructivist support strategies might incorporate drawing attention to contradictions or inconsistencies, engaging learners in conflict teaching, Socratic dialogue, problem-based learning, task modelling, discovery learning and reflective thinking (Driscoll, 2000). Other support techniques might involve thought-provoking questions, speculations, explanations, inferences, justifications, making hypothesis and conclusions. Slavin (1989) explains how socio-cognitive constructivism can support development:

> Students will learn from one another because in their discussion of
> content, cognitive conflicts will arise, inadequate reasoning will be
> exposed and higher quality understanding will emerge (p. 16).

2.10.2 The nature of scaffolding:

The term scaffolding was originally coined by Wood, Bruner and Ross (1976) as a 'metaphor to describe the effective intervention by a peer, adult or competent person in the learning of another person' (McLoughlin, 2002: 1). McLoughlin confirms that the term can be traced back to Vygotsky's concept of the Zone of Proximal Development, discussed in the previous sub-section. Therefore, based on such socio-cognitive principles, McLoughlin and Marshall (2000) have defined scaffolding as:

> a form of assistance provided to a learner by a more capable teacher or peer that helps the learners perform a task that would normally not be possible to accomplish by working independently (p. 3).

To start with, students' learning progress may be limited, but with the teacher providing appropriate intervention, students learn further than they would if left alone (Vygotsky, 1962). This means that an appropriation of learning is necessary, with which tasks and instructions are oriented at a level just above the learner's current stage of development (Vygotsky, 1978). As a candidate's skill or knowledge develops from lower to a higher level processing, the scaffolding support is eventually withdrawn and the instructor is said to fade away (Applebee, 1986). That is, an unavoidable aspect of scaffolding instruction, as Dodge (1998: 4) points out, is that the scaffolds are temporary, exactly as in building scaffolds, thus, scaffolding

> essentially means doing some of the work for the student who isn't quite ready to accomplish a task independently. Like the supports that construction workers use on buildings, scaffolding is intended to be temporary. It is there to *aid* the completion of a task and it is eventually removed (p. 4).

McLoughlin (2002: 10) argues that scaffolds must be designed to support 'a multiplicity of learning activities'; accordingly, forms of scaffolds are provided to encourage meta-cognitive skills and support higher-order thinking, such as 'reflection, articulation and comparison of multiple perspectives'. The author concludes that effective scaffolding is characterised by

> reducing the scope for failure in the task that the learner is attempting; enabling learners to accomplish a task that they would not be able to achieve on their own; moving learners to a new and improved zone of

> understanding; bringing learners closer to a state of independent competence (p. 155).

As an educational strategy for teacher development, the ultimate goal of providing scaffolding instruction is therefore for teachers to gradually function independently, by transferring knowledge and skills to their own contexts (Hartman, 2002). The process of scaffolding instruction is then supposed to take teachers through structured stages of development, and in acknowledging success (emotional support) at the completion of each stage, a teacher should feel motivated enough to make further progress.

2.10.3 Facilitating Internet-based scaffolding:

A significant aspect of scaffolding is that it lends itself easily to technology-based environments, such as the Internet, which facilitates independent knowledge construction, simply by navigating the Web, reading interesting material and engaging in collaborative activities and/or online discussion. As pointed out by Miyake (2007: 256), scaffolding 'can be devised not only by more able adults or peers but also by well designed technological tools and activity structures'. Toporski and Foley (2004: 6) stress that the nature of Internet-based learning 'encourages discovery, experimentation, and experiential (hands-on activity based) instruction that provides multiple representations of knowledge'.

Hence, as applications of Internet-based environments expand into TED, education experts argue that 'the incorporation of scaffolding into the learning process becomes imperative' (Starr, 2000: 4). However, 'the role of ICT and online environments has created a need to rethink issues of agency, and the respective roles of peers, facilitators and teachers in offering learning support' (McCloughlin, 2002: 2).

To arrive at a constructivist framework for Internet-based support, researchers have turned to socio-cognitive theory (McLoughlin and Oliver, 1998) and Vygotsky, as discussed in sub-section 2.10.1. Since social constructivism stresses the role of interaction in facilitating collaborative activities and the individual's cognitive construction of knowledge in meaningful contexts (Cobb, 1994) as well as the instructor's role in providing

instructional support, the evolution of e-learning technology has led to a paradigm shift in

understandings of online pedagogy (Pincas, 2002).

It has been argued that as the web develops in size and sophistication, not merely as a

content provider but as a communications medium providing learning environments rich in

levels of interactivity, socio-constructivist approaches to Internet-based instruction

continue to be favoured as a method of teaching (Driscoll, 2000). The emerging

pedagogical perspective in online learning and teaching is that as 'learning involves social

interaction and dialogue, negotiation and collaboration and that 'scaffolded 'or assisted

learning can increase cognitive growth and understanding' (McLoughlin and Marshall,

2000: 5). As McLoughlin (2003) argues Internet-based support should provide

opportunities to

> construct knowledge, actively share and seek information,
> generate a diverse array of ideas, appreciate multiple
> perspectives, take ownership in the learning process, engage in
> social interaction and dialogue, develop multiple modes of
> representation, and become more self-aware (p. 6).

2.10.4 McLoughlin's scaffolding elements:

As Internet-based technology is increasingly incorporated into the delivery of CPD,

McLoughlin (2002: 4) argues that 'the concept of scaffolding needs to be extended',

calling for 'a reconsideration of the nature of learner support and for the alignment

of the original theory with current teaching and learning practices'.
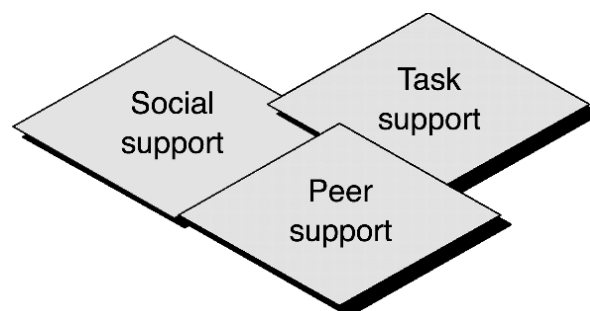
Figure 2.6: McLoughlin's scaffolding elements

Consequently, McLoughlin (*ibid*) proposes a conceptual framework (Figure 2.6) for

scaffolding distance online learners by identifying three basic elements of support: 'social

support, peer support and task support'. Here, McLoughlin views social support as the

provision of distributed groups of learners that support 'different technological

functionalities which enable dialogue, reflection and interaction …and the creation of an

online community'; peer support is 'provided through discussion forums' and 'allows

sharing of information, review of ideas and feedback among groups of learners'; task

support is facilitated by creating structured learning so that 'the learner is able to perform

the task, e.g., through provision of heuristics or resources that enable task engagement

and activity' (p.4-5).

In my opinion, social support and peer support largely coincide since a sense of community

is created by peer interaction, collaboration and sharing of knowledge. Instead, I

reconstruct McLoughlin's components to amalgamate social and peer scaffolding and, due

to the significance of guided instruction, include instructional scaffolding. As Morris (2002:

2) argues, the notion of the ZPD seems to indicate that 'one's latent, or unexpressed ability

could be measured by the extent to which one profits from guided instruction'. Further,

Garrison and Anderson's (2003) concept of 'teaching presence' (sub-section 2.7.2), is

viewed as a central component in supporting a community of practice, in addition to

cognitive and social presence.

What follows is a clarification, based on relevant literature, of McLoughlin's reconstructed

support elements: *Instructional support, task support* and *peer support.* These elements

are subsequently incorporated into a multi-dimensional support model, as discussed in

sub-section 2.10.5.

2.10.4.1 Instructional support:

McLoughlin (2002: 4) argues that in online learning contexts, it is the function or 'agency

of the teacher' that is different from f2f settings. Emphasising how instructional support

can be mediated by technology, Toto, Wise and Engel (2005) point out that online

scaffolding may take the shape of

> hints about solving a problem or completing a task, or guided tasks that
> lead the learner towards more complex, extended, independent
> performance (p. 14).

To help achieve this, learners in asynchronous environments need explicit instructions,

where tasks are preceded with, or linked to, such instructions in a clearly headed message

on how to proceed (Salmon, 2002a).

An instructor should be aware of communication gaps, which can be overcome with 'effective, deliberate planning and strategies for improved communication between instructors and students' (Vonderwell, 2003: 10). As McKenzie (2000) observes, without clear structure, precise instruction and clearly stated expectations, participants are likely to wander off and lose interest. Ultimately, however, scaffolding instruction is a balancing act. While the instructor's role is to provide appropriate structure and support with which to facilitate learning, participants must make a conscious effort to read and understand the material, respond to set tasks, interact with peers and generally act independently of the group when necessary.

According to Rogoff (1990), the number of steps to set online tasks should be minimised such that a learner can make the necessary transformation within a ZPD with least assistance. Five instructor-led functions have been proposed:

1) enlist learner's interest,

2) keep the learner in pursuit of the task,

3) stress the important features of the task,

4) minimise learner stress, and

5) demonstrate or model task completion or provide an ideal solution to a problem.

McKenzie (2000), however, adds two more scaffolding activities to Rogoff's five:

6) reduce uncertainty, surprise, and disappointment (by testing lessons to determine possible problem areas and eliminate difficulties);

7) direct students to useful resources to reduce time-on-task and learner frustration.

A critical drawback associated with instructional scaffolding is its implementation in mixed-ability groups where not all candidates are at the same level of knowledge or skill. As Van Der Stuyf (2002: 12) observes, while scaffolded instruction is personalised so it can benefit individual learners, 'this is also the biggest disadvantage for the instructor since developing the supports and scaffolded lessons to meet the needs of each individual would be extremely time-consuming'.

2.10.4.2 Task support:

In order to create a constructivist learning environment, task support can be provided through what is known as Problem-Based Learning (PBL). This is a form of learning in which participants are stimulated to learn through being engaged in a problem or stimulus. In Savery and Duffy's (1995: 2) terms, 'cognitive conflict or puzzlement is the stimulus for learning and determines the organization and nature of what is learned'. Here, the goal is not the stimulus itself, but rather a focus of attention that determines what learners attend to, what prior experience or knowledge they bring to bear in constructing their understanding and what kind of knowledge is eventually constructed.

As Ngeow and Yoon (2001: 1) explain, PBL is a hands-on educational approach which challenges participants to 'learn to learn… to seek solutions to real-world problems and, more importantly, to develop skills to become self-directed learners', which renders it an effective scaffolding approach that can be employed in I-CPD contexts, where participants often learn in isolation (see sub-section 2.8.2). A key feature of an online task is therefore a stimulus, a piece of information, opinion or anecdote that initiates discussion, to which participants respond by posting contributions to the discussion board, or forum.

Instructional support, as discussed in the previous sub-section, is often embedded in PBL. First, the instructor prepares a stimulus, task or activity that participants can perform independently and decides what they must learn to complete it. The instructor then 'designs activities which offer just enough of a scaffold for students to overcome this gap in knowledge and skills' (Ngeow and Yoon, 2001: 2). To support participants in completing a task, the instructor may first suggest pre-selected sites to follow, but later these sites may be used as gateways, helping participants to extend further out in search of material to suit their own learning or teaching contexts (discovery learning). Mason (1998) suggests providing specific tasks (such as searching for answers to specific questions in readings or web resources) and then setting timelines for reflective discussion.

Research shows that, in setting online tasks, it is important to engage participants in reflecting upon relevant practice (Hung and Wong, 2000). To promote reflective thinking, participants are often asked to recall a familiar experience, which will then be used to introduce a problematic stimulus or ask activity. At the end of a reflective activity, the instructor or moderator provides feedback and/or a summary of contributions made (Salmon, 2002a).

An expanded form of PBL is technology-enhanced project-based learning (Howard, 2002). Mills (2006) argues that Internet technology provides an ideal medium for project-based learning and collaborative activities by employing a range of cognitive tools that guide and extend learners' cognitive process. In scaffolding participants to complete a project, they are required to seek relevant information from appropriate sources and apply them to complete a project (McLoughlin and Luca, 2002). The objective is to engage participants in relevant situations or issues requiring them to 'acquire skills or knowledge in order to solve the problem or manipulate the situation' (Dodge, 1998).

However, effective outcomes of problem-based or project-based learning require that participants possess certain technical pre-requisites, or input skills and that they are sufficiently motivated to engage with the tasks. In the excitement of incorporating I-CPD, educators may overlook the need to prepare, or orient, teachers appropriately. This could lead to what might be called 'virtual learning', in which participants appear to be busily engaged in exploring the Web or chatting with peers, 'but are not sufficiently prepared to learn much from the experience' (Dodge, 1998: 4).

2.10.4.3 Peer support:

EPPI (2005) report that sustained collaborative development can be effective when it combines input from outside experts but with peer support and is connected directly with teaching practices. Since the practice of scaffolding is inherently a social constructivist process, collaborative activities are often embedded in online interaction such that more able peers can scaffold less skilled colleagues (Brown, Collins and Duguid, 1989). Hence, peer support is a key feature in collaborative CPD, because 'peer collaboration often acts as

the principal vehicle for professional development' (EPPI, 2005). Peer support, whereby

more advanced learners can be paired up with less-developed colleagues, can also

alleviate pressure on the instructor.

Bearing in mind the role of Vygotsky's ZPD in peer scaffolding, Lewis (1995) maintains that

> the ZPD area of one member overlaps core areas of others. These are
> areas where one member may support another and in which learning
> may take place incidentally…It is here that the exchange of informal
> knowledge between professionals results in the creation of new
> knowledge (p. 193).

Therefore, to enhance learning, CPD opportunities can be created by educators such that

teachers can scaffold each other in supportive non-threatening environments. As

demonstrated by research evidence, 'teachers who collaborate, learn together, share ideas

and attempt to model best practice are more likely to remain in teaching', because they

feel 'valued and supported in their development and in their work' (GTCE, 2004: 15).

When a sense of community is developed, the collective experience of an online group can,

therefore, contribute positively to enhance CPD. As Bruner (1985) argues, when learners

are confronted with different interpretations of a given situation, collaborative learning

enhances comprehension and improves problem-solving strategies. That is, peer support

increases the potential of conceptualising received knowledge and applying critical thinking

skills to solve problems and respond to set tasks. The capacity of collaborative web-based

social networking, as Kress and Pachler (2007: 11) put it, has been enhanced through

recent advances in communication technology; new collaboration tools, such as 'photo-

and video-sharing services, pod- and video-casting, weblogs, wikis, social bookmarking,

syndication of site content', all of which facilitate the sharing of content, are now available

to online participants.

2.10.5 My model for multi-dimensional support:

In this section, five theoretical concepts are synthesised into what might be termed multi-

dimensional Internet-based support (Figure 2.7). In addition to incorporating notions of

constructivist support embedded in the works of (a) Vygotsky (the concept of ZPD

discussed in sub-section 2.10.1), and (b) McLoughlin's (2002) modified elements

(instructional, task and peer support discussed in sub-section 2.10.4), the multi-dimensional model reflects (c) Salmon's (2002a) five-stage model of online development discussed in sub-section 2.9.3, (d) Dodge's (1998) transformation model, which depicts scaffolding as a sequence of instructional activities that begin with an input stage and end with an output stage, but at centre stage is the process of transformation (ZPD), and (e) Applebee and Langer's (1983) concepts of horizontal and vertical scaffolding, to which I have added two dimensions, namely emotional and procedural scaffolding. The last two concepts in (d) and (e) are outlined in this sub-section.

Figure 2.7 represents a framework for multi-dimensional support: Horizontal, Vertical, and Emotional, which occur within a transformation zone (ZPD). Emotional support (represented by the dashed arrow) provides motivational and attitudinal support, which is thought to be particularly relevant to distance online instruction, where learner isolation and/or frustration can influence participation. A fourth dimension, Procedural support, which could not be shown, represents an instructor's procedural activities to facilitate tasks, which normally occurs before or after a transformation zone.
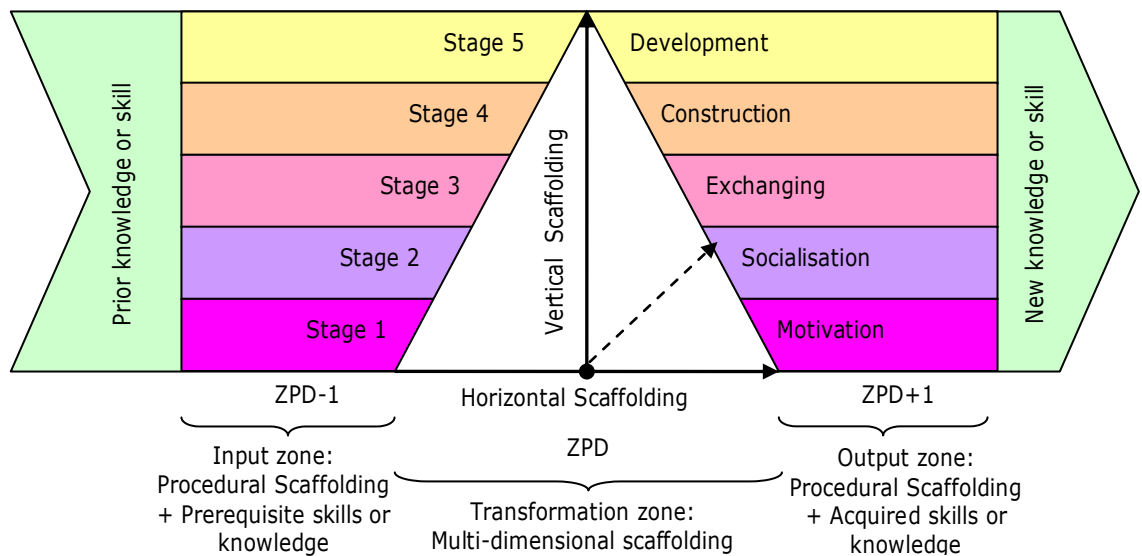
Figure 2.7: Multi-dimensional I-CPD support model

The rationale for constructing the multi-dimensional support model is to facilitate a constructivist Internet-based framework that considers the multiple aspects of learning to support novice teachers' I-CPD and, as pointed out by Hoadley (2007: 140), to produce

'design models that permit construction of improved e-learning interventions' in CPD

situations characterised by low technical skills and low-tech conditions. The idea of the

multi-dimensional support model draws upon McLoughlin's (2002: 10) 'multiplicity

continuum' suggesting that 'scaffolds can range from one-dimensional (limited to one

aspect of learning) to multi-dimensional (applicable to many aspects of learning)'.

In Dodge's (1998) transformation model, an instructor perceives each online task as a

separate unit or stage of learning (a scaffold) that leads to a further stage of development.

Dodge perceives scaffolding in three distinct steps: 1) **Input**, referring to pre-requisite

knowledge or skills, 2) **Transformation**, or the conceptualisation or internalisation of

knowledge or skills, and 3) **Output**, which is the manifestation of knowledge or skills

learnt. It is worth noting that the transformation process (step 2) is an internal activity

particular to an individual learner; a cognitive conceptualisation is needed if a task

introduces new knowledge, but a behavioural one if the task involves acquiring a new skill.

Such transformation of knowledge or skill is critical to task support and is central to

Vygotsky's ZPD where cognitive internalisation takes place.

Applebee and Langer (1983) describe aspects of instructional scaffolding where two types

of scaffolding are envisaged: sequential or *horizontal scaffolding* is said to be an act of

introducing further topics, or tasks, by covering new areas of knowledge or skill, using

cues, prompts, hints, partial solutions, or direct instruction; *vertical scaffolding* is supported

by asking probing questions to further enhance existing knowledge or skill (Hartman,

2002). It is worth nothing, here, that McLoughlin's scaffolding components (instructional,

task and peer support; see sub-section 2.10.4) are embedded within both horizontal and

vertical scaffolding. That is, an instructor may decide to provide instructional, task or peer

support either horizontally or vertically as required by situational contexts to assist

learning.

The centre triangle in Figure 2.7 represents a transformation zone, or the ZPD (in

Vygotsky's terms), where horizontal, vertical or emotional support take place. In this

sense, a learner can be scaffolded vertically, based on Salmon's (2002a) five-stage model,

thus, moving to higher-levels of online interaction (Stages 1-5), e.g. from socialisation to information exchange; horizontally, according to the complexity of the task, where more information or conceptual knowledge is needed to assist cognitive transformation; or emotionally, by providing emotional scaffolding, e.g. enlisting learner interest or providing personal encouragement.

It is within the transformation zone (ZPD) that multi-dimensional scaffolding activities are enacted. The input zone, ZPD-1 (minus one) denotes pre-requisite technical or cognitive skills prior to undertaking a task; ZPD+1 (plus one) is the output zone or outcome of the scaffolding instruction depicting acquired skills or knowledge after task completion. On completing a task, this output zone also acts as a threshold from which to scaffold and motivate learners to engage in higher-level tasks achieving yet further development.

A theoretical framework for multi-dimensional support is presented in Table 2.1. The transformational functions therein are based on the works of several authors, as indicated. The centre column shows the scaffolding activities associated with the transformation zone (ZPD), whereas those relevant to the input and output zones are shown either side. To help classify the scaffolding functions, the symbols HS, VS, ES and PS are used (see key).

It can be seen (from Table 2.1) that whereas scaffolding within the ZPD is typically multi-dimensional (vertical, horizontal or emotional), scaffolding within the input and output zones appears to be either procedural or emotional. This is because actual scaffolding of knowledge or skill (transformation) takes place within the ZDP itself; emotional scaffolding can be provided throughout the scaffolding process, while procedural scaffolding occurs before and after transformation as required by the instructor.

Despite the sophistication of Internet-based technology and the range of instructional, task or peer support facilitated by an instructor, participation in online learning does not always match the efforts made or the expectations held. As Salmon (2002a: 47) notes, 'inhabitants of the online world can only be recognised by the contributions they make', however small.

Table 2.1: A theoretical framework for multi-dimensional support

Input Zone (ZPD-1)	Transformation Zone (ZPD)	Output Zone (ZPD+1)
Be aware of prior-knowledge; pre-requisite knowledge or skill (PS): (Dodge, 1998). Minimise task procedure (PS), enlist learner interests (ES): (Rogoff, 1998). Clarify task objectives and procedures (PS); Promote a sense of ownership (ES), set task at appropriate level (PS): (McLoughlin and Marshall, 2000). Empower learners (ES): (McConnell, 2000). Direct learner to useful resources (PS), Reduce confusion, frustration, and time on task (ES): (McKenzie, 2000).	Scaffolding activities or functions include: comparing/ contrasting (HS), forming new concepts (HS), reflective thinking (VS), critical thinking (VS), brainstorming (HS), Socratic questioning (HS), attitude shifting (ES): (Dodge, 1998). Problem-based learning (HS; VS), conflict teaching (HS; VS), Socratic dialogue (HS): (Driscoll, 1994). Probe (HS), Socratic questioning (HS), explore further topics (HS): (Applebee and Langer, 1983). Keep learner in pursuit of task (ES), minimise learner stress (ES): (Rogoff, 1990). Provide cues (HS), prompts (HS), hints (HS), partial solutions (HS), think-aloud techniques or direct instruction (HS): (Hartman, 2002). Encourage collaborative learning and foster internalisation of knowledge (HS, VS): (McKenzie, 2000). Encourage learner to transfer knowledge or skill to own context (VS): (Hartman, 2002). Encourage independent performance (VS): (Chang, Chen and Sung, 2002).	Acknowledge success (ES), encourage and motivate learner to move on to next learning zone (ES): (McConnell, 2000). Withdraw support gradually (PS) (Applebee, 1986).

Key: HS= Horizontal Scaffolding; VS= Vertical Scaffolding; ES= Emotional Scaffolding; PS= Procedural Scaffolding

To shed more light on the issue of contribution, the next section discusses the personal factors which might influence online participation and the possible means with which to encourage effective online presence.

2.11 Supporting online participation:

It is a requirement of successful I-CPD that teacher-participants make a conscious effort to actively engage in the learning process, e.g. by responding to tasks or collaborating with other co-learners (Swan, 2006). If, despite the range of constructivist support strategies employed, learners do not actively participate, no interaction will take place and any learning will be limited to personal study (see Lurking in sub-section 2.11.1.2).

I disagree with Kearsley's (2000: 15) recommendation that the instructor 'must participate a lot to get students to do likewise'. Participants might in fact be discouraged, rather than encouraged, if they sense that the instructor will eventually intervene by responding to every message. As Salmon (2002a) warns, too many postings by the instructor may be

counter productive and he/ she may end up logging on to read his/her own messages. However, there should be *sufficient* interaction with learners, where the instructor intervenes, as and when necessary, to answer queries (horizontal scaffolding), advance learners' cognition (vertical scaffolding), moderate discussion (procedural scaffolding), and praise participation or tactfully encourage lurkers (emotional scaffolding).

2.11.1 Personal factors influencing online participation:

Despite the benefits of I-CPD to teachers, not everyone participates equally well, regardless of the support strategies employed. Since e-learning is often a self-directed independent activity, Salmon (2002b) notes that active participation can be influenced by several personal factors among which are learner orientation or learning style, degree of autonomy and the familiarity with the online learning environment, e.g. a particular VLE. Other personal factors, such as the novelty of the technology, how learners adapt to the learning environment and group participation, learner introversion or extroversion may also come into play (Soles and Moller, 2001).

2.11.1.1 Lack of social interaction:

The reduced level of social contact in online learning modes is often a cause of concern for novice learners, who are likely to feel 'anxious about the lack of stimulus and fun from their "buddies" and the potential loss of personal relationship with their teachers' (Salmon, 2002a: 5). Consequently, emotions can surface due to 'the experience of not physically being with others in the same space' (Salmon, 2002b: 8). In addition to technical support, some novice learners may, thus, need emotional support to familiarise them with the process of interacting through text-based media, while developing collaborative skills.

2.11.1.2 Lurking:

Lurking, as Clarke (2002: 21) observes, occurs when having gained access to the learning material, certain participants prefer to 'sit on the fence' and watch others do the work. Because online learning assumes independent learners who presumably require minimal support (Pincas, 2002), tutors have less control over the learning process and this makes it easy for participants to ignore the tutor (McConnell, 2000). Consequently, learners feel

freed from conforming to tutor control and, hence, do not necessarily yield to pressure to participate, as they may do in f2f confrontations (McConnell, 2000; Salmon, 2002b).

Most online platforms enable tutors to monitor, or track, contributions as well as how frequent, or constructive, those contributions are. Online tutors, however, can e-mail or phone lurkers, if possible, to encourage participation, or exercise mentoring skills during f2f components of blended learning to address the reasons of inactivity (emotional support). See sub-section 2.9.2 on Optimising blending, which points to some advantages of blended learning.

2.11.1.3 Surface approach:

Two types of learner approaches can be distinguished as far as depth of understanding is concerned: a 'surface processing approach' and a 'deep processing approach'. Deep processing learners will actively engage with ideas and reflect upon the learning experiences involved in order to make meaning. On the other hand, surface approach learners will not engage fully and are likely to produce passive or appeasing responses (Briggs, 1999a). It follows that surface approach learners should be supported to apply deep strategies to engage with, and reflect on, task activities leading to meaningful construction of knowledge and high-level participation.

2.11.1.4 Frustration with technology:

Particularly in the case of poorly skilled and poorly prepared participants, frustration with technology is a common concern (Salmon, 2002b). Novice participants with low ICT skills are more likely to be deterred by digital technology, unless they are motivated and reassured so that, as Kearsley (2000) notes, the emphasis is on learning, not on technology. On the other hand, however, learners new to Internet-based environments need to understand how to develop emotionally with technology and that what matters is

> acquiring the emotional and social capacity to learn with others online.
> Technical skills can be acquired and disposed of as needs be. Feelings
> about being unable to take part successfully are more significant than
> precise technical skills (Salmon, 2002b: 12).

Therefore, an emotional and social disposition to actively participate and collaborate online appears to be a significant pre-requisite, without which learners may not succeed even

though they may be technically skilled. Using f2f sessions inherent in blended designs,

educators can create social constructivist environments, in which participants are

emotionally supported and encouraged to interact online. As Pea (2004) puts it,

> people and machines join together in helping someone learn something
> in the sense that certain scaffolding activities can be the responsibility of
> the teacher (or peers) and other scaffolding activities provided by the
> [online learning] software (p. 22).

There is force in Buxton's (2001: 5) argument that while digital technology is a catalyst for

change in the way people learn, 'the deep issues holding back progress are more

behavioural than technological'; that is, to overcome resistance to change, or fear of

technology, teachers must undergo a change in attitudes to accept, and eventually

acquire, new approaches to learning and teaching. Therefore, while supporting in-service

teachers to exploit Internet-based technology as an instrument for development, teachers

themselves should come to terms with their fears and familiarise themselves with the

technology (Nichols, Ferketich and Jacoby, 1998).

2.11.1.5 Online error-phobia:

In addition to coming to terms with the fear of Internet-based technology that novice

teachers experience, other pressures of having to perfect text-based communication are

likely to surface. The openness of online communication is such that other participants can

read all the messages sent by group members, which as McConnell (2000: 84-85) points

out, could be discouraging and 'might prove rather threatening'; yet, 'this is expected, and

should be accepted'. McConnell (2000: 84) also argues that, for some participants, the

anxiety of 'having to present their thoughts publicly in typewritten form acts as a barrier to

full participation'. Hence, the fear of committing online errors, because contributions are

retrievable and 'open to view and criticism' (Porter, 1997: 201) might lead to online error-

phobia, which can be identified as a cause for poor participation.

Salmon (2002a) describes how a non-native learner believed that her messages had to be

error-free before posting. Later, however, she realised that online responses could be

written as spoken (Netspeak) and need not always be perfect, particularly when the pace

of discussion is notably rapid, and that natives too can make mistakes:

> Last year I felt that before I could post anything, it had to be perfect!
> Then sometimes I was too late, simply because the discussion had
> moved on. This year, I saw native speakers make mistakes too. They
> mistype words or they write as they would speak, and then, I felt more
> self-confident! I said to myself, 'I needn't be perfect, why don't you just
> try and join in?' And this is what I did! (p. 7).

For novice NNESTs with relatively low levels of language competency, however, the anxiety of online error-phobia remains that of constructing grammatically incorrect responses, hard copies of which are archived and open to view by other users. Error-conscious participants are likely to feel deterred even more and, as McConnell (2000: 125) observes, 'learners will act with caution for fear of making fools of themselves or showing themselves up'.

Thus far, the review of the literature has helped to construct a theoretical framework for the present study. Several pedagogic perspectives and conceptual issues that characterise the areas of study relating to the kind of I-CPD thought to be appropriate for the Libyan context have been discussed. This has led to the construction of a pedagogic constructivist framework to enhance I-CPD for novice users in the shape of a multi-dimensional support model.

Before embarking upon the Research Design chapter, I turn now to a consideration of how I-CPD has been researched and might be researched, in order to provide further justification for conducting the present study from an empirical viewpoint. The research studies are presented in chronological order and, in each study, the methodology of research as well as the conclusions drawn are presented. To help identify a research gap, a summary of the studies follows.

2.12 Overview of relevant empirical studies:

Advances in ICT within developed countries have provided exciting opportunities for expansion into online CPD provision. It is worth pointing out, however, that developing countries have a lesson to learn from the West's hasty experience in implementing online learning. In the beginning of the hype of e-learning during the nineties, virtual education enthusiasts envisaged the new technology as a replacement for conventional models of learning (UK e-Universities Worldwide, 2002).

Currently, professional and higher education in most Arab countries are undergoing some transformation to online environments in one way or another (see later in this section). To benefit from the West's early experience in e-learning (bearing in mind what has been said about the reflux of virtuality in section 2.9), this section draws upon earlier, as well as recent, studies concerned with applications of online learning carried out in Europe and America. This section also draws upon studies investigating the implementations of e-learning in some Arab countries. It must be noted, however, that in contrast with Western contexts, very few empirical studies into the design, support or implementation of online learning have been carried out in the Arab world. Much of the literature, e.g. that published by the Arab Network for Open and Distance Education (ANODE), appears to be concerned with theoretical principles and concepts, accreditation of educational programmes or political/ cultural barriers to online education.

2.12.1 Hammond (1999):

An important case study in higher education contexts carried out in Britain by Hammond (1999) suggested that online participants fell into three categories: the *communicative learner* who found time to respond to messages and take part in online tasks; the *quiet participant*, or lurker, who found time to read messages but not to contribute; and the *non-participant* who did not engage at all due to certain constraints. Over time, however, participants slipped from one category to another as they became more familiar with the learning environment. Hammond also found that the communicative participants were not necessarily competent with technology, suggesting that digital technology is not a potential barrier to participation. Rather, participation emerges as a result of a willingness to take risks and a personal sense of responsibility to the group.

Hammond concludes that five major barriers affect the degree of online participation: time constraints and inadequate structuring of priorities; inadequate access to the technology or technical support; learners' attitudes to the value of online discussion and their expectations of it; the nature of the online environment; and pedagogical factors, which include being anxious about a permanent record of online contributions being kept.

2.12.2 Whittle, Morgan and Maltby (2000):

The authors used constructivist pedagogy and problem-based design to deliver web-based academic material to twelve undergraduates via blended learning. Asynchronous text-based discussion was the main pedagogical feature of instructional design, collaboration and assessment. The case study involved an in-depth examination of the effect of asynchronous discussion on student learning.

The study focused on understanding students' learning processes and gaining insights into how students utilised the learning environment to meet the learning objectives. Of particular interest to the research were: 1) the level and quality of engagement with subject content, cognitive changes in students' understandings, and the final level of cognition students achieved. Data were collected through records of asynchronous discussion, students' responses to set tasks, and an online project.

The findings support the view that supporting collaboration and problem-based learning embedded in text-based communication provides instructors with a 'powerful strategy to support students' active engagement with content and facilitates the development of high levels of conceptual understanding' (p.19).

2.12.3 Hawkey (2003):

In a case study involving nineteen trainee teachers working on Blackboard (VLE), Hawkey (2003) conducted a qualitative enquiry. The study evaluated the trainees' contributions to text-based asynchronous discussion as well as the benefits and limitations of Blackboard. Consistent with social constructivist theory, instructional scaffolding was a characteristic feature in the study, thus trainees were able to move from assisted learning to non-assisted, or independent, learning. Mason's (1998) wrap-around model (see sub-section 2.9.3.2) enabled the trainees to contribute to course content and determine the direction of online discussion. Hawkey claims that the study appears to be consistent with other research in that asynchronous text-based discussion was positive in supporting the social construction of knowledge, by virtue of allowing participants time to reflect.

2.12.4 Motteram (2006):

An interesting case study was carried out by Motteram (2006) on postgraduate in-service teachers studying at the University of Manchester (MA Educational Technology and English Language Teaching). The study employed a mixed-method design in which a long-term case study (over 3 years) was used. Questionnaires, discussion and focus group transcripts were the main sources of data collection. Concepts of cultural history to describe how the module activities developed over time were also employed.

Motteram manipulated Salmon's (2002a) 5-stage model to provide blended learning support through what he called "a transformative education scale". The model was applied to a particular course module (Computers, Language and Context) in which asynchronous discussion and web-based material were used to support teaching, as in Mason's (1998) 'content + support' model. The aim of the study was to describe and evaluate teachers' experiences of using a range of online tools and to assess whether blended learning constituted a valid experience for in-service teachers. Motteram's transformative education scale, reproduced in Table 2.2, illustrates a parallel with Salmon's five-stage model. It appears that Motteram retained the original stepped presentation to reflect the progressive flight of steps in Salmon's model (see Fig. 2.5 in Chapter 2).

Table 2.2: Motteram's transformative education scale

	Motteram's scale		Salmon's stages
5	Transferring knowledge and skills to others	Innovate and inspire others to change ideas	Development
4	Doing it alone	Establish a personal view and become confident with new skills	Knowledge construction
3	Gaining independence	Try out new ideas in one's own professional context. Discuss these ideas with work colleagues	Knowledge exchange
2	Supported knowledge and skills development	Try out new skills with support from tutors. Discuss ideas with peers and tutors online: reflect on new experiences with further reading	Online socialisation
1	Getting an overview	Read input materials (new ideas), become acquainted with new ideas and new skills. Reflect on these in terms of own experiences	Access and motivation

The findings of Motteram's study indicated that Salmon's model worked well with participants who engaged with tasks involving ideas and processes that were stimulating and motivating and which facilitated reflection, thus leading to meaningful learning. Through the provision of deep processing activities and experiences, the study also showed

that blended learning can play an important role in the transformation of teachers, but it is important to set tasks that are feasible and within the timeframe available.

It is noted, however, that compared with Salmon's stage 1 (access and motivation), Motteram's transformative scale incorporates reflection on experience, which may seem rather demanding for novice users who are not used to online communication and tools. In the second stage, which corresponds to online socialisation, the model also encourages the exchange of ideas and more reflection. Motteram's transformation model may work well with experienced users, as perhaps was the case with the MA Educational Technology and English Language Teaching students, but with novice users of online technology, it may be wise to first familiarise learners with the online environment through low-level tasks before expecting them to take part effectively in higher-level ones.

2.12.5 Daly and Pachler (2007):

This study describes research into collaborative discussion by a group of in-service teachers on a blended mode Masters degree at the Institute of Education, University of London. The course was based on constructivist notions of shared knowledge construction and critical reflection through problem-based learning, and regular and compulsory participation in an online forum.

Using Garrison and Anderson's (2003) community of enquiry model (see sub-section 2.7.2) and qualitative content analysis, the study investigated discussion messages and extracted themes pertaining to development which could answer questions about how professional learning takes place in an online environment. In all, thirty messages were sent by eleven participants in response to set tasks. An investigation of message typology revealed five categories: knowledge construction, community, metalearning, autobiography and cognition.

The study concludes that permanent manuscripts mediated by computer-mediated discussion facilitate 'conscious engagement with language that can be subjected to interpretations and reinterpretations, thus extending the levels of further meaning-making' (p. 76). Participants also demonstrated collaborative notions of reflexivity on teaching

practices in their discussions. It was also concluded that online forums can contribute to 'the co-construction of evolving professional knowledge' and that this reflexive process is in need of further exploration.

2.12.6 Studies in the Arab region:

Although valuable lessons can be learnt from research studies in distance education, teacher training and development contexts in Western institutions, published research linked to under-resourced low-tech conditions is scarce. Particular published material in I-CPD, e-CPD or online CPD in Arab contexts is even scarcer, due to a dearth in relevant research and the comparatively late introduction of e-learning to the region. It was not until 2002 that the Arab Open University (AOU) began online teaching at three national branches: Kuwait, Lebanon and Jordan; in 2003, three other branches opened in Bahrain, Egypt and Saudi Arabia (Abu-Ghreib, 2004). Teaching at the AOU, however, focused on higher education rather than adult education or professional development.

The introduction of online learning in Arab countries appears to have encountered a host of operational problems, e.g. Al-Khatib (2003); Al-Tuhaih (2004). Consequently, research studies, e.g. Almarzougi (2003), Al-Tuhaih (2004) and Mohamed (2005), have tended to focus on barriers to online learning, but from a stakeholders' perspective relating to policy issues, technical infrastructure, financial support, programme administration or staff training, all of which emphasise a prospective rather than a retrospective outlook.

Examining the case of the UAE, Almarzouqi (2003) notes that in addition to the need for enhanced technical training for staff and students, attitudes of policy makers need to improve in order to finance a strong infrastructure for e-learning and that the general public, including employers, must be prepared to recognise and accept online accredited certification. In Kuwait, Al-Khatib (2003) also points to accreditation concerns of online education. In Jordan, online learning was appealing for universities in order to absorb the large numbers of secondary school leavers, but accreditation problems continue (Abu-Ghreib, 2004). Across the Arab region, Mohamed (2005) points to the need for establishing a quality assurance framework and appropriate accreditation policies.

Al-Tuhaih (2004), who conducted a case study on Kuwait University's Distance Learning Centre, found that some e-learning programmes were conducted without carefully considering students' needs and lacked co-ordination between officials responsible for programme implementation. Al-Tuhaih suggested that to improve the quality of e-learning, lecturers, technical staff and support personnel all need to effectively collaborate to enhance the planning, delivery and development of e-learning. Al-Tuhaih also suggests that teaching staff should receive technical training in using e-learning tools to support the teaching process. He proposed that students should be made familiar not only with obtaining online information but with interacting effectively with the e-learning environment and collaborating with co-learners to enhance outcomes.

In the domain of Arab in-service teacher development, El-Gamal (2005) examined an Egyptian e-learning project in which Internet-based teaching (I-ELT) was introduced at preparatory schools (11-14 age group). A survey of 88 teachers was conducted to investigate the barriers to successful integration of the Internet at classroom level highlighting teachers' use of the Internet and the difficulties they faced in adapting to their new roles as facilitators of e-learning. Results showed that 81% of the sample did not know how to use the Internet, which reflected inadequate levels of training provision. Only 12 teachers out of 88 had received Internet training by the Ministry of Education, and the majority felt that the training received was insufficient either because courses were very short or the quality of the training was inappropriate. El-Gamal notes that the case of poor Internet-skills training is not particular to Egypt but also appears in other developing countries in which teachers typically rely on friends rather than formal instruction to compensate for the lack of training. The survey also revealed that 37% of teachers did not have time to learn Internet skills because of their workload and 20% did not try to learn due to the lack of financial or promotional reward, all of which highlighted the all important issues of improving INSET provision and introducing ICT training in teacher education institutions. El-Gamal concludes that continuous school-based and INSET training based on teachers' needs and interests should be the goal of organised training in Egypt.

On the whole, despite the technical, financial and administrative difficulties, e-learning has gradually found its way into universities and higher education institutions at some, but not all, of the Arab countries. However, the implementation of online development for both pre-service and in-service teachers has a long way to go yet, and relatively few research studies have been conducted to date.

2.12.7 Summary of empirical studies:

To summarise, this review of relevant empirical studies has helped to identify a gap in the research literature regarding Internet-based CPD for teachers in the Arab region in general. Moreover, no specific studies about the Libyan context were found. In addition to the need for organised technical training for in-service teachers to cope with and benefit from developments in ICT, El-Gamal's (2005) study raises the issue of teachers' school-based and INSET provision according to teachers' needs. In the present study, I take this proposition further by proposing to integrate school-based and INSET provision along with teachers' independent development in a holistic and optimised approach to I-CPD.

While Motteram (2006) reported successful implementation of blended learning for teacher development and that the use of Salmon's (2002a) model provides empirical support for the present study, no details were given of the consequences of the kind of support provided or of the levels of participation at different stages of development. As Price (2007: 32) points out, although blending of digital technology with learning has been proven valuable, 'little is yet known about the specific impact on learning itself, both in terms of learning outcomes and the particular processes of learning that they can support effectively'.

There would therefore seem to be a need for a study which examines how novice teachers situated in resource-poor environments, such as those described in Chapter one, could be supported to benefit from Internet-based environments for professional development. In contrast with reviewed studies which appear to investigate online interaction in established communities within high-tech contexts in Western countries, or those which are concerned with accreditation problems or barriers to implementation within Arab countries, the

present study is an in-depth mixed-method case study which seeks to support independent

Internet-based development for novice in-service Libyan teachers situated in low-tech

conditions, right from the beginning. After all, the outcome of implementing new

technologies, or any other novel approach for that matter, can only be fully investigated if

practically applied in a particular context (Fullan, 1991). These and other related research

issues are addressed in the following Research Design chapter.

Chapter 3: Research Design

One does not begin by choosing a method. Methods can be sufficiently flexible to grow naturally from the research question, and in turn from the nature of the social setting in which the research is carried out (Holliday, 2002: xi).

3.1 Introduction:

Chapter three draws upon research design and methodology literature relevant to educational research. It describes how the design of this study was suited to the research objectives and the data collection methods involved. I begin by expanding upon the preliminary research questions which guided the research study, and which were outlined in Chapter one. Subsequent sections deal with the rationale for the research, its aims and objectives and the research strategies adopted. A practical dilemma brought about by a low-resourced ICT context is also outlined. At the end of the chapter, issues of data collection, research trustworthiness (validity, reliability and triangulation), as well as ethical considerations involved in data collection (access, confidentiality and anonymity) are discussed.

3.2 Research strategy:

Underpinning the research strategy were three issues: **What** *I want to know (*object of research)? **Why** *I want to know it (*aims of research)? and **How** *I can get what I want to know (*methods of data collection)?

As pointed out in Chapter one, developing the research questions involved the **what I want to know** of the research: Is Internet-based development a feasible solution to compensate for the INSET gap for Libyan in-service EFL teachers? Consequently, how can I as a teacher educator and researcher engage and support teachers in appropriate Internet-based learning environments within low-resourced school contexts in such a way that would lead to independent Internet-based Continuous Professional Development (I-CPD)?

In practical terms, how can I organise and deliver an appropriate Internet-based learning solution for Libyan EFL teachers, as novice e-learners, that can create an appropriate context for researching and exploring I-CPD provision and the possible factors which might have a constraining influence on I-CPD in relatively low-resourced environments?

3.2.1 Research questions:

The research question above prompted specific questions and sub-questions:

Q1. What is the status quo of conventional top-down CPD or INSET provision for in-service EFL teachers in Libyan public-sector schools?

    a. How do teachers perceive responsibility for Continuing Professional Development? Is it for them an individual pursuit, the school's responsibility or the responsibility of the Ministry of Education, or is it a combination of these?

    b. How do teachers currently go about developing themselves under the prevailing low-resourced school conditions?

Q2. What is the present state of readiness of Libyan in-service EFL teachers, in both public and private schools, to adopt Internet-based CPD, or I-CPD?

    a. What level of Internet skills do Libyan EFL teachers currently possess?

    b. What are their attitudes towards I-CPD?

    c. How do they currently use the Internet and for what purposes?

Q3. Considering the present low-tech ICT environment within Libyan secondary schools, how can teachers' independent and interdependent I-CPD be supported?

    a. How can teachers' Internet skills be supported and enhanced to prepare them for I-CPD activities?

    b. How can teachers' I-CPD be supported in blended learning modes?

    c. How can teachers' I-CPD be supported in distant online learning such that they may become more independent learners?

    d. How would teachers participate in distant online learning activities in a way which would enhance their development?

    e. Would teachers' attitudes towards Internet-based learning change as a result of the intervention course and the support provided?

3.2.2 Research aims:

This section answers the question *why I want to know it?* The aim of the research was to study the implementation of Internet-based CPD on Libyan in-service EFL teachers in

low-resourced ICT environments. Its objective was to explore how might such teachers respond to, and interact with, Internet-based support strategies in order to act as independent learners and, in doing so, develop an appropriate Internet-based support model which can successfully be applied within relatively low-resourced school contexts.

Although not expressed as an explicit aim underpinning the research focus, a tacit objective of the study was to influence, through a bottom-up approach to development, educational policy in favour of adopting Internet-based INSET as part of a holistic I-CPD approach (see section 2.4). A bottom-up approach to change has been advocated by Day (1999: 113) who argues that 'teachers themselves can be active in promoting changes'. Rossner and Bolitho (1990: 328) also support a bottom-up route to change, even at the national level, whereby teachers can play an active role in challenging policy decisions that affect their professional lives and to 'articulate their concerns publicly, and to play a leading part in their own development'. The idea of a bottom-up approach is not strange to Arab context. A study on Omani education by Alkitani (2002: 292) reveals that both educational policy and educational theory can be shaped by professional practice; he concludes that while policy makers make decisions, it is the practitioners who 'give educational policy its direction and determine its outcome in reality'.

3.2.3 Scope of research:

This study addresses Libyan EFL in-service teacher development, with focus on Internet-based Continuing Professional Development, hence I-CPD. From a research perspective, the I-CPD intervention course (see section 5.3) created a pedagogic with which to gain an understanding of teachers' learning processes, pedagogic concerns and difficulties; the impact of the intervention on teachers' practices, which in reality would have taken much longer to evaluate than is permitted by the timescale set for this study, was not an immediate objective.

Before carrying out the intervention course or engaging teachers in Internet-based activities, however, a practical dilemma concerning the low-tech school conditions had to be resolved.

3.3 The low-resource dilemma and solution:

This section highlights the practical dilemma faced by the research in setting up an appropriate Internet-based CPD context with which to engage and support teachers' learning and the solutions considered.

3.3.1 The dilemma:

The practical dilemma of the research was how to set up an e-learning solution that can create an appropriate context for researching and exploring I-CPD provision in relatively low-resourced public school environments (see Chapter one). Although most public-sector secondary schools have computers to teach ICT, no Internet access is available and, to pursue I-CPD, most teachers use private Internet cafés. In addition to low resources, other constraints were teachers' poor ICT skills, limited Internet access, varying teacher attitudes to technology and development and the lack of independent self-study skills arising from traditional teacher-centred transmission models.

The only technical tool teachers could access outside schools was the bare minimum: a personal computer and a dial-up Internet connection; no technical infrastructure to house online learning software was available. Therefore, my approach to the low-tech dilemma was, having conceptualised an optimised CPD for the Libyan context, to harness available technology to support such CPD needs, and subsequently meet the research objectives. In consequence, a low-resourced solution meant that the online learning platform had to be web-based, i.e. not institutionally based as in popular VLEs hence requiring minimum technical investment: a PC and an Internet browser.

3.3.2 The web-based solution:

During the time of fieldwork preparation, several online learning options that could be implemented in low-resourced conditions were considered. There was the basic option of e-mail communication where learning material could be posted week by week in single attachments, to which teachers would reply by e-mail, but this simple solution, though inexpensive, fails to facilitate group discussion.

To provide a low-resourced I-CPD solution, which includes a discussion platform, a Yahoo group was considered. This could provide a low-cost web-based learning platform through which teachers could read online material and respond to relevant discussion via a group forum, or discussion board. Learning material would be uploaded as data files which participants could freely access. While this option did not require any infrastructure or overheads, it would not be possible to track learner activities, i.e. who logged on, when and for how long. Despite this drawback, it was decided to apply the Yahoo group solution during blended learning (Part 2 of the I-CPD intervention course). Therefore, a web-based solution to the low-resourced school contexts provided an inexpensive platform for conducting the blended learning part of the intervention course.

3.3.3 The Merlin VLE:

For the online part of the intervention course, Merlin, as a hosted e-learning platform, provided a Virtual Learning Environment (VLE) that was web-based, therefore economic, but also allowed tracking and discussion facilities. All Merlin needs to operate is a multimedia computer, access to a modem, a reliable Internet connection and an up-to-date web browser. The Merlin solution was, therefore, ideal for running the distant online part of the intervention course with teachers having few ICT facilities at their disposal.

However, being a hosted e-learning environment, cost was involved; the cheapest rate being £1,995 for hosting 100 online learners per year. I had hoped that I could perhaps strike a bargain for six months at half price, but what I got was a pleasant surprise: having learnt of my research project, the E-learning team at the University of Hull kindly decided to waive the cost of hosting and granted me, and up to 100 students, free access to Merlin for six months (July to December 2004).

3.4 Establishing a research methodology:

Having answered the questions of 'what' and 'why' of the research, the question of **how to get what I want to know?** was next. The question of *how* can be answered by an understanding of research methodology, which as interpreted by Wellington (1996: 16), is 'the activity of choosing and justifying research methods'. King (1987) explains that while

research methodology can be adapted to suit the topic under exploration, it is the research

purpose that dictates methodology. Cohen *et al* (2000) echo the fitness for purpose of

research methodology:

> Though researchers might advocate and adhere to a specific research
> tradition, it is sensibly wise to consider 'fitness for purpose' as the
> 'guiding principle' because different research paradigms are suitable for
> different research purposes and questions (p. 1).

In practical terms, it was necessary to demonstrate how Libyan EFL teachers would

interact with, and respond to, development-oriented support in Internet-based

environments. Hence, it was necessary to create for them the conditions under which they

might experience internet-based development support and, to do that, a case study design

was thought appropriate as a research methodology.

3.4.1 Rationale for a case study approach:

'Case study is a study of singularity conducted in depth in natural settings' (Bassey, 1999:

47). Hamel, Dufour and Fortin (1993) define a case study as an in-depth investigation of

the case under consideration in which a researcher can employ different methods of data

collection. Cresswell (1998: 16), provides a similar definition in which a case study is 'an

exploration of a "bounded system" or a case (or multiple cases) over time through

detailed, in-depth data collection involving multiple sources of information rich in context'.

According to Cohen *et al* (2000) a case study provides

> a unique example of real people in real situations enabling readers to
> understand ideas more clearly than simply by representing them with
> abstract theories or principles…Case studies can penetrate situations in
> ways that are not always susceptible to numerical analysis (p. 181).

Therefore, case studies do not have to adhere to particular methodologies, e.g. qualitative

or quantitative paradigms. Rather, case methodology is characterised by an interest in the

particularities of a case or cases, not by the methods employed (Stake, 1994). A case

study approach was, thus, more appropriate to answer the research questions, where in-

depth data from participants could be obtained over a period of time. Accordingly, the

credibility of the case study findings were increased by yielding rich in-depth data about

case members using verbatim quotations and thus capturing participants' experiences and

perspectives concerning central issues to the research under investigation (Geertz, 1973).

3.4.2 Design of Case study:

The Case Study was instrumental and descriptive: It was *instrumental* (Stake, 1994)

because it was used to gain an insight into a particular issue and advance understanding of

something other than the case itself (teachers' reactions to I-CPD scaffolding activities).

The Case Study was *descriptive* because it answered the "what" questions (Yin, 1984),

thus revealing attitudes and skills and the state of teachers' professional development.

In the approach to Case Study design, a funnel model (Figure 3.1) was adapted from

Bogdan and Biklen (1992). In their single funnel-model, Bogdan and Biklen explain how a

researcher first surveys the field, then casts his or her net over a case, hence, the 'funnel'

metaphor; the survey (Fact Finding) is the wider end of the funnel and the narrower end is

the case:

> The general design of a case study is best represented by a *funnel*. The
> start of the study is the wide end: the researchers scout for possible
> places and people that might be the subject or the source of data, find
> the location they think they want to study, and then cast a net widely
> trying to judge the feasibility of the site or data or source for their
> purposes (p. 59; italics added).

Pre-intervention Assessment Questionnaire (PAQ), semi-structured interviews at 6 language schools.
Selection of Case for Phase 2.

Phase 1: Fact Finding

funnel in

I-CPD Intervention course (8 CS teachers):
Part 1: Core Internet skills (f2f)
Part 2: Internet-based instruction (blended)

Phase 2:
Case Study

funnel out

Part 3: Online distance learning (via Merlin)
60 online participants including CS teachers from Phase 2.

Phase 3: Extended Case Study

Figure 3.1: A dual-funnel case study design

The Case Study design for what I would call a *dual-funnel model (*Figure 3.1), comprised three distinct phases, each of which will be discussed in more detail in Chapters 4, 5 and 6 respectively:

1. **Fact Finding** (FF) phase (survey the field; scout for a suitable site),

2. **Case Study** (CS) phase (cast the net; funnel in) and

3. **Extended Case Study** (ECS) phase (extend case; funnel out).

In phase one, the field of study under investigation was surveyed using a Fact Finding approach (Wellington, 1996). This was necessary in order to gain a broad perspective on the field of EFL teacher development in Libya. Then, my expert judgement as a teacher educator and researcher within the Libyan context was exercised to select what was considered an adequate bounded system (Cresswell, 1998), which constituted the context for the case study. This "typical" representative case was a particular group of Libyan EFL teachers based at a private language teaching institution with appropriate in-house access to the Internet, which was convenient for delivering training and collecting data with least disturbance and cost.

3.4.3 Research methods:

In this case study approach, a combination of quantitative and qualitative data collection methods were used. This included pre-intervention and post-intervention questionnaires, in-depth interviews, focus groups, research journal, task-response scripts, task observation as well as video-recorded microteaching sessions in which teachers participated in an Internet-based English Language Teaching (I-ELT) Project. A detailed description of the research methods follows in section 3.5, but before that it seems appropriate to discuss some of the philosophical orientations behind research paradigms.

3.4.4 A philosophical perspective:

Cresswell (1994) incorporates a philosophical perspective to the quantitative qualitative debate by tendering ontological, epistemological and methodological outlooks: from an *ontological* point of view, quantitative research views reality as purely objective and value free, i.e. devoid of researcher perceptions or beliefs about reality, whereas qualitative

research accommodates subjectivity and allows for researcher bias, so long as it is recognised, i.e. made explicit and reasonably rationalised by the researcher (reflexivity).

From an *epistemological* point of view, quantitative research tends to be independent of what is being studied, situating a researcher as far as possible from participating subjects, whereas in qualitative research the researcher makes a point of interacting with, and becoming part of, the subjects or informants in order to extract richer, more intense data.

From a *methodological* stance, quantitative research tends to employ deductive methods of enquiry. Thus, variables and hypotheses are predetermined prior to the research study, for the intent is to develop generalisations that can explain and/or predict certain phenomena. On the other hand, qualitative inquiry utilises inductive methodology whereby information is revealed by participants, analysed and interpreted using a researcher's 'sensitizing concepts' (Flick, 2002: 2) rather than being anticipated *a priori* or presupposed beforehand.

Given the philosophical orientation reflected by the ontological, epistemological and methodological perspectives on both qualitative and quantitative research, Bryman (1992) argues for the integration of the two paradigms:

> As general approaches to general research, each has its own strengths and weaknesses as an approach to the conduct of social research. It is these strengths and weaknesses that lie behind the rationale for integrating them (p. 59).

3.4.5 Quantitative vs. qualitative paradigms:

The distinction between quantitative and qualitative paradigms is well documented in the literature (Cresswell, 1994; Merriam, 1998; Cohen, Manion and Morrison, 2000; Holliday, 2002). It is a widely acknowledged belief that quantitative research is rooted in positivistic philosophy, whereas qualitative research has its roots in naturalistic philosophy. Consequently, while quantitative research tends to emphasise the measurement and analysis of causal relationships, qualitative research stresses socially constructed realities and the situational constraints that shape inquiry (Denzin and Lincoln, 2000).

A more practical distinction is made by Blaxter, Hughes and Tight (1996: 60) who describe

quantitative research as concerned with 'collection and analysis of data in numeric form',

thus emphasising large-scale sets of data; qualitative research, on the other hand,

concerns itself with 'collecting and analysing information in as many forms, chiefly non-

numeric, as possible' thus aiming to achieve 'depth' in a -particular context rather than the

'breadth' associated with surveys. Nunan (1992) summarises the difference between the

two approaches by noting that

> quantitative research is obtrusive and controlled, objective, generalisable,
> outcome oriented, and assumes the existence of 'facts' which are
> somehow external to and independent of the observer or researcher.
> Qualitative research, on the other hand, assumes that all knowledge is
> relative, that there is a subjective element to all knowledge and research,
> and that holistic ungeneralisable studies are justifiable (p. 3).

3.4.6 A mixed-method design:

A mixed-method approach is, hence, not uncommon in educational research and, as

Fielding and Fielding (1986) argue, it might sometimes be desirable. Hitchcock and

Hughes (1995: 15) emphasise that whatever the research, 'it is possible for either

qualitative methods or quantitative methods, or both to serve our purposes'. Therefore a

'complementary position' (Brannen, 1992: 12) adopting multiple research methods to

address different aspects of the research problem was a tactical preference in this study.

Accordingly, research design amalgamated qualitative interviews and focus groups with

quantitative data from a teachers' questionnaire and a post-intervention attitude test. A

rationale for selecting such methods of data collection is discussed in sub-section 3.6.2.
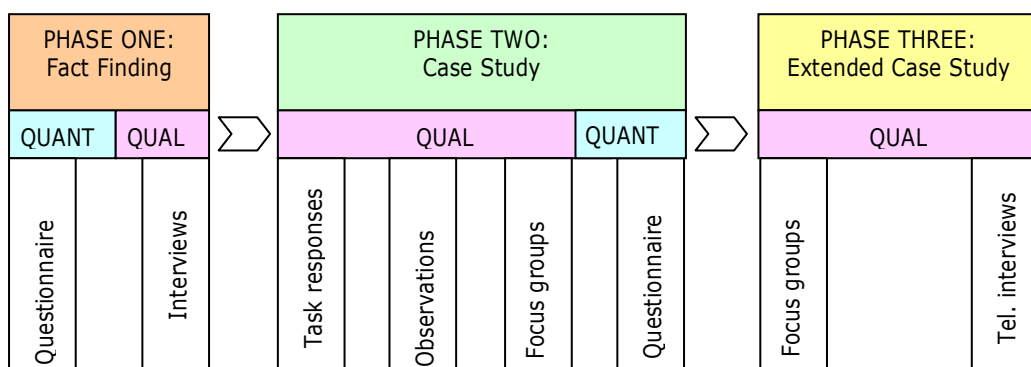
Figure 3.2: Integrating quantitative and qualitative methods

As Figure 3.2 illustrates, data in the Fact Finding (FF) phase was carried out using a Pre-intervention Assessment Questionnaire (PAQ) and individual interviews; in phase two, the Case Study (CS), an intervention course was delivered to case members employing qualitative methods (task scripts, training observation and focus groups) after which a Post-intervention Attitude Test (PAT) was conducted; and in the third Extended Case Study (ECS) phase, Case size was increased to include more teachers on a distance online course, involving qualitative methods (online task scripts, focus groups and telephone interviews). While the qualitative methods employed in the Case Study were used to answer the research questions that could not otherwise have been answered using quantitative means (Bird, 1992), the PAT assessed shifts in teacher attitudes after phase two of the intervention course.

During the third and final phase of the research, ECS members were engaged in distance online learning (as opposed to blended learning in phase two). Focus groups and telephone interviews in addition to task response transcripts were used. Due to the scarcity of online task responses, such interviews provided feedback on the causes of the low level of participation in online learning.

3.5 Data collection and analysis

Bell (1999: 101) explains that a researcher selects particular research methods because they are thought to provide the data required to produce coherent research in that 'data-collecting instruments must be designed to do the job'. Having collected sufficient data, Bassey (*ibid*) describes the gruelling task of data analysis as

> an intellectual struggle with an enormous amount of raw data in order to
> produce a meaningful and trustworthy conclusion which is supported by
> a conscious account of how it was reached (p. 84).

3.5.1 Strategies for data collection and analysis:

Considerable thought was given to *how* data was collected, managed and analysed, for the ultimate aim was to obtain valid and reliable data. During the different stages of data analysis and presentation, issues of data sampling were considered (Flick, 2002: 61): While collecting data, certain cases or subjects (case sampling) appeared more typical than

others; in interpreting the data, parts of it (material sampling) e.g. interviews, were

selected for transcription and analysis; extracts of interviews (sampling within the

material) were selected for detailed interpretation; and finally, decisions on which

interpretations were most appropriate to reflect the emergent findings (presentational

sampling) were made. As Bell (1999) observes, data was examined critically to assess to

what extent it was likely to be reliable and valid, that is, to provide true answers to

research questions so that such answers could form the basis for 'credible conclusions'

(Sapsford and Jupp, 1996: 98).

3.5.2 Methods of data collection:

3.5.2.1 Research journal:

A research journal, or field notes, (Bogdan and Biklen, 1992; Flick, 2002), is a classic

method of documenting research procedures (Flick, 2002). Throughout fieldwork, the

research journal was a constant tool for documenting interesting events, recording

reflection, thought processes and observations, thus forming a continuing record of the

day-to-day research activities. Taking Sapsford and Jupp's (1996) advice, field notes were

taken either during observation, whenever possible, or soon after, to maintain accuracy

and credibility.

3.5.2.2 Questionnaires:

A questionnaire is regarded as a kind of interview that is recorded on paper for subjects to

respond to (Nisbet and Entwistle, 1970). According to Brown (2001), questionnaires are:

> any written instruments that present respondents with a series of
> questions or statements to which they are to react either by writing out
> their answers or selecting from among existing answers (p. 6).

Denscombe (1998: 106) maintains that advantages of using questionnaires are that they

are economical, i.e. yielding large datasets at minimum processing cost. Questionnaires

are also a quick method of obtaining information from a large number of respondents

(Cohen, Manion and Morrison, 2000). They are also not subject to bias caused by

interviewer subjectivity and responses can be anonymous if deemed desirable (Bell, 1999).

On the other hand, there are certain disadvantages in the use of questionnaires. These

can be low response rates, not yielding true reflections of respondents' thoughts, limited

range of answers, inability to correct misunderstandings or check incomplete answers (Oppenheim, 1992: 102), which were the reasons for conducting subsequent interviews in order to triangulate data.

THE PRE-INTERVENTION ASSESSMENT QUESTIONNAIRE (PAQ):

The PAQ (Appendix B) was used in the Fact Finding phase to collect data about the status quo of Libyan in-service EFL teachers' I-CPD. The PAQ was introduced using an attached covering letter, which introduced the researcher and explained the purpose of the research (Swetnam, 2000). The covering letter also contained guidance on how to respond to the different items, and my personal e-mail address was included so that I could be contacted if necessary.

The purpose of the PAQ was threefold: first, to assess teachers existing Internet skills and how they actually used the Internet for development purposes; second, to investigate the current attitudes of EFL teachers in Libya towards various aspects of Internet-based professional development, with a view to ascertaining attitudinal change at the post-intervention stage of the research; and third, as a needs assessment analysis for designing the follow-up intervention course (see Case Study phase). Moreover, as the PAQ was non-anonymous, its data helped to affiliate respondents with their teaching sector, which provided answers to the emergent question concerning the training status within the different teaching sectors.

The first and second objectives of the PAQ were, therefore, concerned with the collection of baseline data pertaining to the status quo of Libyan in-service EFL teachers at a particular point in time, with respect to Internet-based skills, attitudes and actual usage. Bearing in mind that the Internet-usage data is self-reported by the teachers, the generated baseline data will be useful as a background to further research in the field under investigation. In particular, baseline data relevant to the eight Case Study teachers (discussed in Chapter 5) will be of particular significance, as these case members were involved throughout the three phases of the study (the Fact Finding, the Case Study and the Extended Case Study)

and took part in the I-CPD intervention course through which qualitative data was collected.

Structure of the PAQ: The PAQ was made up of 65 items divided into three parts, part four being an invitation to participate in the intervention course; part five biographical data. A Likert scale, as the most common of scaling techniques, (Dörnyei, 2003) was considered suitable for measuring Internet skills, attitudes and usage. Part one of the PAQ constituted statements concerning a range of navigation and communication skills. Teachers were asked to self-assess their skill by placing a tick on a five-point Likert scale from 1 (lowest ability) to 5 (highest ability). In SPSS, the scores were coded such that: 1= Very Low, 2= Low, 3= Intermediate, 4= High and 5= Very High.

In order to obtain a measure of attitudes in part two, teachers were obliged to make a judgement rather than be neutral, or undecided, by using a six-point Likert scale (Dörnyei, 2003). The scale covered a range of attitudes such that 1= Strongly Disagree, 2= Disagree, 3= Partly Disagree, 4= Partly Agree, 5= Agree and 6= Strongly Agree. Teachers' usage of the Internet in part three was indicated on a five-point Likert scale: Never, Rarely, Sometimes, Usually and Always.

In Parts two and three, the Internet attitudes and usage were investigated under two areas: Internet-based professional development (I-CPD) and Internet –based language development (I-LD). Even though the two areas of development are treated as one (CPD) in the literature, this split in the PAQ was thought to yield richer data relevant to NNEST contexts where language development is perceived as a separate activity leading to improved classroom performance and, in turn, enhanced professional status.

Part one: Internet skills
Section one: Communication skills (10 items)

Section two: Navigation skills (11 items)

Part two: Teacher attitudes
Section three: Internet-based CPD (14 items)

Section four: Internet-based LD (12 items)

Part three: Internet usage

<u>Section five</u>: Internet in CPD (10 items)

<u>Section six</u>: Internet in LD (8 items)

Part four: Invitation to participate

In this part of the PAQ, teachers were invited to indicate their interest in participating in the proposed I-CPD intervention course (phase two) and the subsequent online course (phase three). Those who expressed interest in joining the intervention course were also asked if they were willing to participate in focus group interviews.

In an effort to empower teachers with access to relevant research output at the end of the research (BERA, 2004), participants were given the option of requesting feedback on the questionnaire findings via e-mail. In addition to being a token of gratitude for responding to the PAQ, the feedback was thought to tempt respondents to submit personal e-mails, which were later used to invite them to participate in the online phase of the intervention course.

Part five: Biographical data.

In this final part, teachers gave personal details including name, age, gender, teaching sector, highest qualification, INSET and Internet training, years of teaching experience and a contact telephone number for course date notification. Following Sapsford and Jupp (1996: 105), this section relating to biographical data was put at the end for two reasons: partly to engage respondents with contents immediately as they read the questionnaire; partly to take their minds off any pressure in parting with personal details before submitting the questionnaire.

Developing the PAQ: The PAQ was developed using three basic tools: first, a survey of two relevant areas of the literature: a) professional development and b) online learning; second, by inspecting questionnaires reported by similar studies within teacher education and online education; and third, my own experience as a novice researcher and lecturer in NNEST teacher education and development contexts within the Libyan setting, as well as my experience as a user of the Internet for professional development purposes.

As noted by Dörnyei (2003), questionnaire design is the only area in academia where plagiarism is not only permitted but also encouraged. The rationale for this is to take advantage of approved and well tested questionnaires used in previous studies. Questionnaires which influenced the design of the PAQ included examples from the Technology Skills Self-Assessment Survey (FGCU, 1998), survey research (Burgess, 2001), and the Online Learning Environment Survey (Wintec, 2003).

Validity and reliability of the PAQ: The validity of research is assessed by its construct validity, face validity and content validity. While construct validity was sought by ensuring that research constructs were operationalised, i.e. understood and used in concordance with the relevant literature, the face validity was established by ensuring that the measures of the questionnaire, i.e. the questionnaire items themselves, reflected the concepts being measured. Content validity is closely connected with face validity and relates to subjective judgements (of the researcher) in selecting questionnaire items which reflect the research objectives.

Establishing validity of the PAQ was achieved by discussing the questionnaire items, in length, with three experts in the field: my research supervisor and two teaching colleagues. Based on recommendations from these three experts, modifications were made to the wording of certain items thought to improve face validity.

The reliability (internal consistency) of the questionnaire was tested using Cronbach's alpha test. This widely-used reliability measure 'calculates the average of all possible split-half reliability coefficients' (Bryman and Cramer, 1999: 65). Due to the inaccessibility of an all-Libyan teachers' sample in the UK before commencing field study, the reliability of the PAQ was tested on eight UK-based Arab teachers, four of whom were Libyans. Cronbach's alpha reliability test for the PAQ was calculated at 0.7699. This result approximates to 0.8, the reliability coefficient generally thought to be acceptable in social science research contexts (Bryman and Cramer, 1999).

Sampling procedure: The sampling strategy for the PAQ was that of non-probability convenience sampling, i.e. it relied on the choice of cases or people most convenient to

access under prevailing research conditions (Patton, 1990) and serve the purpose of the study. Convenience sampling, which is thought to be the least rigorous of sampling techniques (Patton, 1990) was chosen, not to make life easy, but because there was no other alternative in the circumstances. Because the Fact Finding phase was carried out during the summer vacation, public school teachers were dispersed across several private-sector schools. With respect to the petroleum-sector, teachers worked on a full-time basis and were identified as teachers of that sector. The Petroleum Companies Language Training Centre was an exception; the centre employed extra part-time teachers from the public sector to fill positions.

Piloting the PAQ: The importance of piloting lies in pre-testing the validity and reliability of the data collection instruments and to avoid any ambiguity in any of the items (Borg and Gall, 1996). Because ambiguity in the wording of a questionnaire can discourage respondents from answering certain questions, or from returning the questionnaire altogether (Cohen, Manion and Morrison, 2000), piloting was deemed desirable and a small-scale piloting was carried out with the help of five Libyan colleagues studying in the UK. This allowed checking for appropriate wording, thus, improving validity.

Consequently, piloting the PAQ before presentation helped to eliminate inadequacies in the wording of some statements, e.g. preventing loaded questions or statements. Piloting the PAQ also improved the sequencing of questions that might have unwittingly led to undesirable responses. The data collection approach taken was to call on each language school and, upon obtaining appropriate consent, administer questionnaires to teaching staff who happened to be on duty at the time. Despite attempts to administer the PAQ collectively during teachers' break times, convening all teachers in a single gathering at each school was impractical. Thus, questionnaires had to be handed out individually and then collected as and when convenient during subsequent visits. Consequently, the collection process of the PAQ was quite tedious and took much longer than anticipated.

Response rate of the PAQ: Eventually, 37 responses were collected out of 70 questionnaires distributed, giving a response rate of 53%. Although such response rate is

adequate for statistical analyses (Cohen, Manion and Morrison, 2000), it is relatively low.

Teacher anxiety about the lack of Internet skills is thought to be one of the apparent

causes for such low response, as some teachers with low or no Internet skills declined to

return the questionnaire saying it was irrelevant to them. NURI (a pseudonym for a case

participant in Chapter 5) was one such teacher who declined to return of the PAQ despite

reminders. For NURI and other non-respondents like him, the PAQ must have been

perceived as proof of their ignorance about Internet technology and, since they could be

identified in person, the questionnaire created a sense of fear of being exposed.

THE PRE- INTERVENTION COURSE QUESTIONNAIRE (PCQ):
Using two open-ended questions, the PCQ was conducted immediately prior to the

intervention course to obtain 1) perceptions of CS members about the pedagogic role of

the Internet in language learning, teaching and professional development; 2) members'

perceived goals and expectations about the course contents. Adjustments were

subsequently made to take account of responses.

THE POST-INTERVENTION ATTITUDE TEST (PAT):
The PAT (Appendix L) tested CS teachers' attitudes towards Internet-based development

(CPD and LD) and Internet-based ELT before and after the intervention course. A ten-point

numerical rating scale (from -5 to +5) was used to reflect attitude shifts, while an open-

ended question asked for the main reasons behind any attitude change.

3.5.2.3 Semi-structured interviews:
The interview was an important research method, which complemented questionnaire

data. What the questionnaire could not easily assess, such as teachers' perceptions and

experiences, interviews were able to retrieve (Bell, 1999). Cannel and Khan (1968), define

an interview as

> a two person conversation initiated by the interviewer for the specific
> purpose of obtaining research relevant information, and focused by him,
> on content specified by research objectives of systematic description,
> prediction, or explanation (p. 527).

Kvale (1996: 279) emphasises a central role played by the interviewer as researcher: 'The

effective interviewer is not only knowledgeable about the subject matter but is also an

expert in interaction and communication'; a skilful interviewer can 'follow up ideas, probe

responses and investigate motives and feelings, which a questionnaire can never do' (Bell, 1999: 135). The research training modules and the Graduate School course on interviewing techniques organised by the University of Nottingham had helped me acquire some of those skills.

Three possible approaches to interviewing are possible: structured, unstructured and semi-structured interviews (Bogdan and Biklen, 1992).

Structured interviews adhere to a standardised format where the questions and the order of questions are pre-determined by the researcher beforehand (Merriam, 1998). While structured interviewing may increase reliability (the extent to which comparable interview data can be obtained from other subjects within the same research context), it restricts the interviewer's ability to probe interesting responses by further unscripted questions, or probes. Probing is considered a requirement in yielding in-depth detailed study of a particular case. Structured interviews also limit the interaction between researcher and interviewee and, hence, are less likely to produce knowledge of benefit to the researcher (Kvale, 1996). Due to such reasons, the idea of structured interviews was dismissed as inflexible and unproductive.

Unstructured interviewing was also rejected since a researcher does not follow a predetermined schedule and tends to ask questions as the interaction develops in natural unplanned conversations. Consequently, it becomes difficult to maintain the focus of the interview, as interviewees may easily digress into different areas that are irrelevant to research questions (Bell, 1999). Because this kind of interviewing is useful in contexts where the researcher knows too little about a phenomenon to ask relevant questions (Merriam, 1998), it tends to be used in naturalistic research where the researcher attempts to obtain data about naturally occurring phenomena.

Semi-structured interviews, however, enable the researcher 'considerable flexibility over the range and order of questions within a loosely defined framework' (Parsons, 1984: 80). As a way of guiding the interviewer (Robson, 1996), semi-structured interviews enable further probing (to dig deeper into an issue) and prompting (to suggest a topic or

sub-topic especially when interviewees digress). Consequently, semi-structured

interviewing was considered suitable for the purpose of the Case Study since it provided

richer in-depth responses, and interviewees were 'challenged' by probing deeper into their

experiences, perceptions and attitudes on a number of issues relevant to professional

development contexts.

Conducting semi-structured interviews: To eliminate bias or other shortcomings in

interviewing, a few pilot interviews were conducted with colleagues before embarking upon

the field study, where adequate probing and prompting phraseology was sought. Piloting

the interview schedule helped not only to anticipate the length of an interview, but to avoid

redundant questions and made it possible to generate follow up questions (Cohen, Manion

and Morrison, 2000). Piloting also increased researcher confidence in managing the flow of

questioning and helped to anticipate problems (Bell, 1999).

An interview schedule (Appendix C) guided the flow of questioning which consisted of

open-ended questions as well as closed ones. Whereas open-ended questions elicited

opinions, attitudes and viewpoints to encourage expectations or speculation, closed

questions tended to seek specific information (Wellington, 1996). In order to put the

interviewees more at ease, and to obtain realistic in-depth data, respondents were allowed

the choice of speaking in English or Arabic, or a mix of both if need be.

Most of the interviews were audio taped. Tape recording is thought to readily capture the

data more faithfully and allow the interviewer to concentrate on asking the questions

rather than hurriedly written notes (Cohen, Manion and Morrison, 2000). In each case,

interviewee approval was sought prior to tape recording. However, there were occasions

when interviewing was unplanned and was carried out spontaneously, hence tape

recording was not possible. In such cases, and in cases where interviewees expressed

discomfort with recording (one instance), written notes were made instead.

3.5.2.4 Focus group interviews:

A focus group interview is a useful qualitative data collection method. Patton (1990: 335)

defines it as 'an interview with a small group of people on a specific topic', where 'groups

are typically six to eight people who participate in the interview for one-half to two hours'.

Mainly, focus group interviews aim to reveal underlying beliefs and perceptions participants

share in a topic of inquiry. The advantage of a focus group is that participants' opinions

may be checked and balanced out against each other to 'weed out false or extreme views'

and to 'assess the extent to which there is a relatively consistent, shared view' (Patton,

1990: 335).

The focus group interviews were audio recorded to facilitate data analysis and involved

eight Case teachers, but not all were present all of the time. Even though audio-recorded

data was sometimes difficult to analyse when parallel statements were made by two or

more participants (Flick, 2002: 122), focus groups were considered suitable for the small

number of case study members. Focus group dynamics stimulated discussion and created

situations where 'the synergy of the group, the interaction of its members' (Wellington,

1996: 59) added to the depth and insight of the data.

How I positioned myself when, as a trainer, researcher or both, was relevant. My

interviewing strategy was to flip-flop between the two positions as I swung between

objectivity and subjectivity allowing a balanced distribution of teacher opinion so that no

dominant individuals "stole the show". I tried to be, as Fontana and Frey (2000: 652)

advise, 'flexible, objective, emphatic, persuasive, [and] a good listener'.

3.5.2.5 Telephone interviews:

As a variation of semi-structured interviews, long distance telephone interviews were

conducted with some ECS participants in Libya to discuss causes of low online participation

during Part 3 of the I-CPD intervention course. Even though I was ready with a telephone

adapter, most interviewees expressed reluctance to be audio recorded and written notes

were taken instead.

3.5.2.6 Reflective diaries:

Reflective diaries were considered useful as a method of eliciting accounts of contributions

to participants' learning. Participants were asked to reflect on how they interacted with

Internet-based material and modes. The diaries were intended to enhance teachers'

awareness of their independent learning, on the one hand, and elicit perceptions about possible learning problems, if any, associated with different online learning environments.

As a result of discussions with my supervisor, I was made aware that reflective diaries do not always work, because teachers are busy and do not usually bother to keep regular diaries even though they might promise to do so. Despite such warning, I decided to proceed and discover the outcomes for myself. More will be said about this in Chapter 5 (sub-section 5.5.8).

3.5.2.7 Microteaching observation:

Wallace (1991: 87) defines the concept of microteaching as 'a training context in which a teacher's situation has been reduced in scope or simplified in some systematic way'. This simplification can be achieved in three main ways, all of which were applicable to the present study:

1. The teacher's task may be simplified and made very specific.
2. The length of the lesson may be shortened.
3. The size of the class may be reduced (*ibid,* p. 92).

Microteaching was carried out at the conclusion of the Case Study. The purpose of microteaching was to create a pedagogic context for Case teachers to "have a go" at implementing concepts of Internet-based classrooms, as opposed to Internet-supported classrooms (see sub-section 4.6.5.3 for more details), that had been discussed during Part 2 of the intervention course.

To record the whole spectrum of teacher performance during microteaching, and to seize the complex pedagogic processes that were too elaborate to capture by the naked eye (Denzin, 1989), the microteaching lessons were video recorded. The advantage of video recording was that activities could be observed a number of times before drawing any conclusions (Kumar, 1996). Moreover, it would be difficult with one researcher to manually record more than one behaviour or incident at any one particular time (Sapsford and Jupp, 1996). Fortunately, the Internet room, where the intervention course took place, was small enough (5x4 metres) and it was possible to capture the whole range of

events. Moreover, rather than using observational categories with predetermined

classifications, video recording provided a rich source of both visual and verbal interactions.

3.5.3 A framework for data collection:

Table 3.1 below (three sections) summarises the data collection procedures and associated

sources of data at each of the three phases (Fact Finding, the Case Study and the

Extended Case Study).

Table 3.1: A framework for data collection

Phase one: Fact Finding		
Method of data collection	*Source of data collection and timing*	*Form of data/ administration*
Pre-intervention Assessment Questionnaire (PAQ)	EFL teachers at six schools prior to the intervention course	Hard copy/ Self administered
Semi-structured interviews	LOU president; inspectors; school heads; EFL teachers; officials	Audio recorded and transcribed
Phase two: Case Study and I-CPD intervention course (parts 1 and 2)		
Pre-intervention Course Questionnaire (PCQ)	CS participants before the course	Transcripts
Task responses	CS participants during the course	E-mail printouts
Focus-group interviews	CS members during the course	Audio recorded
Observations	CS members carrying out tasks	Audio recorded
Microteaching observation	I-ELT Project at end of course	Video recorded
Post-intervention Attitude Test (PAT)	CS participants at end of course	Transcripts
Phase three: Extended Case Study and intervention course (part 3)		
Responses to online tasks and discussions	ECS participants during course	Printouts
Focus groups	ECS UK-based participants	Written notes
Telephone interviews	ECS distance participants (Libya)	Written notes

3.5.4 Data analysis:

In analysing quantitative data collected by the pre-intervention questionnaires (PAQ),

SPSS statistical analysis techniques were used. The small quantity of data generated by

the PCQ and the PAT were analysed manually. Rather than using computerised data

analysis, a manual inductive content analysis method was used for qualitative data. As

Flick (2002: 28) notes, content analysis is one of the conventional methods for analysing a

range of qualitative material. Particularly interesting extracts were transcribed from audio

recordings (interviews, observations or focus groups) as deemed appropriate to answer particular research questions.

The first step in Mayring's (1983, cited in Flick 2002: 190) qualitative content analysis was to select material most relevant to answering the research questions. The second step was to analyse the situational context of data, such as who was involved and how the material was collected. The technique involves first reducing the raw data, i.e. skipping less relevant or recurring material (first reduction) then grouping similar relevant material under certain categories and then summarising (second reduction).

Flick (2002: 192-193) maintains that Mayring's qualitative content analysis procedure 'seems clear, less ambiguous and easier to handle than other methods of data analysis', but rather schematic and does not reach in-depth. To overcome this shortcoming, selection of particular extracts of data for analysis was based on an interpretative paradigm, which as Mason (1994) explains, sought to portray participants' viewpoints and reflect their intentions understood within the given contexts in which they occurred.

3.6 Technical considerations:

3.6.1 Trustworthiness of research:

Trustworthiness of research is commonly described in terms of its validity and reliability. Kvale (2002) notes that validity involves continually questioning and checking the credibility, plausibility and trustworthiness of the findings. The extent to which data needs to be examined for both reliability and validity is stressed by Bell (1999: 103): 'Whatever procedure for collecting data is selected, it should always be examined critically to assess to what extent it is likely to be reliable and valid'.

Generally, a discussion of validity and reliability is embedded in, and faithful to, the premises behind the tradition in which the research is located (Cresswell, 1994). In reality, threats to validity or reliability in a piece of research can never be completely removed; such threats can only be attenuated by careful scrutiny of research methods and data collection procedures (Cohen, Manion and Morrison, 2000).

3.6.1.1 Validity of research:

The term validity in quantitative research means that an instrument measures or describes what it is supposed to measure or describe (Merriam, 1998). Whereas in quantitative questionnaires the source of validity is built into a questionnaire by virtue of asking 'valid' questions, qualitative research verifies validity through detailed accounts of procedures. In other words, a qualitative researcher has to be transparent to others (Freebody, 2003) and reveal the 'workings' at every stage of the research 'allowing nothing to be taken for granted' (Holliday, 2002: 8). Holliday (*ibid*) makes an interesting analogy with working out maths problems at school; pupils would be given marks for showing how the problem was solved in logical steps, rather than for simply inserting a correct answer.

In this mixed-method approach to research design, qualitative and quantitative findings complemented and clarified each other (Bryman, 1988) to minimise threats to validity. In that sense, validity of findings is likely to be enhanced by 'capitalising on inherent method strengths and counteracting inherent biases in methods and other sources' (Green, Caracelli and Graham, 1989: 259).

Based on a summary of the literature (Patton, 1990; Hamel, Dufour and Fortin, 1993; Yin, 1994; Kumar, 1996; Bryman and Cramer, 1999), two main types of validity were considered in the study: internal validity and external validity. Internal validity is assessed under three sub-categories: *face validity*, *content validity* and *construct validity*. External validity, on the other hand, is a measure of the degree of generalisability of research findings to the researched population based on the studied sample or case.

Face validity seems logical and straightforward. In questionnaires, for example, face validity requires that each question item or statement has a logical link with the objective of the study and 'apparently reflects the content or the concept in question'; it is equally important that a full balanced range of issues is covered by the question items (Bryman and Cramer, 1999: 68). Coverage of relevant issues is thought to have been achieved by the 47 items of the PAQ.

Content validity is closely connected to face validity. It is judged by the extent to which questions and/or statements, according to the researcher as expert in the field, are representative of the issues they are supposed to measure. This subjective judgement of selecting question items in quantitative research, or interview questions in qualitative inquiry, raises possible concerns about researcher objectivity. However, while pure objectivity is almost beyond reach and too much subjectivity can undermine credibility (Bryman, 1992), it was important to continually and critically reflect upon research activities - both as a researcher and an educator. In that sense, while subjectivity (rather than bias) was preserved, it was balanced out by reflexivity. As Flick (2002) maintains, a researcher's reflections on field activities and observations including

> impressions, irritations, feelings and so on, become data in their own
> right, forming part of the interpretations, and are documented in
> research diaries or context protocols (p. 6).

Construct validity in quantitative enquiry is determined by the contribution each construct (expressed by a range of statements or questions) makes to the total variance observed of the phenomena under study, hence, the greater the variance of a construct, the higher the validity of an instrument. In qualitative research, construct validity refers to how the research constructs are operationalised within the research context in question, i.e. how research constructs such as 'blended learning' compare with those found in the body of literature, or understood by other experts in the field.

3.6.1.2 Validity of case study:

As Wellington (1996: 47) points out, two questions need to be asked in case study research: Is it internally valid? and is it externally valid i.e. generalisable? The issue of external validity, or generalisability, of a case is a function of the extent to which the case, as a sample, is representative of the field of study. Hence, the problem of generalisability in case study research lies with the particularity of context or case-specific situation from which data is generated. Based on an understanding of case generalisation limited to the population the case represents, the issue of case typicality, or representativeness, becomes critical.

Although case generalisability (external validity) may seem unimportant or unattainable by qualitative methodology in educational research, case study research does not completely rule out an interest in generalisation (Stenhouse, 1988), for it is beginning to assume achievability and real importance (Schofield, 1993). As Bogdan and Biklen (1992) argue, it is not whether case study, or qualitative research in general, is generalisable or not , it is rather a question of what groups, or research population, case findings are generalisable to, for a case is unique, but is related to something general (Scholz and Tietje, 2002).

3.6.1.3 Reliability of research:

Reliability is defined as a synonym for consistency over time, over instruments, and over a group of respondents (Cohen, Manion and Morrison, 2000). As Bryman and Cramer (1999: 64) explain, 'reliability is often taken to entail two separate aspects – external and internal reliability'.

External reliability is concerned with how precise or accurate a piece of research is, or how replicable the research is, such that it yields similar, if not the same, outcomes. Therefore, a research instrument is reliable when, under the same or similar research conditions, it consistently produces the same or similar results each time the test is repeated or replicated; the lower the degree of error in an instrument, the higher its reliability. In this sense, reliability is defined as the dependability of research such that data collection methods are consistent with findings and provide audit trails for confirming results (Lincoln and Guba, 1985).

Internal reliability is 'particularly important in connection with multiple-item scales' usually present in questionnaire design. Here, internal reliability 'raises the question whether each scale is measuring a single idea, and hence whether the items that make up the scale are internally consistent' (Bryman and Cramer, 1999: 65).

Traditionally, the concept of reliability has been associated with quantitative research, which has its roots in positivist philosophy and, as thus, assumes replicability. However, since qualitative research is rooted in naturalistic philosophy, it is hard to guarantee with any degree of certainty that the same results would be reproduced, because human

behaviour is never static (Merriam, 1998). Thus, replication of circumstances and

particularities of a case can hardly be duplicated elsewhere and, thus, the uniqueness of

data obtained in case study research is recognised. Consequently, qualitative researchers

tend to view reliability in terms of accuracy, or fit, of documentation of what counts as data

and what has actually taken place as research activity (Bogdan and Biklen, 1992).

Therefore, qualitative researchers would only question the reliability of one study or the

other, if it yields results that are different, or incompatible, to a second similar study.

3.6.1.4 Triangulation:

Triangulation is the process of establishing the truthfulness of an event or result by cross-

checking with other sources (Sapsford and Jupp, 1996); that is, getting a "fix" on a result

from two or more angles. Cohen *et al* (2000) note that triangulation techniques

> attempt to map out, or explain more fully, the richness or complexity of
> human behaviour by studying it from more than one standpoint, and in
> so doing, by making use of both quantitative and qualitative data (p.
> 112).

In support of between-method triangulation, Youngman (1982: 37) asserts that

'interviews… can also be used to add extra power to the basic questionnaire method'. Bell

(1999: 135) also stresses that interviews can generate rich material and 'can often put

flesh on the bones of questionnaire responses', which enhances the breadth and scope of

research.

As triangulation is regarded as a test for 'trustworthiness' (Hopkins, 1993: 152), it was an

effective way to reinforce the credibility of the research findings. For this reason,

triangulation was strengthened by applying both quantitative and qualitative measures to

the study. 'Each data source gives information of a different type which usually serves to

complement and provide a check on the others' (Hopkins, 1993: 155). Hence, while

objectivity was important in obtaining reliable questionnaire data (Chronbach Alpha), it was

the role of complementary interview data and focus groups that provided methodological

triangulation and hence strengthened internal validity of this research.

3.7 Ethical issues:

Ethical considerations are important for any research that deals with real people in real world situations (Bassey, 1999). Bell (1999) emphasises that a researcher must identify and be guided by ethical protocols throughout the research process, and that common sense and courtesy are invaluable in establishing good research practice. Neglecting ethical protocols not only harms participants, but may also affect the researcher as well (May, 1997). Accordingly, a concern for ethics and ethical issues began from the outset of the research by identifying with The University of Nottingham's Code of Conduct (UoNottingham, 2000) and the British Educational Research Association's Revised Ethical Guidelines for Educational Research (BERA, 2004).

During the Fact Finding phase, I travelled round different language institutions, some of which were state schools providing evening language courses. As I visited each institute, I briefly explained the research objectives to heads and/or administrative staff, most of whom were cooperative in allowing access to premises and people. As Bell (1999) notes, before deciding whether to co-operate or not, participants and administrators have to be convinced of the researcher's integrity and of the value the research has for them.

Ethical concerns for participating teachers as stakeholders, led to a humanistic stance - one which views education as a human encounter - the aim of which is the development of the unique potential of each individual (Carr and Kemmis, 1984). This was accomplished by accommodating Libyan EFL teachers' concerns and aspirations for professional self-development in relatively low-resourced and poorly organised CPD environments.

3.7.1 Institutional access:

Wolff (2002) observes that research always constitutes an intervention into some social system under study; that research is disruptive to that system to which it often reacts defensively. The issue of gaining proper access to people and places (the social system), however, is more decisive in qualitative than in quantitative research (Flick, 2002). This is because interviews, observations or focus groups require closer contact with participants than, say, questionnaires, which can be administered without having to come into direct contact with subjects.

While ethical principles were observed throughout the research, and proper ethical procedures adhered to in order to gain access to people and places, it appeared that I could not satisfy everyone. People involved with institutional access held varying views of what constituted 'proper' access procedures, or ethical behaviour for that matter.

'Gatekeepers' (Bogdan and Biklen, 1992; Fink, 1998) in particular turned out to be more crucial in gaining institutional access than anticipated. In one incident, I purposefully arrived at a school gate in time for the morning break. Unfortunately, as my contact person was not available to meet me, I tried in vain to convince the gatekeeper of the importance of my questionnaire, but he was adamant that my visit would "disrupt teaching" and that, in order to get in, I had to obtain the headmaster's permission, who was not present at the time. Sadly, my visit to that school was abandoned.

In a second incident, having talked my way past the gatekeeper, I was met with a gruelling task by the principal - the 'key gatekeeper' (Bogdan and Biklen, 1992: 81) – who wanted to see a "research proposal" prior to considering my request to carry out an intervention course at his school, the kind of proposal "scientists" do before carrying out "scientific research". As Bogdan and Biklen (1992: 87) observe, some comments by key personnel 'weigh heavily; they are taken as signs of rejection', for the principal was glad to see the back of me and my "scientific proposal".

With respect to the Case Study institution, my approach to institutional access was cautious. I was fortunate, this time, to meet some of my ex-students from university, through whom I gained a 'low-profile entry' (Bogdan and Biklen, 1992: 82). Having rallied the support of Case teachers, a meeting with the principal was arranged in which I briefed him about the research plan and the significance of the intervention course. This was followed by a written request from me to deliver the course and hold focus group interviews with participating teachers, after which permission was granted. The principal was quite receptive to the research idea so much so that he personally encouraged his teachers to attend the course and instructed the technical engineer to finish off the network wiring at the Internet room in time for the intervention course.

3.7.2 Confidentiality and anonymity:

From the outset, I set out to assure participants of anonymity and that research data would be treated as confidential. It was made clear to respondents that research data would not be used to 'demean or otherwise hurt' anyone (Bogdan and Biklen, 1992: 79). This included questionnaire respondents, interviewees, CS members and ECS participants. It was explained that any information participants part with would only be used for the purpose of the research and that any published material would not identify them in person (Oppenheim, 1992).

However, the notion of anonymity often associated with questionnaires did not apply to the PAQ. First, teachers were required to indicate their readiness to attend the planned intervention course, so they had to be identified; second, their e-mail addresses were used to invite them to join Phase three of the course.

To ensure anonymity of interviewees during FF, alphabetical letters (Inspector A; Teacher B, etc.) were used. For Case Study participants, pseudonyms (e.g. BAHA; HIDI; SOLO) were used to refer to individual teachers within the group. Symbols P1, P2, etc. were used to refer to participants in the ECS. All respondents were assured that personal information that could be used to identify them individually would not be accessed by anyone other than those directly involved with the research (Trochim, 2000). In accordance with Bell (1999), participants were also informed of who was likely to gain access to data, e.g. the University of Nottingham and the E-learning team at the University of Hull.

3.7.3 Informed consent:

Principles of informed consent (Miles and Huberman, 1994) were followed throughout the research. PAQ respondents indicated their consent to participate in the intervention course by ticking a box. Written consent of Case Study teachers was sought and obtained by signing an attendance consent form, which was attached to a letter requesting permission to carry out the intervention course at FLI premises. In all cases, research participants were free to opt out of the course at any time.

In addition to enlisting the commitment of case teachers, the consent form assessed the need to invite non-FLI teachers on a secondary waiting list, consisting of teachers from other institutions who had expressed interest to join the course when responding to the PAQ. However, the head of FLI said that this would not be necessary and, in consequence, persuaded FLI teachers to attend the intervention course.

The next three chapters draw upon data from Fact Finding (Phase 1), the Case Study (Phase 2) and the Extended Phase Study (Phase 3), in order to investigate Libyan EFL teachers' experiences of, and interactions with, Internet-based professional development, highlight emergent themes and examine relationships between them in relatively low-resourced ICT contexts. The first of these chapters is an account of my entry into the field for the purpose of Fact Finding.

Surveys can provide answers to the questions What? Where? When? And How?, but it is not so easy to find out Why? Causal relationships can rarely if ever be proved by survey method. The main emphasis is on fact-finding (Bell, 1993: 9).

4.1 Introduction:

The first step in descriptive case study research of the kind reported in this chapter of the thesis is to develop an understanding of the domain of enquiry, as a way of entering the field (Stake, 1995). An understanding of the field parameters involved assists in making sensible decisions about data collection and tentative analysis of data. As Sapsford and Jupp (1996: 79) observe, initial examination and analysis of data provide an opportunity for 'progressive focusing' and for research questions to be more specific, which, in turn, clarifies the need for any further data collection. The Fact Finding (FF) phase sought to describe the current state of affairs in a specific context. As discussed in Chapter 3, quantitative and qualitative methods were both used to provide a richer understanding of the field under investigation. That is, while quantitative means divulged answers to 'what', 'how many' and 'how often', qualitative methods sought out answers to the 'why' and' how' questions (Bell, 1993).

Further justification for a Fact Finding approach is provided in the following section. The Pre-intervention Assessment Questionnaire (PAQ) and resulting data are presented in section 4.3. Discussion and analysis of data from the PAQ are integrated with interview data in sections 4.4. Emergent themes are then discussed under conventional CPD (section 4.5) and Internet-based CPD (section 4.6). A synopsis of the FF phase is provided in section 4.7.

4.2 Entering the field: A fact finding approach

A search of the relevant literature had shown that the proposed research context, Internet-based Continuing Professional Development (I-CPD) for EFL teacher education and development in Libya, had not previously been investigated.

Consequently, it was felt necessary to gather information on such aspects of this context as current INSET provision, teachers' attitudes with respect to Internet-based development, their Internet usage and their Internet skills.

Therefore, while the Fact Finding phase assessed 'the outside' (Bell, 1999: 272) or the macro view of Libyan EFL teachers' professional development contexts in the immediate field of study at a particular moment in time, its purpose was to obtain sufficient preliminary information upon which appropriate decisions could be made to explore 'the inside' (Bell, 1999: 272), i.e. to find a typical Case site in which to deliver the planned intervention course.

During the Fact Finding phase, which took place in the summer of 2004, a field visit was made to the Libya Open University (LOU) as the leading institution in distance education. An interview was held with the LOU president to identify postgraduate opportunities and teacher training programmes offered to in-service teachers of English, any ICT facilities and the state of readiness for online learning (see Chapter 1: Distance education, for details). Interviews were also held with two officials at the National Centre for Educational Planning and Training (NCEPT) to verify INSET policies and development plans. A number of Internet providers and technical engineers were also seen.

Because of unforeseen delays in accessing the field of study and the public secondary schools in Libya, Fact Finding coincided with the summer vacation (July 2004) when public schools were closed. Hence, practising teachers working at private language schools, most convenient to access under the circumstances, were approached and the self-completion questionnaire (PAQ) was handed out to those present during visits to such schools. This proved a happy turn of events because private schools employed teachers from public as well as private schools. As a result, FF data analysis yielded interesting comparisons (which were originally outside the scope of the research) between the state sector, the petroleum sector and the private sector.

The inclusion of petroleum sector schools in FF enriched the comparison and yielded more interesting results with respect to INSET training and development policies across the three

sectors. Consequently, an emergent question, which was incorporated with Q1 of the

research questions (Chapter 3), involved the three teaching sectors, thus:

Q1. What is the current state of conventional top-down CPD or INSET provision for in-
    service EFL teachers in Libya *with Haneen*

Q2. *respect to the three teaching sectors: public, private and petroleum?*

As Table 4.1 illustrates, six non-public language schools, of which the first three are private

while the last three are petroleum sector institutions, were visited. The Internet facilities

and the number of PC positions are indicated in brackets alongside each school.

Table 4.1: Tripoli schools and research activities during the Fact Finding phase

	Language school and Internet facility	Questionnaires given/returned	Teachers interviewed	Inspectors interviewed	Heads interviewed
1	Alsun Language School (No)	10/3	1	0	0
2	Foreign Languages Institute (Yes:8)	15/13	4	1	1
3	Tripoli College (No)	15/7	3	2	1
4	Petroleum Companies Language Training Centre (No)	10/5	3	1	1
5	Petroleum Training and Qualifying Institute (Yes:25)	10/4	3	0	1
6	Waha Oil Company Training Centre (Yes:15)	10/5	2	1	0
	Total	70/37 (53%)	16	5	4

Whereas the private sector schools relied mainly on part-time EFL teachers normally

working in public schools, the petroleum sector employed full-time teaching staff. At each

institution, respondents were briefed with the purpose of the research and the procedure

for data collection. Accordingly, participants understood the process in which they were to

be involved, including why their contribution was necessary, 'how it will be used and how

and to whom it will be reported' (BERA, 2004: 6).

It is worth noting that some public school teachers in the sample worked at more than one

private school at the same time and, hence, 70 is not an accurate reflection of the total EFL

teachers at the six schools. Out of 70 teacher questionnaires handed out, 37 were

returned giving a response rate of 53%. In addition to the questionnaire, in-depth

interviews were held with 16 teachers (five public, five private and six petroleum sector

teachers), five inspectors and four school heads. Although in-depth interviews were held

with 16 teachers, extracts from casual conversations with five other EFL teachers are also

reported in the study. At the time of the research, the five school inspectors were acting

as language teachers, but for the purpose of interviewing, the focus of discussion was on

their supervisory role in supporting secondary school teachers, and the problems they

encountered under the present conditions.

4.3: PAQ data analysis:

To be able to carry out adequate statistical analysis, a minimum sample size of thirty is

considered safe (Cohen, Manion and Morrison, 2000). Admittedly though, the PAQ sample

size (n=37) is relatively small for significant statistical generalisations to be made about

the target population of secondary EFL teachers in Tripoli, which was estimated at about

720 by Inspector D during a Fact Finding interview. With the present sample size, it is

possible, however, to make tentative inferences with a degree of caution using a 95%

confidence level but with a broader confidence interval of 17.5%, that is, with an accuracy

of plus or minus 17.5% of the results obtained.

Raw data from the PAQ was manually entered into Excel before being transferred into

SPSS for Windows (Statistical Package for the Social Sciences) release 11.0.1. Due to the

nature of the study, descriptive statistics were mainly used to analyse the PAQ data.

Because the type of data obtained was either nominal, e.g. gender, or ordinal, e.g. attitude

scores, non-parametric tests were chosen. Frequency distribution tables showing relative

frequency were used to summarise data relating to certain items of interest in the PAQ.

Bar chart diagrams and pie charts, where appropriate, gave an additional visual

representation to particular data items.

Data values specified as missing were excluded from calculations. Thus, when analysing

SPSS output, only valid responses (n) were shown and missing values were ignored in

most parts of the PAQ analysis, except when considered relevant to the item of discussion,

such as INSET training (missing values were thought more likely to reflect absence of

training).

4.3.1 Analysis of biographical data:

4.3.1.1 Gender:

As Table 4.2 illustrates, gender is almost evenly distributed across the sample with 20

(54%) males and 17 (46%) female teachers.

Table 4.2: Gender frequency table (n=37)

Sex	Frequency	Percent
Male	20	54.1
Female	17	45.9

4.3.1.2 Age:

The age range of respondents in the sample was between 22 and 58 years, which covered

a wide spectrum. The mean age was 37.2 years. The four missing values were notably by

female respondents, who did not disclose their age.

Table 4.3: Teachers' age groups (n=33)

Age group	Frequency	Valid Percent
Age 20 to 29	9	27.3
Age 30 to 39	11	33.3
Age 40 to 49	6	18.2
Age 50 and over	7	21.2

According to the age groups in Table 4.3, there is a grouping of 11 teachers (33.3%) in the

age range 30 to 39, the range in which multiple modes lie. The younger age group 20 to

29, which represents fresh teachers, contained comparatively fewer teachers at only

27.3%.

4.3.1.3 Teaching sectors:

As this item was not originally included in the PAQ, data was retrieved using my knowledge

of respondents by name. Thus, categorising respondents according to teaching sector

affiliation, rather than where they worked in their spare time (Figure 4.1) helped to

understand the relevant INSET policies in each sector. It can be said that as private

schools were mainly staffed by public sector teachers (44%), fewer private teachers (24%)

existed. The petroleum sector relied mainly on its own full-time staff, making up 32% of

the sample.
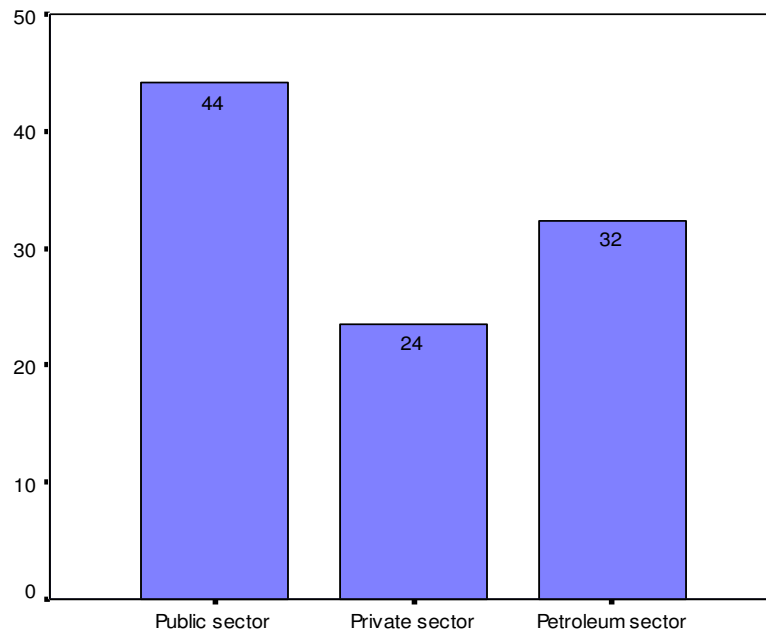
Figure 4.1: Distribution of sector teachers

In general, a clear distinction between public and private sector staff is difficult to ascertain due to the fact that teachers might work in both, but it was possible to glean INSET policies pertaining to each sector using PAQ data, which was triangulated by subsequent interviews.

4.3.1.4 Teaching experience:

The teaching experience across the sample (Table 4.4) ranged from 1 year to 32 years, with a mean of 12.6 and a standard deviation of 9.63. The mode was 2 years, while the median was 9.

Table 4.4: Teaching experience groups (n= 33)

Teaching experience	Frequency	Valid Percent
Under 5 years	8	24.2
From 5 to 15 years	12	36.4
From 16 to 25 years	8	24.2
Over 25 years	5	15.2

It is noted that while the majority of teachers are clustered in the '5 to 15 years' of experience, relatively fewer teachers are in the 'under 5 years' group. Although sample size is too small to warrant significant generalisation, this comparatively low percentage of young teachers might signify a poor rate of graduate teacher retention.

4.3.1.5 INSET training:

Despite the wide range of teachers' experience, almost two thirds of the teachers in the sample had not received any INSET teacher training since graduation.
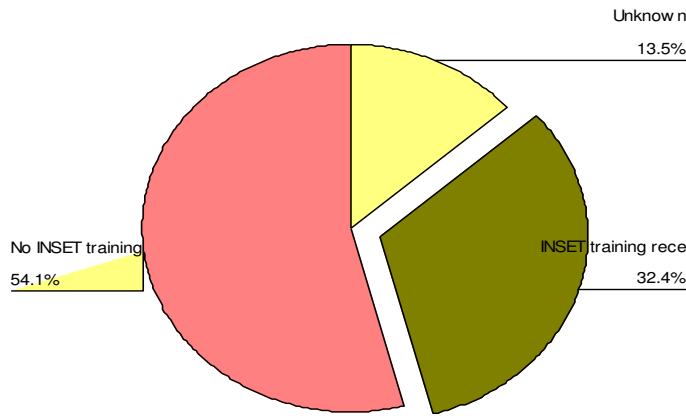
Figure 4.2: EFL teachers' INSET

As Figure 4.2 illustrates, 54.1% of respondents had received no INSET training at all, while only 32.4% had had some kind of training. The pie chart reveals a high percentage of teachers with no INSET. Taking missing values (unknown) into account, the likely proportion of teachers with no INSET training would be even higher at 62.5%. This statistic is cause for concern and calls for intervention by providers to facilitate regular training for in-service teachers. To investigate whether there are differences in teaching experience with respect to INSET, the crosstabulation output in Table 4.5 was generated.

Table 4.5: Crosstabulation of teaching experience within INSET (n= 31)

EXPGRP * INSET Crosstabulation		INSET training	
		INSET	No INSET
5 years and under	Count	1	6
	% within EXPGRP	14.3%	85.7%
From 6 to 15 years	Count	3	9
	% within EXPGRP	25.0%	75%
From 16 to 25 years	Count	5	2
	% within EXPGRP	71.4%	28.6%

The table reveals that only 1 in 7 new teachers is likely to receive organized INSET in the first five years of teaching; teachers are more likely to teach from 6 to 15 years in order to get a 25% chance of in-service teacher training; and over 16 years before having a realistic 71.4% chance of training in Libya. The clustered bar chart (Figure 4.3) reveals the disparity of INSET training opportunities.
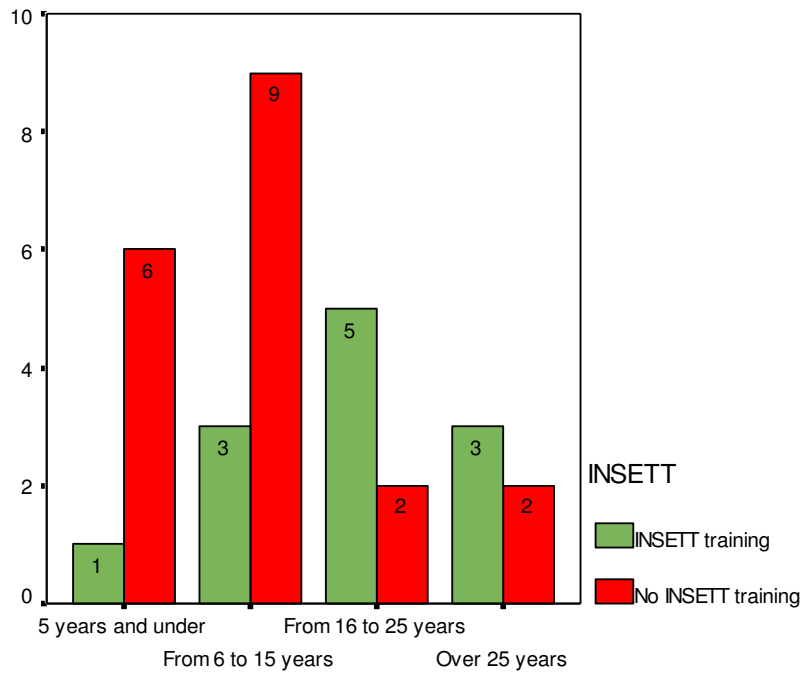
A further investigation of INSET training within the first five years of teaching across the three teaching sectors (Figure 4.4) shows that more new teachers in the petroleum sector (33%) are likely to receive in-service training than teachers in the private or public sector.
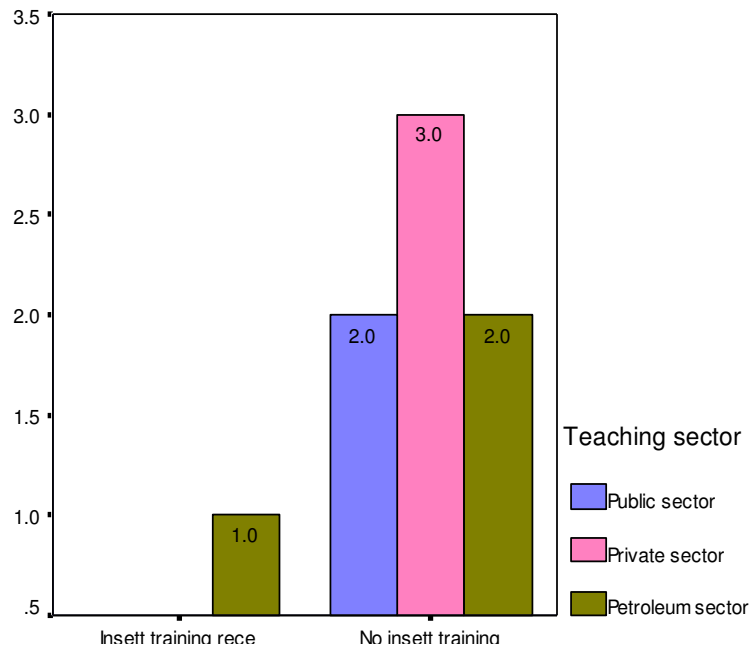
Figure 4.4: INSET in first five years across teaching sectors

4.3.1.6 Internet training:

The current status of teachers' Internet training in Libya is not in any way better than that of INSET provision. In fact it could be much worse, for all the Internet training that is reported by 11 PAQ respondents (29.7%) was arranged informally (self-taught, from

colleagues or through private training schools). In other words, no Internet skills provision

was reported to have taken place within any INSET programme and to compensate for this

deficiency, some teachers organised their own.
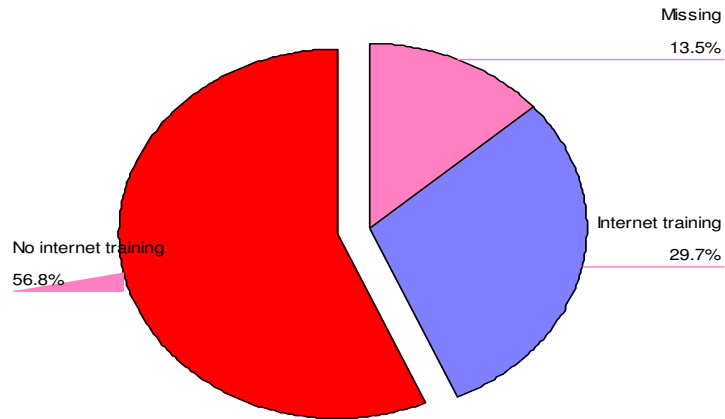
Figure 4.5: Teachers' Internet training (private)

Figure 4.5, which demonstrates teachers' privately arranged Internet training, shows that

almost a third (29.7%) of teachers in the sample had made a personal effort to acquaint

themselves with the Internet, whether for general or professional development purposes.

Again the missing values (13.5%) were interpreted as respondents with no Internet

training, assuming that if they had received any training they would have reported it.

4.3.2 Analysis of part one: Internet skills

In part one of PAQ, teachers self-assessed their Internet skills in two areas, communication

skills and navigation skills. The Cronbach alpha test for internal reliability of part one

yielded a coefficient of 0.96, which is reliable.

4.3.2.1 Internet Communication skills:

The communication skills assessment related to the setting up and management of e-mail

accounts, the use of chat and messenger. PAQ item numbers have been incorporated into

SPSS output, a procedure which was followed for all PAQ data analysis.

Table 4.6, below, shows the mean scores of all respondents under each sub-skill, along

with the nearest point on the 5-point self-assessment scale. Here, the skill levels are

displayed in descending order of means, that is, in order of teachers' ability (according to

their self-assessment). In reverse order, this can reflect the priority to be given by training

providers. A glance down the scale column in Table 4.6 shows a reasonable overall level of

communication skills ranging from very high to intermediate.

Table 4.6: Mean scores and nearest scale for Internet communication skills

No.	Communication skill	N	Mean	Scale
3	Replying to a received e-mail message	34	4.06	VH
2	Using e-mail to compose and send text messages	33	3.91	VH
7	Saving or printing attachments received by e-mail	32	3.28	H
1	Setting up new personal e-mail accounts from scratch	30	3.17	H
9	Using MS or Yahoo Messenger to conduct live chat	33	3.15	H
5	Sending text file attachments with e-mail messages	33	3.00	H
4	Forwarding an e-mail to a third party	32	2.97	I
10	Using NetMeeting to conduct live communication	33	2.79	I
8	Reactivating an e-mail account after it has been deactivated	33	2.73	I
6	Using e-mail to send image file attachments	34	2.56	I

Key: VH= Very High   H= High   I= Intermediate

Whereas item 6 (sending image file attachments) has the lowest mean (2.56) with 55.9%

low ability, item 5 (sending text file attachments) which gave a higher mean (3.00)

appears less difficult for teachers (42.4% low ability). Obviously, the procedure for

sending file or image attachments is similar. It must be a case of unfamiliarity, rather than

inability, of some teachers in handling image files.

Item 8 (reactivating an e-mail account) appears next in order of low ability (51.5%) at a

mean score of 2.73. Surprisingly, the mean score for setting up new accounts (item1) is

ranked higher at 3.17. This could lead to e-mail accounts being set up by teachers, but

eventually deactivated by software providers due to prolonged delays in logging on to

one's account. Or, as mentioned in the Case Study, users may forget their password and

cannot retrieve it.

Teachers' Internet communication skills ranged widely from very high to very low abilities.

To calculate the overall mean (Table 4.7), an SPSS Transform and Compute operation was

carried out, which produced an average communication skill for the whole sample (3.14)

approximating to an Intermediate level of ability.

Table 4.7: Overall mean for communication skills

Variable	Mean	Median	Mode	Min	Max	Skew	Nearest score
COMSKILL	3.14	3.05	2.5	1	5	.071	Intermediate

According to respondents' self-assessment, the distribution of Internet communication

skills (Figure 4.6) shows a bunched up group of teachers with high and very high skills

(11), but the majority fall within the intermediate skills category (15) around the mean.

However, eight respondents fall within the low and very low category. The positive skew

from normal distribution is insignificant (less than 1), hence, it could be said that the

distribution is close to normal.
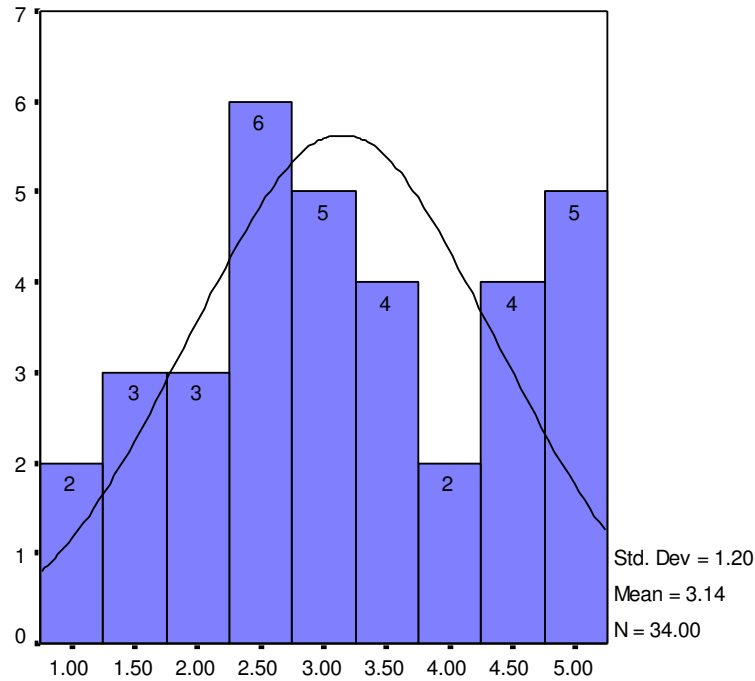
Figure 4.6 Distribution of communication skills

4.3.2.2 Navigation skills:

The descending order of means in Table 4.8 reflects the self-assessed navigation skills.

The nearest corresponding point on the 5-point assessment scale is indicated alongside.

Table 4.8: Means of Internet navigation skills in descending order

No.	Navigation skill	N	Mean	Scale
12	Familiarity with a browser's function icons such as forward, backward, home, etc.	33	3.97	VH
18	Downloading and saving interesting Web pages from the Internet	33	3.97	VH
11	Using Internet Explorer to look at any Web site using its URL (Web address)	32	3.72	H
16	Using Internet search engines to look for sites of particular interest	33	3.42	H
15	Returning to favourite Web sites already saved on a computer	32	3.41	H
19	Printing a Web page on a local printer	32	3.38	H
14	Saving, or book marking, favourite Web site addresses	32	3.25	H
20	Copying and saving images from a Web site	33	3.18	H
17	Evaluating Web sites relating to a particular subject or area of interest	33	3.15	H
13	Navigating round a Web site using embedded hyperlinks	33	3.06	H
21	Downloading and installing browser plug-ins, Acrobat Reader and Real Player	33	2.42	I

Key: VH= Very High   H= High   I= Intermediate

Although navigation skills ranged widely from very high to very low abilities, items 12 and

18 scored VH at a mean of 3.97. At the bottom end, the item on which informants

reported to have least ability (Intermediate), and thus lowest mean (2.42) was item 21

'downloading and installing browser plug-ins'. At a low ability of 63.3%, this is rather

surprising, for most plug-in applications are installed automatically by following simple download instructions. This, however, could be due to confusion, by some respondents, about the exact meaning of 'plug-ins' (see comment on Internet jargon in sub-section 4.3.8.2).

Surprisingly, item 13 has a mean of 3.06 corresponding to 42.4% low ability. Although the mean reflects a High ability on the self-assessment scale, this basic level of web navigation skills, which only requires the click of a mouse, might have been expected to be relatively higher up the scale.

Evaluating web sites (item 17) is a skill that even regular users of the Internet may grapple with, yet, respondents rated themselves High (3.15). At this early stage of the study, I wondered whether teachers really appreciated what website evaluation really entailed.

In a similar manner to communication skills, a new navigation skills variable was created, from which an overall mean could be calculated (Table 4.9).

Table 4.9: Mean score for teachers' navigation skills

Variable	Mean	Median	Mode	Min	Max	Skew	Likert score
NAVSKILL	3.35	3.27	3.00	1	5	-.345	Intermediate

Std. Dev = 1.13
Mean = 3.35
N = 33.00
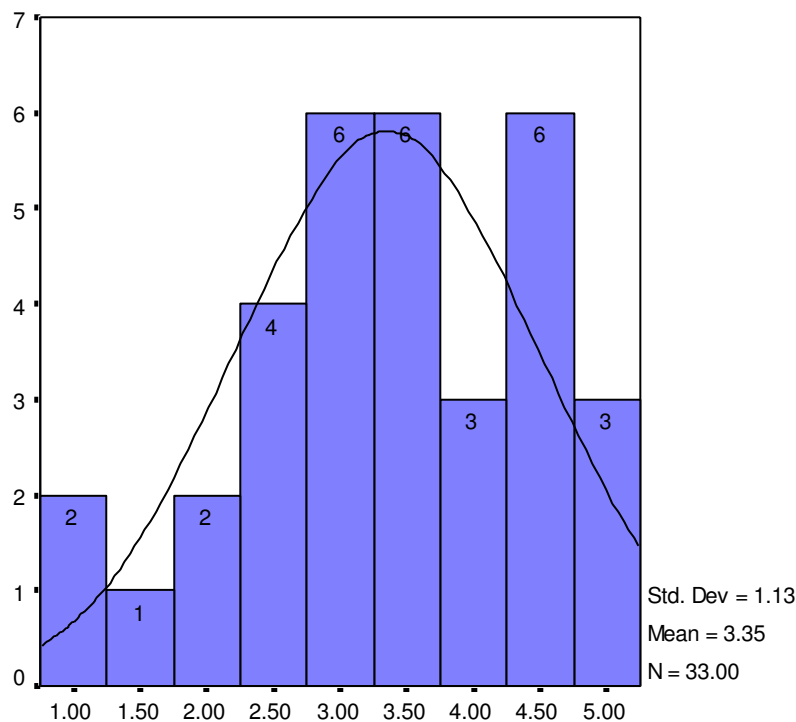
Figure 4.7: Distribution of navigation skills

While teachers' navigation skills ranged widely from very high to very low, the mean was 3.35 (rounded). This reflects an overall 'Intermediate' ability, very close to that for communication skills (3.14), but for some reason slightly higher.

The distribution of navigation skills (Figure 4.7) shows cases of low and very low abilities (five), but most levels tend to cluster at the middle of the scale (16), with 12 cases at high skills. This is reflected by the closeness of the distribution measures to the mean: the median at 3.27 and the mode at 3.00, with a negligible negative skew (-0.345) towards the lower end of the scale.

4.3.2.3 Differences in Internet skills:

Four different tests were carried out to investigate whether there were significant differences in Internet skills (communication and navigation skills) with respect to a) teaching experience, b) home Internet, c) Internet training or d) teaching sector. Table 4.10 summarises these results.

Table 4.10: Significant differences in Internet skills

Internet skill	Teaching experience	Home Internet	Internet training	Teaching sector
Communication	No	**Yes**	**Yes**	No
Navigation	No	**Yes**	No	No

There appears to be no significant differences in Internet skills across teaching experience or teaching sector. Although differences in Internet skills across the teaching sectors were insignificant, the mean skills in the Kruskal-Wallis test were ranked higher for the petroleum sector followed by the private sector then the public sector teachers. Not surprisingly, those with home Internet had significantly higher abilities in communication and navigation skills. This suggests that providing institutionalised Internet access, let alone training, is likely to improve teachers' Internet skills. With regards to Internet training, however, significant differences were found in communication skills, but in navigation skills differences were noted though insignificant. One explanation for this is that Internet navigation skills could be, as in my own case, self-taught by self-motivated practitioners. Therefore, whereas novice Internet users might need guidance in setting up a new e-mail account for example, they may fairly easily run Internet Explorer and simply navigate the web by following (clicking on) interesting links. Consequently, teachers with

no (declared) Internet training may have ranked their navigation skills higher than Internet-trained teachers on the self-assessment scale, and as such caused insignificant difference when compared with trained users.

The main conclusion, here, is that Internet training *combined with* proper access to Internet facilities can significantly improve teachers' Internet skills. Consequently, to exploit the full potential of the Internet, teachers need structured tuition to further enhance existing, be it relatively moderate, Internet skills to pave the way for improved Internet-based development.

4.3.3 Analysis of Part two: Teacher attitudes

The second part of the PAQ investigated teacher attitudes towards two aspects of teacher development: Internet-based Language Development (I-LD), and Internet-based Continuing Professional Development (I-CPD). Although addressing conventional language development is often covered under a broader discussion of CPD, for the purpose of more detailed data analysis of attitudes and usage, I-CPD and I-LD are discussed here under two separate headings. The rationale is that in this study, the subjects are NNESTs located in a foreign, rather than second, language environment. Therefore, Libyan EFL teachers place a greater emphasis on LD which, in turn, is thought to play an important role in CPD. The alpha Chronbach reliability for the attitudes scale was slightly lower than that of part one at 0.73, but satisfactory.

The attitude items in part two were presented in an assortment of negative and positive statements. The purpose of combining positively and negatively worded items on the attitude scale was to conceal, to a certain extent, the researched intention behind posing such questions and help 'prevent response bias' (Pallant, 2001:75).

In order to carry out meaningful statistical analysis of attitudes, the negatively worded questions were recoded such that low scores would indicate positive attitudes (negative attitudes to negative questions). This was carried out in SPSS by recoding the negatively worded items such that 1= Strongly Agree, through to 6= Strongly Disagree. But in order to interpret the output of attitudes analysis correctly, the negative items are reversed into

positive ones so that all the attitude statements can represent a positive measure in the thesis. That is, the higher the mean, the more positive is the attitude.

4.3.3.1 I-CPD attitudes:

In Table 4.11, the I-CPD attitudes are rearranged in descending order of means along with the nearest corresponding point on the Likert scale. A glance down the scale column reveals an overall positive attitude, ranging from Strongly Agree to Partly Agree. The responses reveal unanimous agreement in keeping abreast with teacher development through the Internet (item 23). Moreover, the majority (94.6%) strongly agree that the Internet is excellent for CPD (item 22) and 81.1% think it will develop cognitive skills too (item 24).   Though respondents display readiness (83.3%) to join organised I-CPD (item 25), when it comes to cost (item 30), they are divided in their opinion (50% split) about having to pay privately for Internet-based development.

Table 4.11: I-CPD attitudes in descending order of means

No.	Statement	N	Mean	Scale	%Agree
32	EFL Teachers must be able to direct pupils in the proper use of the Internet for language learning	37	5.24	SA	94.6%
31	Schools should link to the Internet to encourage I-CPD	35	5.23	SA	94.3%
27	When teachers are confident enough in using the Internet they will pass on their skills to their pupils	37	5.19	SA	94.6%
22	I think the Internet is excellent for EFL teachers' CPD	37	5.11	SA	94.6%
23	I like to keep abreast with current developments in EFL teacher education through the Internet	37	5.03	SA	100%
28	I think I-CPD will develop my teaching skills further	35	4.60	A	82.9%
25	I am prepared to join an I-CPD programme with any recognised institution in Libya	36	4.58	A	83.3%
24	I feel that I-CPD will develop my cognitive skills (theoretical knowledge) further	37	4.43	A	81.1%
34	The flexibility of learning in I-CPD is very appealing for me	35	4.43	A	88.6%
33	EFL teachers are ready to embrace I-CPD	34	3.94	PA	64.7%
26	I am confident enough about using the Internet for my CPD	37	3.86	PA	59.5%
35	I think that I-CPD will expand if adopted by schools	37	3.84	PA	59.5%
29	I need more than a list of useful resources or URLs for my I-CPD	34	3.62	PA	58.8%
30	I can afford I-CPD; it does not cost too much	36	3.47	PA	50%

Key: SA= Strongly Agree   A= Agree   PA= Partly Agree

94.3% of teachers agree the need for school involvement in providing I-CPD facilities (item 31). This opinion is also supported, though at a lesser emphasis, in item 35 (59.5%) in which teachers partly agree that schools should adopt I-CPD. These results reflect Libyan teachers' awareness of the role of schools in providing the technological climate needed to establish school-based I-CPD, which will assist with the cost factor on which teachers' opinion is divided (item 30).

At a mean of 3.86 (PA), 40.5% of teachers seem to be lacking confidence in using the Internet for professional development (item 26). This means that further Internet skills training is required to familiarise teachers with Internet-based resources and hence facilitate development. Moreover, 58.8% think they need more than just a collection of links to carry out professional development (item 29). These revelations seem to justify a skills training intervention in order to increase teachers' Internet skills and raise their awareness of the web as a rich resource for development.

The overall mean value of teachers' I-CPD attitude amounts to 4.47, which approximates to Agree (Table 4.12) on the Likert scale.

Table 4.12 Statistics for overall mean of I-CPD attitudes

Variable	Mean	Median	Mode	Min	Max	Skew	Likert scale
ATTICPD	4.47	4.57	4.00	3.57	5.57	.018	Agree

Although the distribution graph (Figure 4.8) shows two respondents at a low point, this actually reflects a Partly Agree response on the I-CPD attitude scale.

The distribution confirms that the majority (33) of teachers are clustered along the positive side of the scale (Agree) with a low standard deviation and a low skew level at 0.018. Only two respondents show a low mean of 3.5.
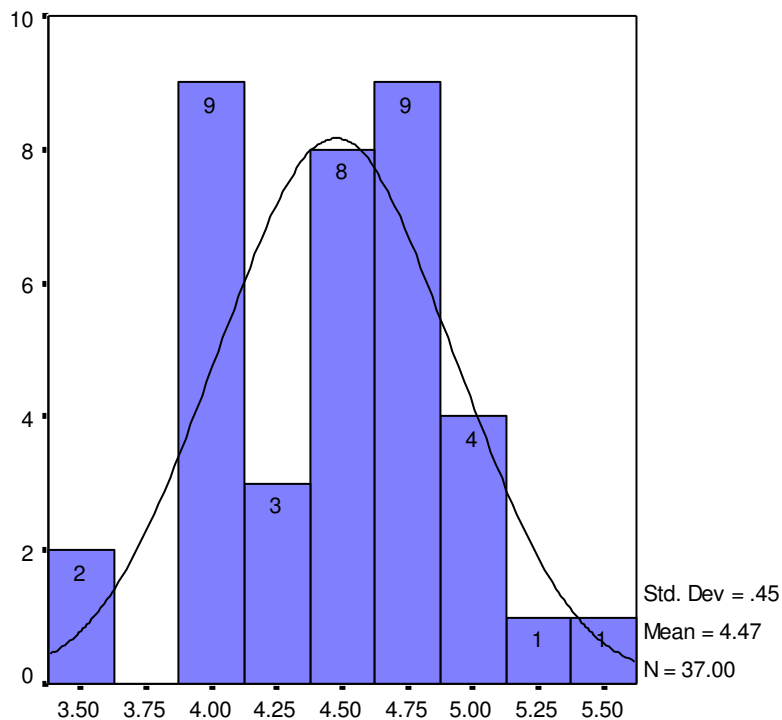
Figure 4.8: Distribution of overall I-CPD attitudes

4.3.3.2 I-LD attitudes:

Table 4.13 presents teacher attitudes towards I-LD in order of positivity according to descending means, i.e. those statements on which there is more agreement. The mean values have been approximated to the closest point on the 6-point scale. It is worth noting that the descending order of means does not necessarily coincide with the order of agreement (% Agree), as in statements 36 and 47; 41 and 46. While the arithmetic mean is statistically a stronger measure of tendency, since it calculates the mean of all scores on a scale, the agreement scale only considers the total percentage scores on the positive half of the Likert scale where agreements lie (PA, A and SA).

Table 4.13: Mean attitudes of I-LD and closest point on scale

No.	Statement	N	Mean	Scale	%Agree
38	Video material on the Web enables me to develop my authentic English	36	5.03	SA	94.4%
36	E-mail is useful for improving my writing skills	36	4.91	A	83.3%
47	I can foresee applications of the Internet in my language development	36	4.83	A	86.1%
43	My English vocabulary is likely to expand with the Internet	36	4.78	A	83.3%
44	My reading speed will improve with the regular use of the Internet	36	4.69	A	83.3%
39	I know how to use the Internet to develop my English right now	36	4.44	A	72.2%
37	Internet chat facilities improve my writing skills	36	4.31	A	72.2%
41	Audio on the Web is effective in improving my listening skills	35	4.20	A	65.7%
46	I can find my way round the load of information on the World Wide Web	35	4.00	A	68.6%
42	Audio on the Web is effective in improving my speaking skills	35	3.94	PA	60%
40	EFL Internet resources are the best way to develop my English language skills	35	3.86	PA	60%
45	Internet English jargon does not hinder my language development	33	3.79	PA	54.5%

Key: SA= Strongly Agree   A= Agree   PA= Partly Agree

What respondents appear to agree most with is item 38. This result perhaps signals respondents' awareness of video material on the Internet, even though Internet dial-up speeds for public use in Libya (summer, 2004) were rather slow to comfortably download video. Use of audio for improving listening (item 41) appears to be less popular with a lower mean of 4.2. Understandably, for speaking skills (item 42), audio is even less popular at a mean of 3.9.

Next in order of positive attitudes is the recognition that e-mail is useful for improving writing (item 36) with 83.3% agreement. Teachers, however, feel that Internet chat (item 37) is less helpful in improving their writing skills (72.2%). Perhaps teachers are differentiating here between the formal modes of writing they are more familiar with and the informal English usually associated with synchronous chat.

Under item 47, more teachers (86.1%) can foresee applications of the Internet in their

language development. However, while teachers agree (mean 4.4) that they know how to

use the Internet to develop their English (item 39), there is less agreement (mean 3.9)

that EFL resources on the Internet are the best way to develop language skills (item 40).

At this point in time, teachers may have not been fully aware of the extent and potential of

Internet-based resources (see Case Study phase, sub-section 5.4.6 for teachers' reaction

to the enormity of EFL resources on the Internet).

Under item 44, teachers agree (83.3%) with a mean attitude of 4.8 that their reading

speeds can be improved with the regular use of the Internet. In addition to time saving,

the ability to scan and scroll quickly down web pages is obviously important for developing

reading speeds. However, a proportion of teachers (31.4%) have some problems in

finding their way round web pages (item 46).

The fewest teachers partially agree with item 45, at a mean of 3.79, which seems to

suggest that Internet jargon hinders rather than assists language development for 45.5%

of the sample. Despite that 54.5% think that Internet jargon does not constitute a

hindrance, due attention should be given, in teacher development courses, to untangle

some of the terminology, or technical language, associated with using and communicating

through the Internet before making more demands on teachers' learning. An overall mean

of 4.4 (rounded), which approximates to Partially Agree (Table 4.14), reflects respondents'

attitude to I-LD.

Table 4.14: Statistics for overall mean of I-LD attitudes

Variable	Mean	Median	Mode	Min	Max	Skew	Likert scale
ATTILD	4.42	4.35	3.67	2.33	5.83	-.34	Partially Agree

The distribution of I-LD attitudes (Figure 4.9) shows a cluster of attitudes at the positive

end (Agree and Partly Agree). No Disagreement with I-LD items is shown and the

minimum recorded attitude measure is 2.33 (Partly Agree). Apart from a slight negative

skew, the distribution is almost normal with a low standard deviation.
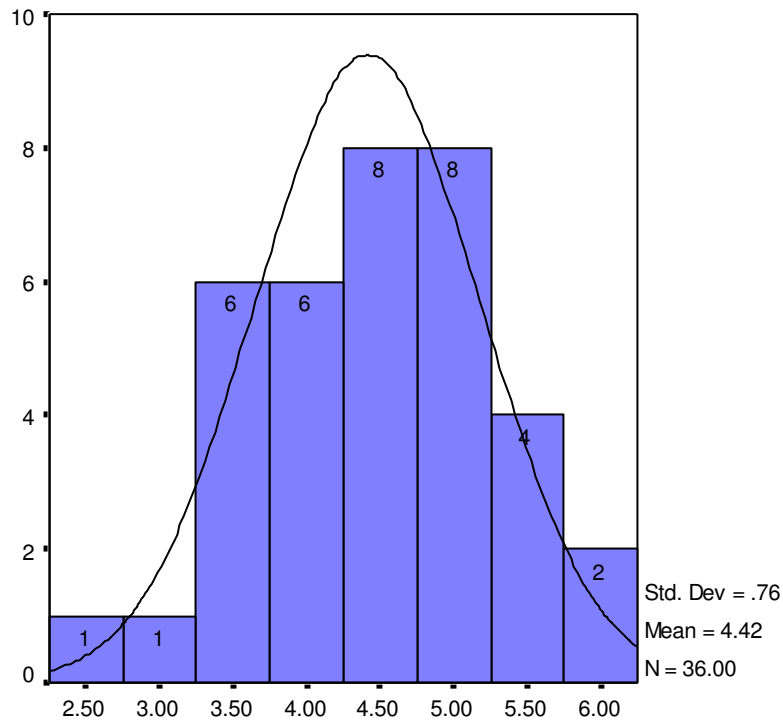
Figure 4.9: Distribution of overall I-LD attitudes

To summarise, it can be said that teacher attitudes towards Internet-based development are fairly positive. On a six-point scale, the mean attitude to I-LD is 4.42 and for I-CPD the mean attitude is 4.47, which yields an overall average mean of 4.45 approximating to an Agree measure. This is a reasonably positive indicator for training providers to capitalise on when introducing the Internet as a potential resource for professional development.

4.3.3.3 Differences in teacher attitudes:

Four different tests were again carried out to investigate whether there were significant differences in teacher attitudes with respect to teaching experience, home Internet, Internet training or teaching sector (Table 4.15).

Table 4.15: Differences in teacher attitudes

Attitude	Teaching experience	Home Internet	Internet training	Teaching sector
I-CPD	No	No	No	No
I-LD	No	No	No	No

At the 95% confidence level, all the tests resulted in insignificant differences.

4.3.4 Analysis of Part three: Internet usage

Part three of the PAQ investigates the actual usage of the Internet by Libyan EFL teachers

in two main areas: CPD (10 items) and LD (8 items). The internal reliability measure for

the Internet usage scale was 0.88, which is reliable.

4.3.4.1: Usage in I-CPD

The mean frequencies of I-CPD usage for the sample are shown in Table 4.16.

Table 4.16: Means of I-CPD usage and nearest point on scale

No	Activity	N	Mean	Scale
50	I look for lesson activities related to my teaching context	34	3.21	U
54	I recommend interesting ELT sites to my colleagues	35	2.97	S
51	I search the Web for ELT related sites	34	2.97	S
49	I read articles related to ELT	35	2.94	S
48	I visit favourite Websites related to ELT	34	2.94	S
53	I recommend interesting ELT articles to my colleagues	34	2.88	S
55	I look up video material related to ELT	34	2.47	S
52	I look up academic journals for contents related to ELT	35	2.40	S
57	I join newsgroups of particular interest to my field	35	2.37	S
56	I look up audio material related to ELT	34	2.29	S

Key: U= Usually   S= Sometimes

At a mean of 3.21, the most frequent I-CPD usage is item 50 (Usually), which is a good

sign of developmental awareness, be it at a moderate frequency. The responses to items

54 and 53 (Sometimes) reflect a level of interdependence awareness between colleagues

that can be capitalised on to enhance collaborative development.

Table 4.17: Statistics for I-CPD usage

Usage	Mean	Median	Mode	Min.	Max.	Skew	Average freq.
ICPD	2.74	2.60	2.74	1.10	4.60	.22	Sometimes

Although the other development activities are of an individual nature and seem less

frequent with 'Sometimes' as a nearest scale, they reflect a state of readiness to further

develop independent I-CPD.

The overall mean of I-CPD usage (Table 4.17) approximates to 'Sometimes' on the Likert

scale, at a mean of 2.74 and a wide range of usage level.

The distribution of I-CPD usage (Figure 4.10) reflects a broad range of respondents' usage

levels from Never (2), Rarely (3), Sometimes (18), Usually (11) to Always (2). The

distribution appears normal with a negligible skew value (0.22) and a small standard

deviation (0.81).

Std. Dev = .81

Mean = 2.74

N = 35.00
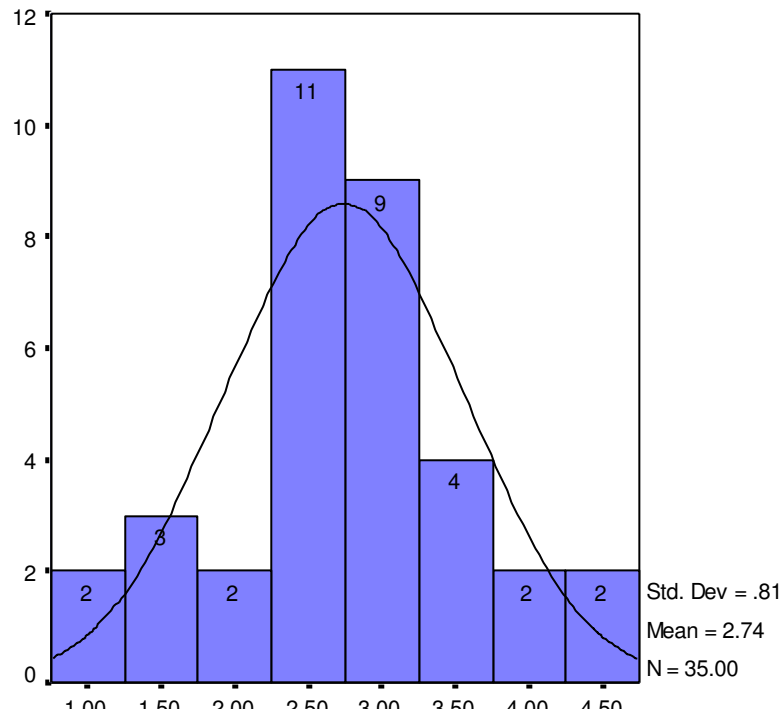
Figure 4.10: Distribution of I-CPD usage

4.3.4.2: Usage in I-LD

Table 4.18 displays the means of teachers' I-LD usage in descending order. The nearest

corresponding point on the Likert scale is indicated opposite each item. Accessing news

articles on the Internet to improve reading (item 61) seems a popular activity, but at a

mean of 3.66 (Usually).

Table 4.18: Means of I-LD usage and nearest point on scale

No	Activity	N	Mean	scale
61	I use the Internet to access news articles and improve reading	35	3.66	U
58	I use the Internet to send e-mails and improve writing	35	3.63	U
64	I read articles of general interest to improve my language	35	3.63	U
62	I look up English meanings of new words in online dictionaries	34	2.62	S
59	I use the Internet for one-to-one chat (text only)	34	2.59	S
63	I look up synonyms of new words in online thesaurus	35	2.46	S
65	I join chat rooms for group discussions	35	2.46	S
60	I use the Internet for one-to-one voice chat	35	2.26	S

Key: U= Usually   S= Sometimes

During interviewing, several teachers have reported regular reading of international English

newspapers and magazines, such as *The Guardian*, *The Times,* and the *Newsweek*.

This is followed closely by e-mailing, which is thought to improve writing (items 58) and, at

the same frequency, by reading of general articles (item 64). According to the sample,

each of these three top-rated I-LD activities is only carried out 'Usually'. Synchronous one-

to-one chat (item 59) was used more frequently than group chat (item 65), the latter

being perceived as more demanding and involving group interaction skills. Perhaps

teachers feel more comfortable to communicate with people they are more familiar with in one-to-one situations than groups. Voice chat (item 60) appears to be the least used.

The overall mean value for I-LD usage is 2.92 (Table 4.19) and approximates to a moderate frequency (Sometimes).

Table 4.19: Statistics for I-LD usage

Usage	Mean	Median	Mode	Min	Max.	Average freq.
ILD	2.92	2.88	2.92	1.13	5	Sometimes

The distribution of the overall mean in I-LD usage (Figure 4.11) shows a clustering in the mid-range frequency with a bimodal effect and a low positive skew at 0.127. In contrast, it appears that more I-LD activities are frequented by teachers than I-CPD.
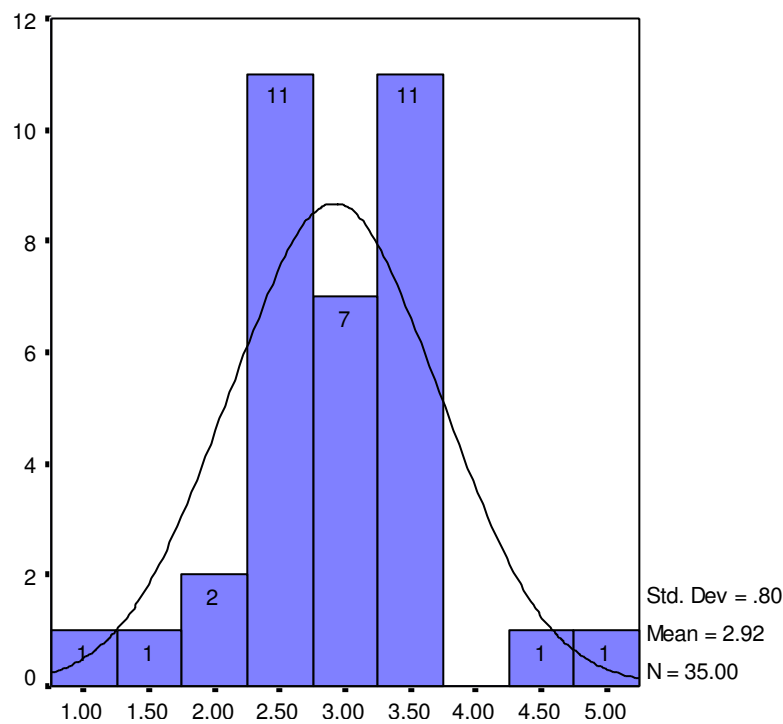
Figure 4.11: Distribution of I-LD usage

Although the overall mean (2.83) in both areas of usage approximates to 'Sometimes' on the Likert scale, the mean of I-LD usage is marginally higher (2.92) compared with I-CPD at 2.74. This may reflect the fact that Libyan teachers in a foreign language environment are more conscious of their language development needs which are perceived to result in better classroom performance and improved professional competence. However, a significant correlation was obtained between I-LD and I-CPD usage.

4.3.4.3 Differences in Internet usage:

As Table 4.20 summarises, four different tests were carried out to investigate whether there were significant differences in Internet usage with respect to teaching experience, home Internet, Internet training or teaching sector.

Table 4.20: Significant differences in Internet usage

Usage	Teaching Experience	Home Internet	Internet training	Teaching Sector
ICPD	No	No	**Yes**	No
ILD	No	No	No	No

a) Teaching experience: A Kruskal-Wallis test was carried out to compare the scores in Internet skills across four teaching experience groups. The insignificant results suggest no differences in communication skills (p= .445) or navigation skills (p= .599). That is, as teachers progress in teaching, there appears to be no differentiation in Internet skills between them.

b) Home Internet: The Mann Whitney test was again carried out to investigate whether there were differences in Internet skills between teachers with home Internet and those without. Not surprisingly, home users' communication and navigation skills were significantly higher (p= .007 and .003 respectively) than those without. This suggests that though Internet cafés are available, they are not much used by this group.

c) Internet training: A difference in Internet skills vis-à-vis Internet training was also performed. The conclusion may seem logical, but needed confirmatory evidence based on the sample data. Surprisingly, the independent samples test showed significant differences in favour of trained respondents in communication skills (p= .005), but not in navigation skills. Although teachers with Internet training also ranked higher with respect to navigation skills, the difference caused by Internet training was deemed insignificant due to a relatively higher (p= .157) probability of error, thus rejecting the null hypothesis.

One explanation for this contrast is that Internet navigation skills could be, as in my own case, self-taught by self-motivated practitioners. Therefore, whereas novice Internet users might need guidance in setting up a new e-mail account for example, they may fairly easily run Internet Explorer and simply navigate the web by following (clicking) interesting links.

Consequently, teachers with no (declared) Internet training may have ranked their navigation skills higher than Internet-trained teachers on the self-assessment scale, and as such caused insignificant difference when compared with trained users.

d) Teaching sector: Differences in Internet skills across the teaching sectors were insignificant. However, the mean skills in the Kruskal-Wallis test were ranked higher for the petroleum sector followed by the private sector then the public sector teachers.

To summarise, no significant difference was found with regards to teaching experience in either areas of usage. This can be explained by the lack of ICT skills training for all Libyan teachers, experienced or inexperienced alike. No significant difference was found with regards to home Internet, but the mean ranks were higher in the case of users with home access, which suggest that teachers with no home Internet are just as active using Internet cafés. As expected, a significant difference was found with regards to Internet training in favour of trained respondents. In I-CPD applications, respondents with Internet training ranked significantly higher than those without training. Although the difference in I-LD usage was not significant, mean ranks of trained users were higher. There appeared to be no significant differences in Internet usage, whether for LD or CPD with respect to the teaching sectors. However, petroleum sector teachers' mean ranked highest in I-CPD usage, while in I-LD usage, private sector teaches ranked highest.

The main conclusion here is that Internet training *combined with* proper access to Internet facilities can significantly improve Internet skills. Consequently, to exploit the full potential of the Internet in professional development, teachers need structured tuition to further enhance existing, be it moderate, Internet skills.

4.4 An integrated discussion of FF data:

This section will integrate the discussion of findings based on a) the quantitative PAQ analysis with b) qualitative data emerging from interviews, both of which were carried out during Fact Finding. In conjunction with the preliminary information contained in Chapter 1, including issues not directly connected with, but related to, the research focus, the combined outcome of Fact Finding (Phase one) has shed more light on Libyan in-service

EFL teachers' experiences of INSET, attitudes, Internet skills, usage and development options.

While the quantitative assumptions pointed out in section 4.3 may have put some restriction on generalisations (to the EFL teacher population in Tripoli) based on the PAQ findings, supportive qualitative data in the form of interviews with officials, teachers, inspectors and school heads helped to provide richer and more robust interpretations of findings whenever appropriate. Thus, complementing quantitative PAQ analysis with qualitative data was thought to provide triangulation of methods and of findings.

Before FF interviews began, participants were offered the choice to respond either in English or in Arabic, or shift between the two as they preferred. This was intended to alleviate any interviewee stress due to perceived language deficiency and, thus, yield more realistic data. To distinguish interview quotations from teachers belonging to different sectors, the words 'public', 'private', or 'petroleum' are inserted after a teacher's alphabetic symbol before each quote. While interview quotations are typed in italics, any mistakes therein were left uncorrected, to reflect the range of linguistic competences by Libyan EFL teachers.

The discussion of FF data from Phase one is classified under two main headings: conventional CPD and Internet-based CPD. Under each heading, discussion is further divided into subheadings according to emergent themes from the interviews.

4.5 Conventional CPD:

4.5.1 INSET provision:

Analysis of INSET provision, obtained from the PAQ, showed that almost two thirds (62.5%) of teachers in the sample had not received any teacher training since graduation. Further, for new teachers, only 1 in 7 is likely to receive organized training in the first five years, which was disappointing for most teachers. Teacher dissatisfaction with INSET provision in Libya is widespread across interviewees including inspectors and school heads. It seems that in a centralised education system schools are incapable of initiating change

unless a directive is imposed from the top (the Ministry of Education). Headmaster A

stressed that teachers are not getting enough training and that

> *education authorities should provide regular training programmes,*
> *refreshment courses, seminars, conferences… This will encourage*
> *teachers to develop themselves.*

As pointed out in Chapter 1, the last INSET programme for secondary school teachers took

place in 2003, in preparation for the introduction of the new ELT syllabus. Teacher C

(public) echoed that

> *the Ministry of Education have some responsibility for educating*
> *teachers. But we only had one training course in 2003 when the new*
> *secondary syllabus started. They invited instructors from England to*
> *give a course to teachers.*

It is no surprise that, in the climate of such scarce INSET provision coupled with low

remuneration rates, prospective teachers turn away from teaching in the public sector

(Mabrouk, 1997), for there are simply no realistic incentives to attract them to the

profession. As Official A emphasised, the combined effect of low teacher pay and the poor

state of public sector INSET is likely to impact badly upon teacher motivation and,

subsequently, pupils' achievement.

It was the introduction of the new and more sophisticated secondary ELT syllabus and the

subsequent difficulties Libyan teachers have had in teaching it that has forced a change in

top-down INSET policy. New graduate teachers, intending to work for the public sector,

now have to complete a six-month training course on teaching methodology before

teaching using the new course book (Officials B and C).

4.5.2 Private sector CPD:

Aside from the summer vacations, most private language-teaching schools operate in the

afternoons and evenings. To run its English courses, the private sector relies mainly on

part-time EFL teachers from public schools and, therefore, in-service training is not an

issue, for there are an abundance of public school teachers searching for part-time work.

That is, private language schools can afford to handpick experienced teachers, who do not

require additional training. Accordingly, apart from initial induction in certain cases, no

particular CPD policy was pursued by the private sector.

4.5.3 Petroleum sector CPD:

Teachers within the petroleum sector were mainly full time employees and, thus, were eligible to receive teacher training according to the sector's policy. Petroleum sector institutions were more committed to in-service teacher development and, unlike other teaching sectors, more than a third (33%) of new teachers are likely to go through structured training, including mentoring and subsequent teacher training courses, both locally and overseas.

The Department of English at the Petroleum Training and Qualifying Institute (PTQI) is a good example of organised in-service training. Teachers P and I had undergone a two-week classroom-based induction course, which involved elements of teaching methodology, classroom techniques, observed teaching and teaching practice. After that, the group was sent to Egypt for a further four-week intensive methodology course that included elements of Internet-based ELT.

A similar, but lengthier, process of mentoring was also followed at the training centre of Waha Oil Company. After completing a 2-month induction period, Teacher L was sent to Cairo for six months to study for a Teacher Training Diploma.

4.5.4 Attitudes to development:

Based on interview data, teachers' attitudes towards CPD seem to be encouraging. While Headmaster A thought that the Ministry of Education should facilitate more organised top-down INSET, he believed that teachers ought to pursue professional development *independently* based on whatever resources available, thus trying to bridge the INSET gap. Accordingly, personal development was equated with professional development, but at an individual rather than collaborative level:

> *personal development is very important because it has something to do with myself. When you study, you read, you ask, you discuss with people, you catch up. And that affects your performance in the classroom.*

In actual fact, professional development for some teachers was not perceived to be a priority, due to other commitments. Teacher C (public) explains that teachers' attitudes to professional development is indifferent because

a teacher will get his time table and will come whenever he is teaching.
And if he's not teaching, he has other business to do outside the school
and he doesn't really care about the level of education whether it's
going up or down.

4.5.5 Perceptions of development:

For EFL teachers, language development was a route to improving classroom performance

and was therefore perceived as professional development. In response to a question about

responsibility for CPD, Teacher A (private) had this to say:

It [CPD] is the teacher's responsibility. The teacher must prepare
himself before the lesson. For example I know some teachers when
they finish the lesson they don't touch the [course] book until the next
class…the lesson is routine for them.

To pursue professional development, Teacher A sought to exploit the limited resources

available in order to improve teaching performance. To him, every lesson and every class

was different and he always found different ways of presenting new material:

I read too much. I read books mainly…and I look at levels close to my
class and take new ideas for my lessons. I take a look at other course-
books such as Headway, Streamline and others. I use the textbooks,
cassette recorder, video, dictionaries, ask other teachers who have
been [teaching] longer than me. The most important thing is to prepare
every lesson well. Every time I give a lesson I find new ways of
presenting vocabulary or a new technique. Each lesson is different than
the last one.

Essentially, due to the scarcity of mainstream (top-down) INSET, a bottom-up independent

approach to CPD was perceived as an alternative route to achieving teacher competence.

To read more books, to look at teacher's manuals, teacher's instruction
books, to go through different teaching stages by teaching different
levels and to improve and this is what life is all about, to improve
ourselves day by day (Teacher S: private, personal communication).

In the absence of organized top-down INSET, such independent development activities by

self-motivated teachers were thought to reflect in better classroom performance, thereby

distinguishing them from the ordinary book-dependent teacher:

I mean when… one teacher opens the book, reads explains from the
blackboard and doesn't use any other material… it's completely
different from the other teacher, who asks, reads, explains, uses other
different [re]sources, so I think it's very important.

Teacher P (petroleum) considered reading textbooks, magazines and newspapers a good

way of achieving language development. He also thought that listening to authentic

English, such as the BBC and CNN news broadcasts on TV, was useful in enhancing

listening and speaking skills. For professional development purposes, Teacher P reported

that he consulted with colleagues and often participated in peer discussions on pedagogic

issues during breaks. The local branch of the British Council (Tripoli) also provided

additional ELT material for him:

> *I sometimes go to the British Council. They have a small library. I like*
> *to read the ELT journal there, it's very useful. And I borrow from them*
> *magazines and newspapers, things like that. Sometimes they allow me*
> *to take old newspapers.*

4.5.6 School-based development:

The first form of school-based support for new teachers, which is mentoring, is virtually

non-existent in public schools. Once teachers graduate, they are presumed qualified to

teach and can assume responsibility for a classroom. Several teachers (e.g. Q and R,

public) who graduated from the Department of English (Faculty of Arts, University of Al-

Fatah) without any teaching practice were appointed to teach at state schools, allocated a

number of classes and then left to their own devices.

Teacher S (private) believed that all schools should have a period of induction training by

experienced teachers:

> *I used to attend classes with different teachers as a listener [an*
> *observer] and to see how their skills are performed in the class whilst*
> *teaching. And from there I picked up a few things that I didn't know*
> *before and also by going through teaching methods with me again and*
> *again. That has brought to me a lot of help actually.*

School mentoring in the petroleum sector was a matter of policy for all new teachers,

though periods of induction differed from company to another. Teachers P, I and L

(petroleum) were all part of a classroom-based mentoring course, before being sent for

further training.

Collaborative development, school-based or not, is uncommon in public schools. However,

as professional people, teachers collaborate on a personal level in peer conversations,

recommending material, or simply seeking advice from more experienced teachers to

resolve immediate pedagogic issues (Teacher Q, public).

With respect to petroleum schools, the role of school-based development extends to initial

induction, peer observation and mentoring. Teacher P: petroleum reported that he was

observed and mentored for one semester, during which he gained structured feedback

from experienced peers. He also gained further experience in classroom management

through consulting peers on particular problematic incidents.

The time factor combined with teachers' drive for financial gains were major obstacles to

school-based development. Teacher S (private) acknowledged that collaborative

development was helpful, but time was not set aside for productive teacher collaboration:

> it's very [sic] pity that they don't do this here and I haven't seen it done
> in most of the places… They don't have teachers meeting together and
> learning different ideas from each other, which is very important… It's
> just teaching teaching all the time.

4.5.7 Obstacles to conventional CPD:

It was mentioned that Libyan EFL teachers, especially those at public schools, do not have

much spare time for professional development as they are too occupied with teaching at

private schools to supplement their low income. It is really difficult to make an ordered list

of obstacles to conventional CPD, as this was not considered a focus of the research, but

these are likely to complete the list.

4.5.7.1 Low teacher motivation:

Data from the interviews suggests that most Libyan EFL teachers at public schools are

insufficiently motivated to become more professional. An exception is Teacher G (public),

who is a supporter of self-directed learning. He asserted that teacher motivation is a

problem:

> Teachers don't want to improve, develop, upgrade, update their skills.
> They don't want to look for, to research, to ask. I can't understand their
> philosophy of why not.

Not doing enough self-directed reading was identified by Teacher B (private) as a common

problem among Libyan teachers as a whole.

> It's laziness, they don't like reading. That's our problem, we have to say
> it. I can't find any justification why. Maybe because they are
> accustomed to traditional ways… send them something ready made,
> and they will do it. They don't want to read or search for [the
> information] themselves.

A dull school teaching routine was to blame for the low teacher motivation by Teacher S

(private):

> *Some teachers are just sick of the same daily routine, the same*
> *teaching class, the same students, the same school over and over*
> *again. Nothing is new, so it [teaching] became like a habit.*

However, he had a self-motivating message to convey:

> *Loving what you are doing is very very important. I always say to my*
> *self 'you must be a good teacher'. Even if you don't know how, you ask,*
> *you read, you learn from better teachers. I am not the type of just not*
> *bothering about learning more or staying at the same level. This will*
> *not get me anywhere.*

Teacher P (petroleum) believed that teachers must like what they do to continue

performing well in such a demanding job:

> *Maybe they don't have the courage, or they don't have the teaching as*
> *a hobby. Because when I entered the language college [at university],*
> *it [teaching] was my hobby. I am interested in teaching. It is related to*
> *advancing our social life.*

Teacher L (petroleum) explained that the problem is *'drive from inside, because if you are*

a creative person, innovative person, you always have goals to achieve'. He then pointed

to his own achievements as an example of the self-motivated teacher:

> *I started my life as a craftsman, as an ordinary technician, but then I*
> *moved along. I did my O levels, A levels, HND, BSC, and then finally*
> *achieved my Masters degree from Sheffield University. This means*
> *that… developing ourselves never stops, never ends.*

4.5.7.2 Lack of incentives:

Teachers' lack of motivation to pursue development, through reading or otherwise, was

often linked to an absence of incentives, whether financial, promotional or simply

recognition (Teachers A: private, B: private and C: public). As Teacher S (private)

explains:

> *I think it's to do with salaries, with the payment. You see a teacher if*
> *he's well paid, I think he will give out more. If a teacher's salary is not*
> *fulfilling his needs, or her needs, then they will start worrying about*
> *their other needs in life and will lose their motivation in teaching, which*
> *is very bad.*

To make matters worse, annual promotion of public sector teachers was time related,

rather than linked to teacher performance. This was not a realistic incentive for good

teachers to carry on teaching as they do, other than to get paid at the end of the month

(Inspector B: private). This lack of realistic incentives demotivated teachers and was a

significant barrier to achieving higher levels of professional competence. Instead, teachers

adhered to the same kind of teaching routine, because they had become accustomed to a

monotonous boring cycle, day in and day out (Teacher N, public).

Teacher L (petroleum) argued that there is a degree of sacrifice teachers must make

during their early years of work, where a teacher has to prove he or she is worthy of

recognition:

> *Teachers sometimes have to sacrifice. Because once you reach a*
> *certain level of achievement under your own steam, other incentives*
> *will come easily; you will improve your life style, you will improve your*
> *situation, you will be wanted everywhere… as a professional person.*

However, while teachers may need to "sacrifice" by making more effort to learn during the

first years of teaching, there must be equal opportunities for them to train and prove their

worth, before they run out of motivation and leave the profession. That means providing

proper mentoring and in-service teacher training opportunities so that all new teachers can

have a realistic chance of developing themselves and achieving professional competence.

4.5.7.3 No EFL teachers' forum:

While a general Teachers' Syndicate has existed in Libya since the early seventies, the idea

of establishing a dedicated forum, or society, for EFL teachers has not been entertained.

However, several teachers (e.g. Teacher A, B, C, and O) thought the idea of a teacher

forum was an excellent one through which teachers could exchange ideas, share

resources, initiate discussions and organise collaborative activities in a climate of scarce

resources. *'A teacher forum would encourage teachers to develop more and encourage*

them to improve themselves generally' (Headmaster A).

For Teacher S, the idea of a teachers' forum was novel, and very conducive to teacher

development:

> *We need to have a teacher forum to make meetings and conferences*
> *about teaching for English language teachers… It hasn't been done here*
> *in Libya… No one has brought it [the issue] up before, but it would be a*
> *great help if they do it.*

4.5.7.4 Shortages of teacher's books:

Another problem that Libyan EFL teachers faced concerned the recently introduced

secondary school course-book. In addition to poor language competency levels (see

Chapter 1), there was an acute shortage of teacher's books and audio cassettes that were

part of the package published by *Garnet*. For some reason, very few teachers had access

to a teacher's book, which gave detailed guidance in lesson presentation. According to

Inspector E

> *the teachers didn't have the teacher's book and also they didn't have
> audio cassettes, so they didn't [couldn't] give listening lessons for the
> students.*

Consequently, most public sector teachers missed out on helpful hints on presentation and

teaching techniques contained in the teacher's book.

By contrast, petroleum sector teachers had complete access to a teacher's book, a

workbook and audio cassettes. For example, Teacher L (petroleum) found the teacher's

book very useful in setting up and presenting lessons. In addition to providing teaching

resources for their teachers, the oil companies subscribed to specialised journals. Due to

the emphasis on technical English, Waha Oil Company alone subscribed to "*more than*

fifteen technical and English journals and magazines" (Teacher L, petroleum).

Teacher S (private) who also had access to a teacher's book, workbook and a CD noted

that

> *the teacher's book tells the teacher what to do and when to do it, which
> is very very helpful. So the teacher won't miss out any important
> points.*

Even though a teacher should not be totally dependent on a teacher's book, it should be

made available for reference when required. In the case of shortages of hard copies, such

as those described, the education authorities should intervene by making copies of

teachers' books digitally available on the Web. This leads to a discussion of issues

concerning the use of the Web as a platform for professional development.

4.6 Internet-based CPD:

So far, the discussion of FF data has been focused on themes around conventional

development. The following subsections reflect the themes that have emerged from the

interview questions concerning Internet-based development.

4.6.1 Internet training:

No policy for Internet training provision has been introduced by the education authorities (Official C and Headmaster D). Over a third of teachers (six males and five females), or 34.4% of the PAQ sample, reported making private arrangements to gain Internet skills. Although this was an encouraging prospect demonstrating (male and female) teacher awareness of Internet-based learning, proper ICT skills training should be organised on a wide scale to enable teachers to gain access to development resources, on the one hand, and to equip teachers to participate in online learning, on the other.

The public school teachers who were approached during this study expressed readiness to receive Internet training. These teachers also looked forward to having school-based ICT facilities to help them adapt to and develop through computer technology, e.g. Teacher H (public) who advocated, with caution, that schools should encourage the use of the Internet for student learning as well as for teacher development.

> *I really wish one day I could see the Internet used by students and*
> *teachers at our schools, even though I can't guarantee it would all be*
> *educational.*

Market needs appear to be driving Internet training policies within private-sector schools. The provision of Internet access and computer facilities for teachers' use depended on the type of school and any computer courses on offer. In any case, the priority was for commercial use and for computer-based courses rather than for teacher development (Teacher U, public). While acknowledging his poor ICT skills, Teacher S (private) planned to enrol for a training course, on his own expense:

> *I still need to be trained, to have a course on how to use the computer*
> *and the Internet, on how to go to different sites. Even other members*
> *of staff… most of them they don't know how to use the computer.*

On the other hand, teachers within the petroleum sector have free in-house Internet access and are offered Internet courses as part of their in-service training. For example, Teachers P and I (petroleum) joined a one-week Internet course, provided by specialised company-based personnel.

4.6.2 Internet facilities:

Since the commercialisation of the Internet in 1998, public access through Internet cafés in Libya has become more common (see Chapter 1). Teachers in Libya can now access the Internet in their locality, with relative ease '*at any time, day night evening, whenever you are free*' (Teacher S, private). Teacher B (private) explains that

> *nowadays access to Internet is more common than before, due to the [falling] prices of linking to the Internet agencies [providers] and number two, computers have become cheaper. Internet accessibility is now available wherever they [teachers] go in Tripoli… In Hay Andalus [an area of Tripoli], you can find over ten [cafés], and twenty in downtown, so there's no excuse.*

However, mounting cost of Internet access was worrying for some teachers, e.g. Teacher O (public), as no other I-CPD provision, such as by schools or education authorities, was available:

> *If I get time and the money I will go on the Internet, because it requires money sometimes … One Dinar an hour I know, but sometimes you are eager for one quarter.*

Private home access to the Internet is available but not very widespread among teachers. Only six out of 37 respondents during the Fact Finding phase had home Internet, which gives a modest ratio of 16 percent. Even those with private Internet access had problems of a different kind: Teacher D (private) complained of recurrent faults on the dial-up connection, which often forced her to resort to the local 'café net'.

4.6.3 Existing Internet skills:

According to teachers' self-assessment (reflected in the PAQ) the items pertaining to Internet communication and navigation skills were, on average, at an intermediate level. According to a 5-point scale, these were 3.14 and 3.35 respectively, thus, averaging 3.25 for an Internet skill measure. However, these self-assessed ratings contrasted with the generally low levels of teachers' Internet skills pointed out by several interviewees (Official A; Inspectors A, B, C and D) and, therefore, they can only be regarded as a rough guide, rather than a realistic assessment.

In general, respondents thought that poor levels of Internet skills were an obstacle to carry out I-CPD, but poor skill is not a convincing excuse for not pursuing professional

development. Teacher B (private), who was not technically oriented, argued that self-

motivated teachers can find ways to upgrade their technical skill even at the local Internet

café, where technical assistance is often available if asked for. He explained that

> *part of it [the problem] is technology, part of it but not completely. I*
> *am not good at technology, but whenever I ask the guy who's in the*
> *Internet [café] to help, they never hesitate. So it's not an excuse to say*
> *'well, I am not familiar with the Internet or the keyboard, with the*
> *computer'. No, it's not an excuse at all. You can ask. The problem [is]*
> *they don't want to. It is an excuse, but it's not the right excuse.*
> *Technology is not a problem at all, it is in themselves.*

Teacher B points to what could be an attitude problem to development as a whole within

which fear of new technology, or e-phobia, may be seen as cause for concern by novice

learners, particularly the poorly skilled and poorly prepared (Salmon, 2002b), but with

focusing on learning rather than technology, it is said that this fear can be overcome (see

Frustration with technology, in the Review).

4.6.4 Teacher attitudes to I-CPD:

Despite the fear of technology by some non-skilled teachers, the interview data reveal that

the present I-CPD and I-LD attitudes are encouraging. It is possible, however, that further

improvement in low-skilled teacher attitudes can be attained by raising teacher awareness

even more with respect to the potential of the Internet for teacher learning.

The PAQ means of teacher attitudes towards I-LD and I-CPD were very close (4.47 and

4.42, respectively on a six-point measure) and approximated to 'Agree' on the Likert scale.

That is, respondents had fairly positive attitudes towards Internet-based development.

Contrary to Internet usage (sub-section 4.3.4.2), a Spearman's rho correlation test

indicated that I-CPD and I-LD attitudes for this sample did not appear to correlate. It is

possible that further improvement in teacher attitudes in both areas can be attained by

raising teacher awareness further with respect to the full potential of Internet. Teacher B

(private) believed the Internet was *'the greatest invention so far'*:

> *Nowadays thanks to the latest technology, the Internet, it gave me the*
> *access to any place I wanted. It's like you having the key of the library*
> *of the world.*

According to Teachers D (public), the advantage of the Internet was in its flexibility, multi-media content and immediacy of access:

> *Because we are lazy you know. Open the book, sit and read. It takes*
> *time. The Internet is something new, pictures, audio, from time to time*
> *you find advertising, etc. It's entertaining.*

Teacher P (petroleum) had a similar perception:

> *Sometimes you need details in some points, and these points maybe*
> *you couldn't [sic] find easily or immediately in books. So the difference*
> *is this point, easily and immediately. That's good for teachers, because*
> *it saves a lot of time.*

However, while Teacher P acknowledged the potential of the Internet as a versatile and flexible source of knowledge, he thought it was not as effective as textbooks:

> *It is useful the Internet, it is like [opening] doors for places… for*
> *information, but they don't speak in details as books, just short*
> *passages and abbreviations. I prefer books than the Internet.*

As Teachers A (private), B (private), E (private), G (public), H (public) and J (petroleum), who had no previous Internet skills training, expressed concern about such lack of skill and of not having the proper opportunity to learn, they thought the I-CPD intervention course was a good place for them to start. For Teacher E (private) who had not used Internet material to support classroom learning, her attitude was about to change:

> *I didn't use it [the Internet] before, but now I will think about it*
> *because I think it's a good idea that you bring things from the Internet*
> *for students. Yes, it's a good idea, maybe I will do it now in this*
> *[forthcoming] course.*

4.6.5 Actual Internet usage:

The emphasis teachers, as NNEST users, have given to language development (to support teaching) as a distinct activity from professional development per se, validated my view that Internet-based Language Development (I-LD) usage is best addressed separately from Internet-based Professional Development (I-CPD) in the PAQ.

The PAQ's overall mean of Internet usage in both areas of development was 2.83, which approximates to 'Sometimes' on the 5-point Likert scale. However, the mean I-LD usage was marginally higher (2.92) compared with I-CPD at 2.74. This may reflect the fact that Libyan EFL teachers, as non-native speakers of English, are more conscious of their

language development which, in turn, is perceived to reflect in better classroom

performance and improved professional competence.

4.6.5.1 I-CPD Usage:

It is encouraging to note that PAQ respondents' usage of the Internet to search for relevant

teaching activities (item 50, Usually) ranked the highest. Teacher I (petroleum) confirmed

that the Internet is useful for checking ELT material before new lessons, and that in doing

so professional development goals are fulfilled:

> *You cannot always depend on what you have in your head. You always*
> *update your information and knowledge… We check some websites…*
> *especially if you have to teach another level or something new… Once*
> *you know the sites and you know the things you want and where they*
> *are, it is always useful and very interesting.*

Some Internet users, e.g. Teachers B (private), D (public), F (private) and I (petroleum),

were more experienced in finding what they wanted on the Internet fairly quickly. Teacher

J (petroleum) argued that using the Internet to extract particular material could be time

consuming:

> *Sometimes you can't find the right… for example if you look for*
> *exercises for the zero level, you can't find the right exercises, so you sit*
> *down and… you waste a long time and then at the end you can't find*
> *what you want.*

It was website evaluation skills that some teachers needed in order to appreciate the

vastness of the Web.

> *The question is… the accuracy of the information you get. Do we trust*
> *these sites or not? Do we take this information as if they are… true?*

When Teacher M (petroleum) was asked about how she resolved this dilemma, she

suggested site triangulation:

> *I don't know, but just… look for another site… if the information match*
> *each other from many websites, and then it's true.*

Online learning in its proper sense, that is, via a Virtual Learning Environment, was not

made available to teachers in the sample. However, Teacher B (private), who is an active

supporter of Internet-based development, thought online learning was interesting and said

that he would gladly participate if such an opportunity was offered. It was and he didn't.

> *It is a fantastic idea to be able to communicate with far away teachers*
> *from Newcastle or South Africa… with the same interests and*

> *sometimes we teach the same topic, for example upper-intermediate*
> *skills. I would love it.*

Other respondents had a certain level of awareness about e-learning for language and

professional development through online discussion:

> *You can go online to learn about English language about different skills,*
> *teaching methods, and you can be online with more expert teachers.*
> *You can ask questions at any time of the day… and you can follow up*
> *what is new (Teacher S, private).*

4.6.5.2 I-LD Usage:

The PAQ showed a Usual tendency (item 64) in using the Internet for non-academic

reading to improve language skills. The potential of the Internet in language development

was appealing for Libyan teachers, since it compensates for the shortages in paper-based

EFL resources. As Teacher M (petroleum) explains,

> *we have a lack of books, lack of libraries. But now just write [type] the*
> *name of what you are interested in and then you get everything…*
> *rather than going through books from library to another.*

In response to a question about interesting sites for language development, Teachers D

and F (private) found the site www.englishclub.com useful for improving different aspects

of language skills:

> *This website is good. You can find grammar… pronunciation,*
> *vocabulary, a lot of things for students. And it helps me to improve my*
> *language (Teachers D).*

Several teachers thought the Internet was also useful to improve reading speeds,

vocabulary and grammar (e.g. Teachers B, private; C, public and F, private). For PAQ

respondents, accessing news articles to improve reading was a top-rated Internet activity

(item 61, Usually). While e-mail was recognised as an informal way of improving written

communication skills and rated highly by the PAQ respondents (item 58, Usually), Teacher

I (petroleum) linked this to the automated correction facility provided by software, rather

than the use of e-mail:

> *When you use the computer, you start not to worry about spelling, you*
> *just spell a word the way you like and left click and it'll change it for*
> *you… But remember the computer will give you many options, it won't*
> *give you the exact word, maybe it will give you another word, so you*
> *still have to be careful, you have to know the word that you want.*
> *Sometimes the spelling is correct, but it's not the word that you want.*

Conducting one-to-one text chat was an informal and inexpensive way of talking to friends using Yahoo or Microsoft Messenger, but group chat (group discussion) was not popular with teachers due to the unbonded nature of such groups, i.e. *'you don't exactly know the person you are taking to on the other side'* (Teacher O, public).

Participating in voice chat was the least popular I-LD activity for the PAQ respondents (item 60, Sometimes), but popular with users having overseas contacts or family members, such as in the case of Teacher E (private). Often, members of the same family gather round a webcam and talk to relatives abroad (Teacher N, Petroleum). Participating in chat was not a popular activity for respondents. Perhaps the kind of topics encountered in most chat rooms, as Teacher R (private) noted, was often '*silly'* and more suitable for teenagers than mature adults.

Teachers appear to be aware of its potential as a flexible source of information in both areas of language pedagogy, learning and teaching. Teacher B (private) reported that he regularly used the Internet for reading, because of shortages in paper-based material. When asked to give an example of I-LD usage, he produced this ELT oriented incident:

> *The latest [last] time was about adjectives. I prepared my lesson, but I did not have enough examples to put it in a creative way. Then I went to the Internet and I downloaded a full adjective list from it with questions and tests about the adjectives. I remember more than twenty one pages. The next day I photocopied and distributed them. It saved me a lot of headache and I found it very useful for the students as well.*

As Teacher B searched for ELT material to support lesson activities, there was an underlying purpose: that of advancing his own language skills as a non-native learner of English. Thus, it appears that teachers used the Internet material for a dual purpose: a) to support their lessons (I-ELT), and b) to advance their own language competence (I-LD), both of which were perceived by Libyan EFL teachers as fulfilling their needs as professional teachers. Accordingly, two types of users could be identified: type one and type two.

Teacher P (petroleum) conforms to what I have termed 'type one user', where the *overt* objective of the Internet activity was LD, but with an underlying ELT purpose in mind.

Teacher P reported that he often reads news articles on the Internet to improve on an authentic style of expressing his ideas in English.

> *From time to time I read passages on the Internet. It's suitable for me*
> *to develop my vocabulary and the expressions, because I'm looking for*
> *English expressions… how to express the idea in a right way, not in*
> *Arabic to English… in an English way, how the English people express it.*
> *I found a paper differentiating between the use of 'hope' and 'wish'. It*
> *was good for me even in my level of teaching.*

On the other hand, Teacher B's (private) development activities conform to what I have termed 'type two user', where the overt objective of the activity was I-ELT, but implicitly leading to I-LD. By not openly describing himself as a learner, Teacher B had this to say:

> *I like reading as a reader [learner] and as a teacher. When I have a*
> *new topic to prepare, I go to websites with good English grammar,*
> *English writing skills, things like that and I got [get] hints from them*
> *[LD] and I use them the next day as a teacher [ELT].*

NNEST teachers, particularly those with perceived weaknesses in English, are conscious about their language competence and are worried about their performance (Lavender, 1997). Accordingly, such teachers are likely to place language skills development as a focus of attention when using the Internet and thus, type one learner. Hence, it is thought that a type one user might advance more effectively in the target language skill, since he/she is conscious of that skill deficiency and that the main objective is engaging in relevant LD activities, rather than a type two user whose LD is likely to be tuned to his/her current level of teaching, which (for argument's sake) might be lower intermediate.

A type three learner, however, is one who has CPD as a main objective of an Internet session. Although this type of learner seems rare among the Libyan teachers interviewed, DOLLY (a pseudonym for a teacher in Chapter 5) appears to fit into this category. DOLLY, who admittedly may have had the added advantage of being more aware of I-CPD (through the intervention course) than the FF teachers, reported that

> *When I use the Internet, I can get experience from other teachers. I*
> *can consult or contact them online. I talked to [communicated with]*
> *many teachers online and I find nice ideas… You feel that there's a*
> *continuing development during the Internet. Every hour I spend on the*
> *Internet, I improved in my knowledge.*

4.6.5.3 Internet-based English Language Teaching (I-ELT)

Practices of I-ELT were not originally considered within the focus of this research, primarily

due to limitations on thesis size and excessive demand on data collection. However,

interpretations of I-ELT emerged during FF interviews when it transpired that, as a result of

their Internet-based language development activities, teachers passed on such learning to

their pupils either in the form of printouts or simply by recommending interesting websites.

According to teachers' reports of Internet usage, four variations of I-ELT emerged: (1)

Internet-supported classrooms, (2) Internet-based classrooms, (3) a variation of the latter

- Remote Internet-based classrooms (taking pupils to Internet cafés) and (4) Web

Enhanced Language Learning (WELL). It is worth noting that while (1), (2) and (4) are

already established in the literature (e.g. Dudeney, 2000), (3) is my own term, which

seems unique to low-resourced environments and is not treated at length in the literature.

1) Internet-supported classrooms: This particular concept of I-ELT relies on the use of

Internet material to support the syllabus when classrooms are not actually connected to

the Internet, such as the case with public sector schools. This variety of I-ELT uses

printouts from the Web to support lessons, rather than having live classroom access to the

Web. The rationale, as Teacher B (private) asserts, is that

> *unfortunately, we don't have the access to the Internet even in this*
> *school, so what to do, except to photocopy? At least something is*
> *better than nothing.*

In extending her I-LD usage, Teacher D (private) also promoted an Internet-supported
classroom by supplementing her lessons with photocopied web pages for further reading.

> *I use it [the Internet] both, for my study and for my students. So when*
> *I give them sheets from the Internet it's better… so I prefer to get*
> *some information from the Internet and give it to them for reading*
> *comprehension.*

Internet-supported classrooms can, hence, be useful in presenting new information

(especially in colour), but web pages lose their interactivity as the hyperlinks become

ordinary text. However, as Teacher D (private) explains, in a low-resourced school

environment, the idea of Internet-supported classrooms is to introduce learners to

materials and sites to supplement learning during class time, and then encourage them to

interact with those sites for out-of-class work, e.g. exercises or quizzes.

2) Internet-based classrooms: The second emergent concept of I-ELT was to use live

web pages in the lesson, hence, Internet-based classrooms. Teachers at PTQI had access

to Internet labs where, as Teacher I reports:

> *You can go to some exercises on the website and ask the students to*
> *answer them... they can follow the teacher by looking at the data show*
> *screen.*

While Teacher J (petroleum) recognised the potential of Internet-based classrooms as an

interesting variety of language learning:

> *It [the Internet] might be more interesting than the [traditional] class,*
> *because you know, sitting down behind the table and looking at the*
> *teacher all the time, it might be boring sometimes,*

he argued against excessive use of Internet-based exercises, where students usually

respond by just clicking on pre-selected answers instead of writing:

> *Students won't learn how to write. They always just click on the mouse,*
> *you know, in multiple-choice questions. But if they, you know, in the*
> *class they have to write, they have to copy everything the teacher write*
> *[sic] so this helps them in learning spelling. Yes, it depends on the*
> *question, but [with] most of the questions on the Internet, you have to*
> *click.*

Obviously, clicking will involve some reading comprehension. However, a sensible

approach to Internet-based classrooms is to introduce a balanced variety of exercises that

require different student responses, including word processing, e-mailing, chatting,

dragging or clicking.

3) Remote Internet-based classrooms, if I could call them this, are an uncommon

variety of Internet-based classrooms reminiscent of low-resourced environments, where

the class, or part of it, move to the Internet, instead of it being in the classroom. Only two

private-sector teachers in the sample reported undertaking such an activity voluntarily.

Under existing circumstances of low-resourced school conditions, Teacher B (private)

invited his students to an *'Internet party'* for *'live'* listening practice. The initiative was a

result of complaints by some students about weaknesses in listening to live English

broadcasts.

> *I remember once some of my students complained about listening, so I*
> *accompanied five of them to Internet party. I surfed three or four*
> *websites with them, so we went to the BBC website, the VOA [Voice Of*

> *America] website, ITN website for listening to topics about… I*
> *remember there was a girl killed in Aberdeen and they were looking for*
> *the body and… we had a very interesting discussion about that. You see*
> *now it's live, from Aberdeen to Tripoli in just a matter of seconds.*

The use of a short-wave radio may have served the purpose in a small listening class like this, but, as Teacher B noted, visual clues in video broadcasting aided listening comprehension a great deal.

4) Web Enhanced Language Learning (WELL): Directing students to carry out self-study or language learning activities using interesting websites outside class was one way of applying WELL, which is normally carried out independently by language learners. In this case, students are being introduced to independent learning by their teacher.

Teacher N (petroleum), for example, directed students to carry out exercises and check proficiency levels using the BBC learning zone. Other teachers, e.g. Teacher F (private), directed students to Berlitz Language School web site, as a kind of *'online checking website*' for students to evaluate their English (assisted by a teacher) before enrolling on IELTS (International English Language Testing System) courses.

Teacher M (petroleum) directed her students to access recommended sites for language improvement not only to facilitate learning, but also to empower them through the multi-sensory functions of the Internet such that '*the student feels he's not only a student, he is a researcher or… he's responsible to look and see*':

> *Really I find it [the Internet] useful for me and for the students. They*
> *feel they are up to date. When I ask them please search about this*
> *topic in, for instance, Yahoo or Google. These days we are searching*
> *about the origin of English language. Really we find a lot of web sites*
> *talking about this topic which is foreign for us and interesting at the*
> *same time. So we know a lot of information we don't know before.*

Teacher M's approach was more task-oriented than simply directing students to visit useful websites or carry out open study. This task-based approach puts a kind of pressure on pupils to return with answers as proof of their work, which they can share with the class. Therefore, on route to WELL, students are empowered to be independent by being guided to work outside the class on set tasks, search for certain information or prepare presentations on topics of interest. Teacher B (private) boasted a colourful example of a

student's presentation about 'the making of chocolate', and another about the latest

medical technology in 'the fight against cancer'.

4.6.6. Obstacles to I-CPD

In the past, before the launch of the Internet, Libyan teachers used to make excuses due

to shortages in dedicated textbooks or ELT resources (Headmaster A), but this excuse was

no longer acceptable according to Teacher B (private), for hundreds of websites on virtually

any topic can now easily be accessed on the Internet *anytime anywhere*, so, what is

stopping teachers to '*jump on the band wagon'?*. These are some of the perceived

obstacles to Internet-based development.

4.6.6.1 Teacher motivation:

To carry out any kind of self-directed study, some kind of intrinsic motivation is required,

and independent professional development is no different, be it conventional or Internet

based. An account of teacher motivation in conventional development contexts was

discussed earlier.

Motivation to read online text-based material also requires some kind of personal motive

which keeps one going, rather like fuel in an engine or electric charge in a battery (Teacher

A: private). Despite the commercialisation of the Internet and the flexibility of access

through many public cafés, teachers still had not exploited the full potential of the Internet.

Low teacher motivation to read, as Teacher B (private) explains, is still an obstacle:

> *We used to have an excuse, we can't find books or books are a bit*
> *expensive. But now, with one Dinar, which is less than a Dollar, you can*
> *spend an hour, very rich in education, in every aspect of learning. But*
> *teachers are not keen to use the Internet because of laziness to read.*

Perhaps an understanding of the common causes of low teacher motivation in the Libyan

context will help to identify and alleviate potential weaknesses in both conventional and

Internet-based development.

4.6.6.2 Time constraints:

As with conventional CPD, spare time to carry out Internet-based development was scarce.

According to Teacher S (private), Libyan EFL teachers were unable to pursue development

or upgrade their skills, '*simply because we don't have the time*'. School hours in the public

sector extend from 8am till 2pm, six days a week (Friday off). But due to financial needs,

all teachers interviewed during the Fact Finding phase taught extra hours in the evenings

(5pm till 8pm was typical), which hardly leaves time for the family let alone development

(Teacher G, public).

> *They [teachers] teach at public schools in the morning and they look for*
> *private lessons in the afternoon, to compensate for the lack in their*
> *financial needs… and as a result they don't have time for development.*
> *They haven't time even to dress up properly and look good (Teacher S,*
> *private).*

Moreover, Arab cultures are associated with strong family and social bonds. Consequently,

when not at work, individual teachers are preoccupied with social commitments (Teacher

U, public), so spare time becomes even scarcer. Teacher S (private) was frank enough to

acknowledge that teachers used the Internet less than their students, but argued that lack

of spare time, among other things, was the main obstacle for married teachers, in

particular:

> *For teachers, the obstacles are many: some are family affairs, some*
> *are financial problems and the most important of all is the time. Some*
> *teachers when they are not working they are solving family problems*
> *by transporting or visiting relatives or fetching other members of the*
> *family.*

It is not surprising, then, that most Libyan EFL teachers cannot find quality time for private

professional development. However, Teacher B argued that time was an individual

concern, and that '*many teachers spend hours playing cards, chatting and backbiting each*

other, instead of learning something'.

Hence, 'time management' becomes an important issue for teachers if they are to benefit

from whatever little spare time is available. During my observations of Tripoli College

teachers, I noted that Teacher B (private) always sat away from noisy colleagues, who

often engaged in idle talk during break times. To occupy himself, Teacher B always had

something to read in his hand (the *Newsweek* was his favourite) and I often joined him to

see what he was reading. Teachers at the same school, however, had time for a weekly

gathering to play football.

4.6.6.3 Perceived disadvantages of the Internet:

Some perceived disadvantages in using the Internet, which might have consequences in

Libyan teachers' CPD, emerged from the interviews. Teacher J (petroleum), for example,

criticised the Internet for being time consuming:

> *Sometimes you can't find the right… for example if you look for*
> *exercises for the zero level, you can't find the right exercises, so you sit*
> *down and… you waste a long time and then at the end you can't find*
> *what you want.*

Even though searching for EFL sources on the Internet is fairly simple, it can constitute a

problem for the novice e-learner. Information could be obtained with relative ease, given

that one knows how to use search engines, what to look for and where.

Low download speeds were another source of complaint. Teacher U (public) complained of

slow speeds at Internet cafés, even when checking e-mails:

> *The speed is very very slow and sometimes even the server goes down.*
> *So in order to check your e-mail, it takes you thirty minutes. To do a*
> *reply it might take you another twenty minutes or so.*

According to Engineer B, this problem is being resolved by having introduced faster

broadband connections via DSL in 2005 (see Chapter 1).

Another disadvantage was to do with certain websites that required subscribed access

only. Teacher K (petroleum) found this annoying since one had to possess a credit card to

pay through the Internet:

> *I came across interesting sites that require subscription, but I avoid*
> *them. Because, you see, we don't have the credit card system here in*
> *Libya yet.*

Credit payment facilities, however, were being introduced by Libyan banks at the time of

the study (2004), following a period of commercial embargo on Libya (see Chapter 1).

4.7 Synopsis of the FF phase:

This Fact Finding (FF) phase provided a panoramic view of the field under investigation. In

essence, it provided an understanding of the Libyan EFL teachers' professional

development context, which guided the selection of a typical case to study during the

second phase of the research. It also contributed to providing baseline data about the

case study teachers who participated in the research throughout its three phases: Fact

Finding, the Case Study and the Extended Case Study.

Overall, results of Phase one suggest that Libyan EFL teachers were, to some extent,

reasonably familiar with using the Internet for development purposes. Teachers' Internet

skills were, generally, at an intermediate level (mean score 3.2 on a 5 point scale).

Teachers were also aware of the Internet's potential for improving professional

development, and they seemed generally well disposed to the idea of I-CPD as an

alternative independent route to INSET.

It was noted that certain low-skilled respondents felt anxious, and perhaps threatened, for

fear of exposing their ignorance of new technology. In spite of conceding their lack of

technical skill, such teachers acknowledged the Internet's potential in developing teacher

learning and expressed desire to improve their skills if training opportunities arose.

To compensate for the INSET gap and the low-tech school conditions, however, certain

self-motivated teachers resort to independent development through Internet cafés. As a

result, teachers' individual differences are reflected in variations in teacher competence

according to motivation, self-study skills and the will to search for teaching material. When

time permits, development is mostly pursued through conventional means, such as private

reading, peer discussion or, in certain cases, private academic study. Many teachers are

also aware of the Internet as a flexible source of information and of its potential in

advancing language development. For them, Internet-based development enhanced

classroom competence and constituted professional development.

Teachers' usage of the Internet appeared to be oriented more towards advancing language

skills than professional development as such. Two types of I-LD users emerged: a type

one user's explicit objective was advancing language skills, but with an implicit I-ELT

objective in mind; a type two user tended to overtly search for I-ELT material, but

potentially improved language skills at the same time.

In using the Internet for language teaching purposes within low-resourced contexts, four

types of I-ELT transpired. 1) Internet-supported classrooms were popular with some

public and private sector teachers where schools are not wired to the Internet and where ELT material could be downloaded and printed out to support teaching. 2) The Internet-based classroom variety was applicable only to petroleum sector institutions which had access to live Internet. 3) In certain cases of remote Internet-based classrooms, two enthusiastic private-sector teachers were able to invite students to carry out supervised interactive learning at Internet cafés. 4) Through some kind of WELL activities teachers from three sectors encouraged and empowered students to construct their own knowledge and share presentations with peers.

While the Libyan in-service teachers interviewed were well aware of professional developmental needs in a low-resourced environment, the paradox was that they claimed little time was available to pursue development. Valuable spare time was spent teaching at private schools in order to supplement a low paid income. For such teachers, the low pay and lack of financial or promotional incentives, compared with the private and petroleum sectors, is demotivating and constitutes a major barrier to achieving higher levels of professional competence.

Two further problems impede in-service EFL teacher development in Libya: first, the scarcity of organised INSET provision, which when it does exist is large scale and responsive in nature; second, the absence of school-based CPD of any sort, that is, schools do not provide the climate (time or resources) for teachers to develop. Moreover, Internet facilities are non-existent at public schools where teachers could access Internet material between classes or after school (Inspectors A and B).

Because of teacher overlap between public and private sector staff, a clear teacher classification was difficult. However, it was possible to glean relevant INSET policies pertaining to each of the three sectors using the PAQ and subsequent interviews.

4.7.1 The public sector:

It appears that there is no long-term INSET policy for the public sector. Teacher training courses are irregular and responsive to sector needs. Analysis of INSET provision revealed that almost two thirds of the teachers interviewed had not received any training since

graduation. The PAQ data suggests that new recruits with less than five years of teaching are less likely to receive organised training; only 1 in 7 of them does. In the long term, this is likely to have knock-on effects on teacher retention, particularly with the low remuneration rates at present.

The education authorities had no particular policy for Internet training provision. Teachers interviewed reported making private arrangements to gain Internet skills, which demonstrates teacher awareness of Internet-based learning.

4.7.2 The private sector:

Private-sector schools rely heavily on experienced teachers from the public sector. Thus, no particular policy distinguished the private sector. However, in the case of Tripoli College, which is the largest private school in the sample, some emphasis was placed on induction procedures for fresh graduates. Private sector teachers were also encouraged to develop versatility through teaching different language levels, which helped managers to fill in teaching slots more effectively.

Few language schools within the private sector provide Internet facilities. Where these exist, policy for access appears to be commercially driven and priority was for computer-based courses rather than for teacher development needs.

4.7.3 The petroleum sector:

We do not have to go very far for examples of successful and sustainable professional development, be it traditional or Internet-based, for lessons can be learnt from the petroleum sector. With regards to traditional CPD, the petroleum sector provides school-based mentoring and more regular in-service training by experienced teachers. Further, the sector arranges certified overseas training for good teachers, thus giving due recognition and needed incentive for their achievement.

In addition to sustainable teacher training and development, petroleum sector companies provide free in-house access to Internet labs for teachers and students alike and offer Internet courses as part of their in-service training.

The next Chapter discusses the second phase of data collection. Having completed Fact Finding, the focus was on a particular case of Libyan EFL teachers who could act as participants in an I-CPD intervention course. The case study, the intervention course and the learning activities of participants within the case were expected to provide answers to questions concerning implementations of Internet-based support for teacher development, i.e. how Libyan EFL teachers would interact with, and contribute to, modes of Internet-based learning and respond to different types of scaffolding support.

Chapter 5: Data collection and analysis
Phase 2: The Case Study (CS)

We never fully know what implementation is or should look like until people in particular situations attempt to spell it out through use (Fullan, 1991:182).

5.1 Introduction:

Having completed the Fact Finding phase, which helped to map the field under investigation, a case study approach enabled the homing in from the general field of study, to a typical case, thus, the Case Study (CS) phase. This localisation or 'funnel-in' process (see Research Design), focused on the selection of a typical case upon which to apply the research activities and extract appropriate data.

The purpose of the CS is, therefore, to provide answers to specific research questions regarding implementations of I-CPD support in a low-resourced environment involving in-service EFL teachers who are under trained, under motivated and who generally lack the skills of independent self-directed study, despite some commendable efforts by individual teachers. The research questions, which determined the nature of data collection in the CS, stem from the overarching question: In the Libyan context outlined by the FF phase (Chapter 4), is Internet-based provision a possible solution to independent development and the INSET gap? If so, what kind of teacher learning needs and support provision is likely to achieve this?

The chapter begins by describing the case site and members (section 5.2). Section 5.3 describes the structure of the I-CPD intervention course (parts 1 and 2). To shed further light on the data, case participants' profiles extracted from the PAQ (the Fact Finding phase) are incorporated with responses to a Pre-Course Questionnaire (PCQ) in section 5.4. Section 5.5 discusses Case Study data obtained from my research journal, observations, focus group interviews, task scripts and extracts from participants' reflective diaries. The Chapter concludes by summarising important findings and emergent themes.

5.2 Preparing the case:

5.2.1 Case selection:

The Case Study (CS) and the associated I-CPD intervention course were carried out in August 2004. The CS constituted phase two of the research and was an explanation of an attempt to implement Internet-based professional development in the Libyan context. Its objective was to create a pedagogic context for the intervention course in which Libyan EFL teachers could be supported through Internet-based learning environments. In selecting an appropriate case for this context, convenience sampling was followed, since hardly any schools in Libya had access to the Internet.

The CS focused on a specific but typical bounded system, which was represented by the Foreign Languages Institute (FLI) situated in the Libyan capital, Tripoli. FLI is a state owned institution which teaches foreign languages including English, but one in which students, unless sponsored, pay their own fees. FLI provides English language tuition from beginners to advanced levels and has a well-equipped language laboratory and ten spacious classrooms, which can house up to forty students each. What was particularly appealing about FLI was its in-house Internet room with eight computer positions, which provided an ideal venue for the research.

5.2.2 Case participants:

The CS venue consisted of a group of private and public school teachers who worked at FLI as English language teachers. Since the petroleum sector mainly relied on its own full-time teaching staff, it was not possible to find teachers from all three sectors under one bounded system, therefore only public and private sector teachers were involved in the CS. Petroleum-sector staff were engaged in the research during the Fact Finding phase and, later on, during the Extended Case Study phase. While a restriction on possessing pre-requisite computer skills, namely knowledge of Windows (create and move between files and folders; switch between applications) and Word processing skills (create, edit, save and open documents) was not enforced, teachers were made aware of these. Thirteen teachers signed up for the course, all of whom (apart from NURI) had completed the PAQ.

5.2.3 Obtaining permission:

To obtain permission to run the intervention course, an invitation letter (in Arabic) highlighting the objectives and contents of the course, accompanied by an enrolment list (names and signatures of would be participants), was prepared (Appendix D). The invitation letter was then signed by the Head of FLI and the course was announced to the fifteen EFL teaching staff there. The letter sought teachers' consent to participate in the intervention course and associated research activities and stated that they were under no obligation to complete it. The letter also stipulated that teachers should possess an adequate level of computer skills in order to benefit fully from the Internet skills course.

The FLI head was supportive of running the intervention course. He instructed all EFL teachers to attend and even went as far as instructing the technical engineer to tidy up the network wiring in the Internet room to facilitate the course. Having prepared the Internet room, the issue was about the right timing of the course to suit everyone's schedule, as all FLI teachers were preoccupied with teaching most hours. A two-week gap between courses provided an opportunity to commence. Initially, the intervention course was set to take place from ten to twelve for five weeks, but after the second week teachers returned to classes and attendance depended on individual teachers' schedules.

5.3 I-CPD Intervention course design:

5.3.1 Needs analysis:

Needs analysis is the first stage in the training cycle. The other three stages are course design, presentation and evaluation (Stockley, 2006 b). Although teacher training was not the main goal of the study, the interventionist nature of the course positioned me as a trainer-researcher preparing course material, instructing and supporting a case group of in-service teachers in Internet-based learning.

In the needs analysis stage, three essential activities were involved:

- determining what is required to complete the work activity;
- determining the existing skill levels of the staff completing the work;
- determining the training gap (the difference between required and existing skill levels) (Stockley, 2006 b:2).

The FF data discussed in Chapter 4, which included teachers' questionnaire and interviews, provided useful information with which to approach the pedagogic needs of the CS participants. The PAQ findings, which are summarised in Table 5.1, yielded positive results with respect to teachers' Internet skills, attitudes and usage. The overall self-assessed Internet skill according to a five-point scale was 3.25, which approximates to a High ability; on a six-point scale, teachers' overall attitude to I-CPD was 4.45 approximating to Agree; an overall usage measure was 2.83, which approximates to Sometimes on a 5-point scale.

Table 5.1: Overall means of Internet skills, attitudes and usage

Variable	Overall mean	Score	Likert Scale
SKILL	3.35	High	5-point
ATTITUDE	4.45	Agree	6-pont
USAGE	2.83	Sometimes	5-point

Even though the self-assessed Internet skills were high, low levels of communication and navigation skills (eight and five respondents, respectively) were detected by the PAQ (see Figures 4.6 and 4.7, Chapter 4). Moreover, some teachers may have ranked their Internet skills high on the self-assessment scale, which means that the seemingly high skill shown in Table 5.1 may be misleading and, therefore, should only be taken as a guide, rather than an exact measure.

It was also noted from the PAQ (item 26) that nearly half (40.5%) of the respondents seemed to lack confidence in using the Internet for professional development, signalling that further skills training was required to familiarise teachers with I-CPD resources, thus facilitating development. Moreover, about two thirds (58.8%) of the PAQ respondents thought they needed more guidance than just a collection of links, to carry out professional development. Such revelations suggest that a skills training intervention is required in order to acquaint teachers with Internet navigation and communication skills and raise their awareness of the Internet as a potential resource for development.

Since the CS teachers as participants in the intervention course and provided baseline data throughout the three phases of the research, a summary of their statistical profiles

obtained from the PAQ is presented (Table 5.2). Since NURI failed to return the PAQ, only

known data about him is shown.

Table 5.2: Case members' statistical (PAQ) profiles

Pseudonym	ANGI	BAHA	DOLLY	KATE	HIDI	NURI	SERVO	SHIBO	SOLO	SUE
Gender	F	M	F	F	F	M	M	M	M	F
Status	Private	Private	Public	Public	Public	Private	Public	Private	Public	Public
Age	22	26	25	24	42	49	29	46	36	30
Experience	2	1	3	2	20	15	8	28	8	16
INSET	No	No	No	No	Yes	Yes	No	Yes	No	Yes
I-training	No	Yes	No	No	Yes	No	No	Yes	No	Yes
Home net	No	No	No	No	Yes	No	No	No	No	No
E-mail	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes
I-skill	I	I	I	I	H	-	I	VH	I	H
I-CPD attitude	A	A	SA	PA	A	-	A	A	A	A
I-LD attitude	PA	A	SA	A	SA	-	SA	SA	SA	A
I-CPD usage	S	U	S	R	S	-	R	A	S	S
I-LD usage	R	S	S	R	U	-	R	U	S	R

Key: VH= Very High, H= High, I= Intermediate; SA= Strongly Agree, A= Agree, PA= Partly Agree

Members' self-assessed Internet skills (I-skill) are calculated by averaging the

communication and navigation skills, and then approximated to a 5-point scale (Very High

to Very Low), whereas the I-LD and I-CPD attitudes are approximated to a six-point scale

(Strongly Agree to Strongly Disagree). The Internet usage is not included in the statistical

profiles of the Case teachers, as it did not contribute to the needs analysis procedure in

preparing for the intervention course.

With regards to computer skills, which were not assessed by the PAQ due to limits on time

and scope of the research, the working assumption was that participants who expressed

interest to join the Internet course possessed basic pre-requisite computer skills; indeed

this was made explicit to them in Part four of the PAQ. For some participants, this

assumption turned out to be a weak one as will become apparent later in the discussion

(section 5.5).

Consequently, to cater for the potential differences in teachers' skills and provide support

for the novice users, the course started with core Internet skills (Part 1) and scaffolded

Case members through communication and navigation skills. As the course moved on, the

more advanced learners were occupied with higher-level tasks, therefore, participants were

situated at different levels of development (Cazden, 1983).

Due to teachers' apparent interest in using the Internet for English Language Teaching (I-ELT) reflected by the PCQ (e.g. NURI), and the high level of awareness teachers portrayed about I-ELT applications including WELL (Web Enhanced Language Learning) during the Fact Finding interviews (see Chapter 4), it was decided to include such concepts as the basis for training material in Part 2. As a conclusion of Part 2, some Case teachers prepared and delivered Internet-based micro-lessons (the I-ELT Project). Part 3 of the intervention course dealt with concepts of online learning.

5.3.2 Objectives of the course:

The objective of the intervention course was to support participants through three stages of Internet-based development and prepare them to act independently as online learners. Details of the three parts of the intervention course can be found in Appendix E and the attached CD.

Part 1 (f2f): This part aimed to acquaint Case teachers with core Internet skills including communication and guided navigation; to introduce teachers to advanced Internet skills such as navigation and site evaluation. By the end of Part 1, case members should be able to: sign up for a new e-mail, reactivate an e-mail, set up Messenger, use chat facilities, participate in group chat and discussion groups, navigate the web and search for particular information.

Part 2 (blended learning): This aimed to acquaint members with using the Internet as a potential tool for English language learning and teaching particularly in low-resourced contexts; to engage teachers in exchanging and sharing Internet-based learning experience through a web-based discussion platform. By the end of Part 2, members should be able to prepare and deliver an Internet-based ELT lesson to suit the level of their students and their teaching context.

Part 3 (online): This part aimed to acquaint teachers with concepts of professional development through distance online learning. Online participants will be progressively engaged in online tasks and discussion about issues concerning online learning and I-CPD options for NNESTs. By the end of Part 3, participants should be able to independently

engage in online activities to enhance their professional development using standard VLE

platforms, such as Merlin.

5.3.3 Course structure:

The I-CPD intervention course consisted of three parts that progressively supported case

teachers through three stages of Internet-based development: from f2f to blended then on

to online learning. The grounds for this progressive approach were twofold: first, as novice

users, EFL teachers in Libya were not well acquainted with online learning and thus, a

phased approach was deemed necessary to support core Internet skills and familiarise

teachers with (distance) online learning options; second, online learning does not

necessarily mean discounting f2f contact (Salmon, 2002a), and hence it was deemed

appropriate to empirically research the influence of blended learning by combining

traditional learning with online interaction.
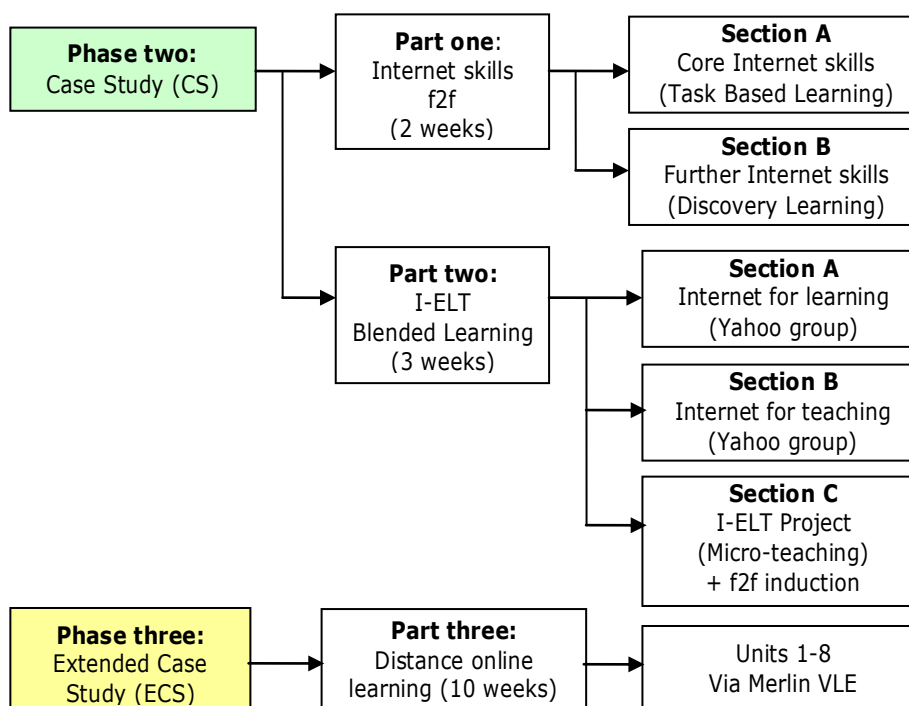
Figure 5.1: Structure of the I-CPD Intervention course

As Figure 5.1 illustrates, Parts 1 and 2 (5 weeks) were delivered to participants during

what will be referred to as the Case Study (CS) phase. Part 3 (10 weeks) was delivered

fully online via Merlin VLE as part of an Extended Case Study (ECS) phase that joined CS

participants with other EFL teachers from Libya and the UK. The ECS will be dealt with

separately in Chapter 6.

5.3.3.1 Part 1: Internet skills

Part 1 provided f2f instruction in practical tasks over two sections: Section A (six days from

25 to 30 September 2004), introduced Core Internet skills through Problem-Based

Learning (PBL) and a Power Point Presentation for which a data-show projector was used.

The meetings lasted for 2 hours a day, totalling 12 hours.

Section B introduced 'Further Internet skills' and supported teachers to explore useful

Internet resources through discovery learning. A combination of online and paper-based

material was used to engage participants in PBL. Intranet file-sharing enabled participants

to access data files and tasks stored in the local server, thus simulating a low-resourced

Intranet approach which could be utilised locally without the need for Internet connection.

In Part 2, this Intranet model was used as a file back-up in the case of Internet connection

breakdown.

Unfortunately, Section B was curtailed to three days (2-4 October) rather than the

intended six, due to an interruption by FLI management, who needed the Internet room

for an external course. Nonetheless, according to some participants the pace of the

intervention course was too fast and only two were able to move on to Section B; others

had to catch up with Section A tasks.

5.3.3.2 Part 2: Internet-based ELT

This second part of the intervention course combined f2f with online learning and lasted for

three weeks (10-28 October 2004). In accordance with the principle of a gradual

approach, a transition was made from f2f instruction in Part 1A, to an Intranet file-sharing

model in Part 1B, then to a blended or mixed-mode learning model in Part 2. Part 3 was

delivered wholly online.

The introduction of blended learning in Part 2 bridged the gap between f2f modes,

described by Salmon (2002b:2) as the 'useful older concepts about learning', and distance

or fully online learning in Part 3. Thus, blended learning, as a widely implemented model

of online learning, maintained the deeply rooted Libyan (and Arab) tradition of relying upon a central figure, as a source of pedagogic support.

A Yahoo Group (YG) named la-tefl (Libyan Association for Teachers of English as a Foreign Language at http://groups.yahoo.com/group/la-tefl) was set up as a platform for online discussion during the blended learning phase, where 1) a combination of paper-based material and web-based resources were made available, and 2) tasks, comments and feedback were sent to the group's discussion forum. Tutor-teacher contact took the form of a combination of f2f meetings and online interaction via the YG. The f2f meetings provided opportunities for social interaction between participants and the chance to review any comprehension problems, or discuss personal issues that could not be resolved online.

The tasks in Part 2 were cognitive rather than practical in nature as in Part 1, i.e. they involved reading of background material then exercising an appropriate level of reflection on teaching experience or context. While engaging CS teachers in using the Internet for language learning and teaching issues, the material increasingly introduced online based readings, the links for which were embedded in the YG task sheets. As well as providing a platform for an Internet-based blended learning model, the YG activities illustrated to the Libyan EFL teachers an appropriate example of a low-cost online learning platform that could be implemented (by teachers or educators) in low-tech underfinanced and under-resourced public school settings.

Instructional scaffolding activities included exploring the Internet for EFL resources, Internet-based language development, using web-based lesson plans and getting familiar with pedagogic concepts of I-ELT. As a prelude to Part 2, teachers discussed an Arabic article about language teaching and learning, which surveyed resources for English language learning on the Web. Participants also contemplated possible ways of exploiting the Internet to set up language learning activities in conventional contexts using concepts of Internet-supported and Internet-based classrooms.

As a culmination of the CS Phase, teachers participated in a video recorded 'I-ELT Project', in which each participant was encouraged to design and implement a suitable Internet-

based lesson of his/her choice. Only half the regular teachers (four) managed to prepare an I-ELT lesson plan and due to time constraints one of the four teachers was too late for video recording.

The CS phase concluded with a brief f2f induction to online learning. This constituted an introduction to online learning via Merlin in preparation for distance online learning during the forthcoming ECS. A Quick Reference Guide (a leaflet prepared by the University of Hull) was handed to CS member. A Merlin tour was also demonstrated online, but unfortunately was only attended by two participants (DOLLY and SERVO).

5.4 The Pre-Course Questions and member profiles:

On arriving at the course venue, CS teachers were requested to respond in writing to the following Pre-Course Questions (PCQ):

> (a) What are your thoughts about the usefulness of the Internet for language learning, teaching or professional development?
>
> (b) What do you expect to achieve by the end of the course in relation to what you already know now about the Internet?

The purpose of the PCQ was to obtain participants' perceptions about the role of the Internet in learning, teaching and development. It also aimed to assess case members' perceived goals and expectations about the course that had not been envisaged and which could be incorporated into the course. As Ludwig-Hardman and Dunlap (2003:13) point out, such interaction with potential students not only helped them feel immediately engaged with the learning, but such diagnostic activity helped them 'reflect on their learning goals and strategies, a process important to self-directed learning'. The PCQ also yielded samples of the teachers' instant writings, since the recorded interviews during the FF phase provided a measure of their spoken competence.

What follows are seven responses to the PCQ. As explained in Chapter 3, for anonymity reasons, pseudonyms are used to refer to case teachers (capital letters distinguish them in the text). A brief personal profile of each Case teacher is given prior to his/her PCQ response in order to contextualise data. Again, as in FF, mistakes within quotations were retained, but insertions in square brackets clarify meanings.

1) ANGI was a full time employee with 2 years of experience. Even though she graduated

in English Literature, she had not planned on a teaching career, but enjoyed teaching and

always looked for new ways of engaging her students. ANGI already had an e-mail and

could use the Internet for general purposes (Intermediate level), but wished to enhance

her Internet skills to include more Internet-based ELT. She had had no Internet training,

but her I-LD attitude was positive (PA) and her I-CPD attitude slightly more positive (A).

This was her PCQ response:

> *First of all I'd like to thank you for your great help, advice and*
> *information on how to use the internet in many ways. I actually use*
> *internet to chat, send and get E-mails and listen to music.*
>
> *My excepection [expectation] after the course I think [is that] all the*
> *teachers will improve themselves in teaching and in language at the*
> *same time (ANGI).*

ANGI's response was rather general and did not address the question at hand. She

explained how she used the Internet rather than perceptions of it. The course

expectations were also generic.

2) BAHA was a part-time teacher with one year of private teaching experience. He

already had an e-mail and was fairly skilled in using the Internet, rating himself at an

Intermediate ability. BAHA had private I-training before the course and his attitude to I-LD

and I-CPD was positive (Agree). He regularly communicated with overseas friends via e-

mail and chat. This was his response to the PCQ:

> *I consider the Internet is [as] the one of [the] most major factors that*
> *can help in teaching language on the right way, in other way [words]*
> *reliable.*
>
> *My expection [expectation] by the end of the course, that any thing*
> *was questionable for me to achieve well becomes more obvious and,*
> *some how, easy to be achievable (BAHA).*

BAHA valued the Internet and viewed it as a "reliable" source for ELT. Regarding course

expectations, he seemed hopeful and confident, but rather philosophical to the point of

being vague.

3, 4) DOLLY and **SUE** sent a shared PCQ response later by e-mail, since they shared a

PC. DOLLY was a graduate with three years of private teaching at FLI and worked full-time

as a trainee lecturer of English. DOLLY had no previous I-training, but rated herself at an

Intermediate level as she was familiar with basic Internet tools; her e-mail needed re-

activating. Her attitude to I-LD and I-CPD was strongly positive (SA).

SUE had sixteen years of public school experience, but there appears to be a mismatch

between her age (30) and experience (16 years), which means one or the other was

inaccurate (more likely the age). She had basic knowledge of using the Internet, but her

e-mail was also re-activated. SUE was one of the more experienced teachers who had

received in-service training, but had had I-training (privately) and rated her Internet skills

High. Her attitude to I-LD and I-CPD was positive (Agree).

> *We'd like to thank you for giving us this chance to get more ideas in*
> *teaching using the Internet. Our perceptions of using Internet as a tool*
> *for langauge teaching or professional development are [to] help*
> *teachers to improve their levels and to get new ideas in teaching*
> *English language for all levels starting with absolute beginners up to*
> *advanced ones and higher studies. It [the Internet] is used to improve*
> *everything and to learn about updating language skills, finding*
> *materials, learning about computer applications, keeping in touch with*
> *friends and also having fun (DOLLY and SUE).*

SUE and DOLLY's perception of using the Internet was to update language skills and gain

new ideas in ELT, a view that is conducive to I-LD and I-CPD respectively. There was no

particular mention of achievable goals.

5) HIDI was a part-time teacher with twenty years of public school experience. She had

received INSET, and had had private I-training. She had an e-mail and was the only

member with home Internet. HIDI rated her I-skills at a High level and Strongly Agreed

with ILD, but agreed less with I-CPD (Agree). At the time of the study, she was studying

for a Masters degree in 'Applied Linguistics and ELT' at the Academy of Graduate Studies.

HIDI did not respond to the PCQ.

6) KATE was a recent graduate of English in her second year of teaching at FLI. She was

quiet and mostly worked alone. She had had no INSET or Internet training, and rated her

I-skills at an Intermediate level. KATE signed up for her first e-mail during the course, of

which she only attended 5 days. Her attitude to I-LD was positive (Agree), and that for I-

CPD less positive (Partly Agree).

*1- I think we have to enable the teachers to participate in e-learning
activities at first in order to improve their skills and explore the web and
exploit its resorces.*

*2- learn [teach] them how is it useful in a whole stages inside the
classroom not only for their researches and that according to what will
they learn from this course. I mean by the end of this course they
should be knew how to use the internet to: present the enogh
information for their syllable [syllabus] and how to act it inside the
class. be familiar with this invintion and use it to expand their horrizon
in every field of life (KATE).*

For a novice user of the Internet to speak of participating in e-learning activities was

encouraging but surprising. KATE's comment raises questions about her perception of the

concept, since she thought e-learning preceded Internet skills when, in fact, it is normally

the other way round. Again, there were strong expectations of using Internet resources to

support the ELT syllabus.

7) NURI was a mature, outspoken teacher with about fifteen years of experience. He had

no previous experience in using computers or the Internet, but was very keen to attend

the course. NURI did not respond to the PAQ, hence, no statistical profile about Internet

skills or attitudes is available, but because had had no computer or Internet training, his

Internet skills were very low. He was permitted to the course to see how he could mange

Internet-based learning without the pre-requisite skills. Clearly he could not continue; he

withdrew after three days.

*I proffer [prefer] to use the Internet as a tool for teaching. I don't know
what I'm going to chieve [achieve], I can decide after the course. I
think the course needs [to run] for many weeks [for me to] grasp the
main points (NURI).*

Again, NURI raised the issue of using the Internet for language teaching, or I-ELT, as a

training need. However, he could not foresee what he hoped to achieve by the end of the

course, but thought he needed 'many weeks' to acquire such skills.

8) SERVO was a graduate teacher from the old Faculty of Education (Tripoli), with almost

eight years of experience as a public school teacher. He taught part-time at FLI to earn

extra income, while studying privately for a Masters degree in 'Applied Linguistics and ELT'

also at the Academy of Graduate Studies. SERVO had no Internet training, but already

had an e-mail and was fairly familiar with basic Internet tools. His attitude was strongly

positive (SA) towards I-LD and positive (A) to I-CPD. SERVO was late in responding to the

PCQ:

> *83% of the information in the Internet [is] available in English script, therefore it is great opportunity for EFL teachers to develop themselves and to go through it. The most important thing is VLE that would provide the teacher with online learning programme. The above would keep the teacher in touch with the newest knowledge of teaching processes.*
>
> *We expect to achieve the following: 1. To know the language teaching sites in the Internet. 2. How to select the best sites. 3. To be familiar with the content of the Internet. 4. How to use it as a tool for language teaching and professional development (SERVO).*

SERVO was more specific and more detailed in his response than the other participants.

He was aware not only of the Internet as a massive English medium of knowledge, but also

of VLEs as platforms for online learning. He also seemed clearer about course objectives,

which included I-ELT and I-CPD, but only because he had time to contemplate on course

material.

9) SHIBO, a mature private teacher with 28 years of experience, was conversant with

using the Internet (I-skills rated Very High). On arrival each morning he would log into

Yahoo Messenger and, whenever possible, would engage in chat even during tutorial.

Perhaps, this reflected his frustration with the status of Internet access at FLI; the Internet

room was there, but mostly inaccessible for teachers. As discussed in Chapter 4, priority

was often given to commercial Internet courses that generated income for a school, rather

than to facilitate teacher development. SHIBO's attitudes to I-LD and I-CPD were Strongly

Agree and Agree, respectively.

> *Fortunately, we, the teachers in FLI indeed we have got an Internet, but is [it] available all the time? The answer is no. Can we use it when we are free? No.*
>
> *Inspite of the disadvantages mentioned obviously, the net is so important to us as professionals. It would help me to follow all new things and the most modern ways as well as the new methods of teaching English as a second language. It would help me to increase my career and let me to be in contact with other teachers in different part of the world.*
>
> *Of course, I hope or let me say, I expect a lot to be achieved at the end of this course (SHIBO).*

SHIBO was aware of the Internet's role in updating cognitive knowledge, advancing professional development and I-ELT. He referred to Yahoo chat where he joined groups of interest, such as 'professors', 'study groups' and 'the university years'. SHIBO was unclear about expected course goals.

10) SOLO taught as a public school teacher and worked part-time at FLI for eight years. He used e-mail, but had moderate Internet skills (Intermediate ability). His attitude to I-LD was stronger (Strongly Agree) compared with I-CPD (Agree). He contributed well to YG discussions during blended learning. Unfortunately SOLO did not respond to the PCQ.

In summary, most responses to the PCQ were generic and teachers did not engage in depth with the questions. Most CS participants, however, perceived the Internet as a tool for advancing their language skills and, in turn, applying those skills in classroom activities (I-ELT), rather than as a tool for CPD per se. A similar pattern of perception had emerged from the interview data during the Fact Finding phase; teachers saw the Internet as a tool for advancing language skills relevant to their teaching contexts and class levels and that, for them, constituted professional development. It seemed that case participants needed more awareness about the Internet's potential for CPD, but first, they needed to enhance their Internet skills with which to pursue it.

5.5 Case Study data (Part 1 of intervention course):

Despite the small size of the Internet room, which housed only eight PC positions, ten out of the thirteen teachers who signed up attended the course on the first day. I made the following note in my journal:

> Although not all 13 Ts [teachers] who signed up attended, it was encouraging to see 10 Ts turn up on the first day. I wonder if the pressure from the Head has worked, or is it a genuine desire to develop! I hope it is the latter. One of the absentees was excused because he was preparing to travel abroad for postgraduate study; one was on sick leave; and the third was too preoccupied with school administration duties.
> Anyway, I started the presentation later than scheduled due to technical problems with setting up the data projector, but with the help of the local engineer it all went well. He also gave a presentation on the state of local Internet connections and speeds (Journal: 25 September 2004).

Three days later NURI dropped out followed by KATE who attended five days (more about KATE and NURI will be said as part of the CS data). From the second week, only eight

(four males and four females) continued to attend on a fairly regular basis. Three of these

regular participants were full-time employees at FLI (ANGI, BAHA and SHIBO); the other

five were part-time teachers from public schools (DOLLY, HIDI, SERVO, SOLO and SUE).

This number of case participants (eight) was thought appropriate in conducting focus group

interviews.

In the company of the eight regular participants, an online learning journey began. My

metaphor for the journey was that of a 'snorkelling excursion' in a coral reef.

> Ts accompany me on a snorkelling excursion to enjoy the beautiful wonders of the
> coral reef (the WWW). But an ability to swim (computer skill) is a vital prerequisite
> before heading off shore. Each equipped with a snorkel and fin (PC and a browser),
> I lead (scaffold) the group to wander round the biodiversities of marine life (useful
> EFL web sites). Eventually, they will be able to discover their own favourite
> snorkelling spots and set off into their own independent journeys (discovery
> learning) (Journal: 1 October 2004).

5.5.1 First Language support:

On the second day of the course, NURI took me by surprise as I was about to conclude

slide 9 of the presentation (Web Applications) and move on to Task 1. He argued that I

was talking about theoretical information, which anyone could have found in a newspaper

or magazine. He could not have spoken sooner, for the next slide, and Task 1, was about:

'opening an e-mail account'. NURI was silent for the rest of the session, unsuccessfully

trying to sign up for his first e-mail account, the instructions for which he could not fully

comprehend.

The next day, NURI brought the local engineer to provide L1 support through Arabic

interpretation of the signing up instructions. While this showed determination to acquire

new technical skills, it reflected avoidance of L2 instruction and more reliance on L1

support. As Harmer (2002) points out learners often resort to the mother tongue when

their L2 level is not compatible with the task at hand; as it is natural for them to

communicate in their first language.

NURI also insisted on sitting at the same PC position, arguing with a colleague that it was

the computer where he had opened his e-mail the previous day. He could not readily

appreciate how his e-mail "box" could be accessed from any computer, so long as he had a

valid username and password. Having explained to NURI the flexibility of electronic mail,

in Arabic, it turned out that he had forgotten his password anyway. With L1 support by the engineer, NURI finally managed to set up another yahoo e-mail and was quite pleased with himself.

5.5.2 Emotional support:

Despite succeeding in signing up for a new e-mail account with the aid of L1 support, NURI felt frustrated with his lack of ICT skills compared with other colleagues in the group and contemplated withdrawal. NURI believed he too should be familiar with the Internet and that, nowadays, anyone who is not is considered illiterate. Through emotional support, I tried to help NURI to come to terms with his fear of technology, by emphasising the potential learning outcomes and encouraging him to stay on the course, since it was free and unassessed. I also promised to help in any way I could (including L1 support), but at the same time advised him to enrol on a computer course. He agreed, but eventually withdrew from the intervention course after three days. Nevertheless, the f2f contact provided emotional support, which helped NURI to come to terms with his anxiety and set alternative learning goals.

KATE, on the other hand, was a quiet person who mostly worked alone. This, however, may have been her weakness since she did not seek support when she needed it, not even from her peers. The day before she dropped out, KATE sent me this e-mail message:

> I would like to tell you I feel that I am getting better and more familiar
> with [this] great invintion but: I can not participate easly I do not know
> why ecsactly may be because I didnot get used [to] it yet or may be I
> did not touch the benifit [of] how to use [it] for improving.

KATE made some improvement in familiarising herself with the Internet tools and, through PBL, managed to set up and use her first e-mail account (Task 2) for one-to-one communication. However, she admitted that she could not bring herself to participate in subsequent group tasks (e.g. Task 3), which involved inviting friends to conduct chat sessions on Messenger, because she had not been used to interactive group work.

My attempt to emotionally support KATE (f2f), by encouraging her to communicate with friends she already knew, did not seem to work. Besides being a shy person, KATE was new at FLI and the intervention course was her first encounter with the group. KATE's lack

of social disposition to work with others appears to be a reason for her withdrawal, for she

dropped out of the course on the fifth day without further attempts to participate.

It appears, from this example, that timid learners are likely to remain so even when

working online. In retrospect, though, I think there should be a smoother transition of

activities to foster more time-on-task, in order to support timid learners to interact more

effectively. First, they should be allowed to gain confidence through one-to-one e-mail,

before moving on to group interaction. This task grading was already adopted in Part 1,

but the issue here is to allow more time for novice learners to gain confidence at each

stage before moving to the next.

5.5.3 The potential of synchronous chat:

While NURI needed L1 support to set up new e-mail accounts, and KATE could not bring

herself to participate in group chat, other teachers in the group, e.g. BAHA and DOLLY

used e-mail straight away and exchanged chat messages through Yahoo Messenger while

attending to tasks (multi-tasking). BAHA had been using chat with friends from abroad

and had picked up a repertoire of Netspeak. DOLLY was familiar with chat, but less

experienced than BAHA.

With permission from BAHA and DOLLY, I managed to obtain an excerpt from one of their

chat sessions (Appendix G) to illustrate their instant messaging skills and demonstrate the

potential of synchronous chat as an informal way of encouraging teacher interaction. It

was noted from the PAQ analysis (I-LD usage) that 47.1 % of teachers felt at ease when

using synchronous text chat, which simulates instantaneous f2f conversation as

respondents have to be online for instant communication to take place.

However, instead of teachers engaging in idle chat as in BAHA and DOLLY's example, it

makes sense for educators to exploit synchronous chat messaging in promoting CPD.

Synchronous chat not only simulates verbal interaction and can help reduce anxiety, but

can also be used to discuss development issues between teachers (and between teachers

and educators) in safe environments, for chat messages are un-archived (unless

purposefully saved) and, thus, less threatening for error-conscious NNESTs.

5.5.4 Online discussion groups:

Participants thought that online groups were useful Internet tools in establishing contact with an international community of teachers. Through Yahoo Groups, DOLLY joined a Schools group with teachers from different parts of the world, which not only helped her to develop new ideas for teaching, but also practise her reading and writing skills. DOLLY inquired about ways to engage young learners on the first day, to which a teacher from Argentina responded. From that online response, DOLLY learnt a new technique of presenting vocabulary to children: The teacher brings a bag full of toys and, as each child pulls a toy out of the bag, its name is shouted out.

> *DOLLY: I think it's a nice idea to deal with [use] the Internet, because by the Internet, you can get experience from other teachers that you can consult or contact with them online. I talked to many teachers [online] and I find nice ideas.*
>
> *We can get experience from other teachers… You can get new ideas for teaching, you see. Because all teachers need is a little bit of imagination and through the Internet you can get new ideas for teaching, you see.*
>
> *You feel that there's a continuing development during the Internet. Every hour I spend on the Internet, I improved in my knowledge and my language skills… in reading and writing.*

For SOLO, the potential of online discussion groups was in the instant access to expert knowledge and a community of teachers from all over the world:

> *SOLO: Actually, I came across this discussion group: Some teachers from different parts of the world, from Guatemala, from Spain, from China, from Jordan. They express opinions about teaching some grammatical items. And I seek other teachers' opinions. I get answers from other teachers, about how they teach this or that.*

However, as the Web reflects a world of cultural diversity and that social values and idiosyncrasies influence the way different societies teach in schools (Akinyemi, 2005), SOLO thought that in navigating the Web to look for language material to support learning, teachers have to be selective:

> *SOLO: When you join discussion groups… you get what's new about language. And sometimes also you [come to] know culture differences; some things are useful to be taught in Libya and some things are not so useful.*

ANGI agreed that gaining access to online discussion with international experienced teachers was useful, because *'you will have good ideas from other teachers from all over*

the world'. On a local level, ANGI welcomed the Yahoo Group (la-tefl) as a platform for

Libyan teachers to exchange ideas and discuss local problems:

> *ANGI: Yes, I hope to use the Yahoo Group. If I got a problem, I can*
> *share it with other teachers. In some grammar, if I can't explain it or*
> *something, maybe you [tutor] will comment.*

5.5.5 Task completion:

For the purpose of this study and to provide a constructivist learning environment, task

support is provided through the concept of Problem-Based Learning (PBL), as discussed in

sub-section 2.10.4.2. However, the term "task" is also used throughout the thesis to

reflect the concept of problem, stimulus or activity used to engage participants.

Teachers worked on Part 1A tasks both in pairs and individually, according to their own

pace. Despite the slow dial-up connection at FLI, teachers did their best to tackle all ten

tasks, but not all eight participants completed them. By Task 4 (joining discussion groups),

a few participants had begun to lag behind. DOLLY said there was not enough time for

teachers to go on the Internet, as they were too busy teaching in their spare time. SHIBO,

however, argued that teachers should make time for the Internet to improve the quality of

teaching and, in turn, be in demand and earn more money.

> *I think there are enough tasks, not very much… I didn't do all of them*
> *because I was absent, but I'm going to catch up (DOLLY).*

In retrospect, I may have overestimated teachers' competence to complete Part 1A tasks

(ten) in a single week. I may have also underestimated the time needed for administrative

duties, such as giving hand-outs, warm-ups, socialising (more of it in Arab cultures), or

responding to teachers who require attention.

5.5.6 Guided peer-scaffolding:

A notable aspect of Vygotsky's theory (see Literature Review) is its claim that 'instruction is

most efficient when students engage in activities within a supportive learning environment

and when they receive appropriate guidance that is mediated by tools' (Vygotsky 1978,

cited in Gillani and Relan 1997: 231). With appropriate guided instruction, CS teachers

appeared to readily engage in f2f problem-based learning and, on several occasions, peer-

scaffolded each other spontaneously on various sub-tasks, such as starting a new e-mail,

sending attachments and adding new friends in Messenger.

In an audio-recorded extract of an instructor-guided peer scaffolding (full version in

Appendix I), SUE tried to support DOLLY to send a web page by e-mail attachment (Task

2). SUE had just observed me attach and send one, but when DOLLY requested

assistance, I asked SUE to demonstrate her newly acquired skill; <task modelling> (angle

brackets to indicate a scaffolding function).

> I: (Turning to SUE) She's asking you. <Prompt peer scaffolding>

Through peer scaffolding, SUE not only supported DOLLY to acquire a new skill (sending e-

mail attachments), but also reinforced her own newly acquired learning. SUE appeared to

have been partially scaffolded (by me) in the e-mail attachment procedure, up to a certain

stage ahead of a ZPD+1 output zone (Figure 2.4, Literature Review), but she was baffled

by the 'done' message, thinking that the web page attachment was sent, rather than

attached:

> SUE: I think… there is something here called 'done', the page is sent
> to…

Because of this partial scaffolding, SUE could not proceed to the next step of peer

scaffolding. To compensate for the cognitive gap, SUE sought instructional support

through her next question "*What does it mean here then 'done'*?", which she did not ask

while I was modelling the task. Retrospectively, my modelling of the task (prior to peer

scaffolding) may have been too abrupt for SUE to internalise in full, which highlights the

need for explicit tutor instruction before withdrawing support. While this observation adds

substance to the role of peer scaffolding, it concludes that the 'teacher' as a more

knowledgeable other, needs to master a new skill or knowledge before scaffolding peers.

Nonetheless, this task procedure casts shadows on the reliability of a self-assessment skills

measure. In responding to the PAQ's 'Sending text file attachments with e-mail messages'

(item 5), SUE had scored herself as having a Very High ability (5), whereas DOLLY's self-

assessment was more realistic (Low ability '1'). A similar overrating of navigation skills

was noted (score '5' for SUE and '4' for DOLLY), for when SUE needed to return to the

previous page, she attempted using 'Refresh' instead of the 'Back arrow'. As noted in the PAQ analysis, some respondents may have perceived themselves as more experienced teachers and, hence, overrated themselves accordingly.

This scaffolding activity resonates with Vygotsky's ZPD and Dodge's (1998) model of Input (ZPD-1) Transformation (scaffolding activity) and Output (ZPD+1). It demonstrated that peer scaffolding is effective, but it is important for the instructor to check the transformation (ZPD), of peer 1's skill/knowledge before he/she is allowed to scaffold peer 2. In the presence of an instructor, peer scaffolding served two purposes: re-conceptualisation of skill of peer 1 (SUE) and scaffolding of peer 2 (DOLLY).

5.5.7 Discovery learning:

The enormity of the ELT resources on the Web became evident to participants during a Google search. BAHA discovered 4,176 sites when using 'elt for language teaching' as a search keyword and HIDI's search resulted in 1,140,000 sites using 'elt' as a keyword.

Through discovery learning by navigating the ELT search list, SOLO came across a humorous site, which he thought highlighted the amusing side of English.

> *SOLO: I found this site www.ahajokes.com through my own interest first of all to know something related to English culture or humour in general.*

I asked SOLO if he could save the site, should he want to return to it later. Instead, he was thinking of copying and pasting the page contents. At the time, saving in Favourites had not been covered and it was a fitting moment to do so. SOLO's self-assessment on saving favourite websites from the PAQ showed a score of 2 (High ability), which casts more doubts on the credibility of teachers' self-assessed Internet skills in the PAQ.

SOLO shared some of the intriguing discoveries with the group, such as 'there is no egg in eggplant'. I asked SOLO how he would use such Internet-based material in an ELT classroom. Rather than using the material for a whole lesson, SOLO suggested printing out selected "jokes" and use them as gap fillers to introduce humour and retain attention.

SERVO was interested in I-ELT sites that enhance teacher performance. Discovery learning helped him to find new techniques to teach the 'present perfect':

> *SERVO: Some sites help you how to plan lessons, how to teach specific skill, speaking or listening, grammar lessons, writing also. You can copy that and you can use it in the classroom I think… I learnt today how to teach the 'present perfect'. The 'language teaching centre' I think.*

5.5.8 Reflective Diaries:

At the start of Part 1, CS participants were requested to send Reflective Diaries (RD) about their learning experience, on a daily basis. The idea was to obtain data about learning problems, if any, associated with Internet-based learning environments. Participants were requested to send their diaries to my personal e-mail. In my journal, I wrote:

> I asked Ts to prepare RDs on a daily basis as much as possible so that they don't forget important details. I hope their responses will enrich data on learning difficulties, if any, which can be probed in the FG [focus group] interviews later on. Also, this will get Ts used to the idea of reflective practice, something they are not quite used to in traditional transmission models (Journal: 26 September 2004).

At first, participants were left to respond in a free style format. This free style, however, was not helpful in obtaining relevant data, as members merely described what they had done rather than reflecting on how each activity contributed, or would contribute, to their development. SHIBO's free-style RD was an example of a narrative rather than a reflective diary:

> *Today I visited Yahoo chat section. There is a special corner in Yahoo called 'School and Education'. This one is divided into 'Professors' Chat', 'Study Group', 'The University Years' and 'Violence in Schools'… (SHIBO).*

In my journal, I made this note:

> RDs tended to be rather narrative and descriptive than reflective and appeared to lack in-depth reflection or critical thinking (Journal: 2 October 2004).

As observed by Kemmis (1980:20), a researcher involved in a case study often takes decisions 'on the spot', when time is not available for reflection away from the real-life pressures of the situation. Consequently, I decided to provide participants with a pre-designed RD format (Appendix F), which was made available on the YG, and was intended to guide teachers' reflective thinking. Faced with a pre-formatted RD, participants felt "cornered" into reflection and had to structure their thinking more consciously. Unfortunately, teachers still did not readily engage in self-reflection and, despite frequent reminders, no pre-formatted RDs were returned.

5.6 Case Study data (Part 2):

As outlined earlier, Part 2 of the intervention course consisted of three sections over three weeks. The learning took place via a YG discussion forum, which was used as a medium for accessing reading material and instruction as well as for sending tasks and providing feedback. The tasks in Part 2 were cognitive in nature (rather than practical as in Part 1), i.e. CS members were required to process relevant background reading material then respond to it by exercising reflection and/or critical thinking on own school contexts or teaching experiences.

5.6.1 Task response procedure and the OET model

The OET (Online Education and Training) model was adopted from a 10-week OET course I took part in as an online participant with the Institute of Education (See section 7.7). The OET task procedure was applied during Part 2 (blended learning) and Part 3 (online learning) of the intervention course and involved the following steps:

1) read the background material (paper-based or online),

2) respond to a set task related to the reading material,

3) comment on a completed task by another participant, and

4) send a personal reflective diary entry about the learning experience to the tutor.

Due to the negative experience encountered during Part 1, where Case members failed to return reflective diaries, I decided to drop the last requirement (4). It was thought that participants should be given more time-on-task instead, so that tasks can be completed within the set time scale. To start the learning procedure, a task sheet (a Word document file) containing task instructions, as well as the reading material for each Section, were uploaded to the YG. Participants, then, accessed the task sheets at any time from any computer linked to the Internet and worked at their own pace.

This low-resourced web-based blended learning model reflected a full understanding of blending: offering a mixture of paper-based and online material (material blending) mediated through a combination of f2f contact and online learning (delivery blending). Accordingly, the model demonstrated for Case teachers the merits of a web-based YG

solution, which can easily be applied in low-resourced public school conditions. Online

instruction is supported with social f2f contact with tutor and peers, while the learning

material can be accessed online. One day, some participants took paper printouts home

and forgot to bring them the next day; for them, that was a living proof of the advantage

of having flexible access to online material, for they could access the YG files online; thus,

the idea of the "paperless classroom" was appreciated.

5.6.2 Task responses:

After reading the set material (either paper-based or online), participants engaged in

relevant tasks, two of which were set in Part 2, thus reducing the task pace compared with

Part 1. One task was common to all participants and the other posed eight individual sub-

tasks, one for each participant. The idea was to encourage independent learning through

individual tasks, as well as creating opportunities for collaborative learning, which then

could be shared online for other members to read and comment on.

All together, CS participants attempted five tasks and sub-tasks (Table 5.3). Only two

(ANGI and HIDI) completed the common task 2.A, while four (SERVO, SOLO, SHIBO and

BAHA) contributed to the individual task 2.B.

Table 5.3: Expected and actual CS tasks and comments

Part 2 Tasks	Expected	Actual	Participants	Comments	Participants
Task 2.A (common)	8	2	ANGI, HIDI	0	
Task 2.B (1)	1	0		0	
Task 2.B (2)	1	0		0	
Task 2.B (3)	1	1	SERVO	1	SOLO
Task 2.B (4)	1	0		0	
Task 2.B (5)	1	1	SOLO	0	
Task 2.B (6)	1	0		0	
Task 2.B (7)	1	1	SHIBO	1	SERVO
Task 2.B (8)	1	1	BAHA	0	
Task response rate	16	6 (37.5%)		2 (12.5%)	

Such low task response rates were cause for concern. Despite attempts during f2f

meetings to encourage more responses, various excuses were made. Most participants

said spare time was scarce outside school and that other social duties often took

precedence over course tasks.

However, some participants, e.g. ANGI and BAHA, were still unclear about the task

response procedure despite explicit YG task instructions:

> To respond to a task do the following:
> 1. Create a new document in Word.
> 2. Copy and paste the task reference and the task question.
> 3. Answer the task question.
> 4. 'Save as' e.g. Task 2A in your floppy.
> 5. Post your task response to the Yahoo group discussion board.
> Remember to use meaningful subject headings e.g. Task 2A.1 and Keep a back
> up copy on your floppy disk.

It seemed that ANGI and BAHA did not make the effort to access and read the instructions, preferring to hear verbal clarification from me f2f, which reflects members' attachment to conventional methods.

When observing Case teachers responding to the tasks, it appeared that some lacked basic pre-requisite word-processing skills to process tasks offline. To help teachers do that and save Internet time (and cost), I had to show a participant how to Copy and Paste the task question into a Word document on which to work on. I also demonstrated how to access a floppy disk drive and save work-in-progress.

5.6.3 Actual task responses and comments:
5.6.3.1: Task 2A (common)

For the common task, I deliberately chose an Arabic article aimed at Arab learners of English in order to raise teaches awareness of I-ELT from a learner's point of view in Arab contexts. Having read the article (Alkadomy, 2002), participants were required to reflect on the reading and express how they felt about using the Internet for ELT in Libyan secondary schools.

Out of a possible eight responses, only ANGI and HIDI replied:

> *I've read the article. I think it's good idea for every teacher in Libya to*
> *improve himself by using internet in many skills. The teachers will get*
> *many information about teaching English language and they will learn*
> *new ways in teaching (ANGI).*
> *It was great to use internet in Teaching English Language, I feel it is*
> *very effective to use internet in teaching in general not only in teaching*
> *English because the internet is very helpful in many ways for example,*
> *I use it to explain grammar to my students and sometimes I asked*
> *them to search some information (HIDI).*

It can be said that both responses were rather brief, general in addressing the issue of I-ELT, and did not address the question in detail. ANGI for example used general terms, such as 'good idea', 'many skills' and 'many information'. HIDI thought it was 'great', but

she touched upon the question by saying that she used the Internet to teach grammar.

No mention was made of the wider issue of I-ELT in Libyan schools or of the likely

obstacles.

5.6.3.2 Task 2B (3):

In Section B, eight individual tasks were set. In this sub-task, the objective was to reflect

on suitable ways of using the Internet for language teaching within local school context, for

example to support the ELT syllabus.

SERVO gave a relatively detailed response to this task. He talked of using online audio to

teach pronunciation and listening, the use of online dictionaries, automated spelling and

grammar correction to improve writing skills. One of the suggestions was to set quizzes

for pupils, for which they have to navigate the Web for answers; a kind of discovery

learning applied to pupils' level.

> *There are so many online programs in the Internet to support or*
> *constitute ELT syllabus:*
>
> *For example: We can have direct access to teaching pronunciation*
> *programs as in bbc.Arabic.com, in which English phonemes are*
> *presented in audiovisual design that would highlight teaching*
> *pronunciation in the students' text. Therefore it'll help them to perceive*
> *the sounds easily and accurately and distinguish between the features.*
>
> ** Online dictionaries are helpful tools to look up the new words in the*
> *target language itself. Students could check the meaning and*
> *pronunciation at the same time.*
>
> ** Ask them to answer a set of questions based on the current topics by*
> *navigating certain websites suggested by you (teacher). Also it can be*
> *in form of multiple-choice, true or false, sorting and matching.*
>
> ** To expose the students to great deal of listening skill. There are many*
> *kinds of multi-media to develop the students' perception of the sounds*
> *in contexts.*
>
> ** Classroom activities such as writing is a kind of skill that can be*
> *taught by Internet. It provides them with spelling and grammar*
> *corrections, therefore they go through some of the computer*
> *advantages. They can send the work to other friends to comment [on]*
> *or respond [to] as well.*
>
> *At the end I'll be happy to recieve any comments from you. We need*
> *more suggestions to convince our boss to use Internet in our FLI.*
> *Help!!!!!!!!!! (SERVO).*

SOLO responded by supporting SERVO's ideas:

I agree with all that you say, and add to this, that there are many web sites, mainly not designed for teaching, but can be exploited to support the EFL materials, like games, puzzles and jokes.

We should not forget using pictures, photos and figuers [images] and their role in supporting lessons which are already their [there] on the line [online].

Students can, if they wish, be in touch with each other and their teacher out of class, to review what they had in class (SOLO).

In addition to emphasising the role of multi-media, SOLO suggested the use of non-ELT sites, such as those containing puzzles and jokes. SOLO went further by suggesting that students share their learning online with the class and get feedback from their teacher.

5.6.3.3 Task 2B (5):

Here, participants were asked to consider the role of pedagogic multimedia on the Web and its applications for ELT, with a suitable audio or video example. SOLO responded to this task as follows:

Multimedia plays an important role in learning and teaching of English or any other languages. In fact, as I conceive, it's one of the most active ways of teaching and learning, in addition to its flexibility. Simply, I can say that, it brings you knowledge wherever you might be .It exploits the four learning skills- listening, speaking, reading and writing, for the most benefit of the students. Another advantage of MTM [multimedia] for both the use of students and teachers, is the sharing of thoughts and opinions (SOLO).

My comment on SOLO's response was supportive, but encouraged more reflection:

Good to see you online! Could you say more about how multimedia can assist the teaching of, as you say, the four language skills? You could be more specific about audio, video, text, graphic images or any combination of these multimedia elements in ELT.

No further response was made.

5.6.3.4 Task 2B (7):

This task invited reflection on the use of a website review form (Appendix H) found in Dudeney (2000:171) and the range of categories included; how they might be utilised to keep records of suitable sites. This was SHIBO's response:

I'm sure it's an important and effective way to keep or record the favorite EFL sites in the future; otherwise we'll spend a lot of time searching for the important previous information. It allows us to have a quick access to the sites. In addition to that it's some sort of evaluation since the websites are classified and analyzed in proper order.

By using this form, we can deicide in advance which is for who (i.e. to arranger the materials that would suit our students levels). They're the best sites that can be prepared in special file if there's a computer or filled in a notebook. They're going to be treated as a guide at the moment we consult or seek for further information in details. Its where to register the name, a brief summary, validity, reliability, presentation such as sounds, pictures and so many other headings.

It can also used to keep the up-dated materials that keep the teacher in the track of any new development in future. It's the source to be used as a provider to the other friends for professional development end classroom tasks. At the end it's a tool that makes teachers more active when they're by [using] computer (Internet) and navigate effectively through the vast and fast flow of information (SHIBO).

SHIBO did not actually comment on Dudeney's evaluation categories as required. He, rather, stated the benefits of records for teaching and development pointing to computer files as means of storage. SERVO's comment on SHIBO's response pointed to the need for personal computers to keep individual records:

I agree with you dear mate, but this will be helpful if you only have your own computer ,otherwise i don't think that you will have big chances to review your records with out anybody bothering you. this if i got what do you mean (SOLO).

Following this comment, I drew attention to keeping personal favourite sites on a removable storage, such as flash memory, which can be used at any PC whether at school or an Internet café. However, an evaluation procedure by an experienced person e.g. in a collaborative school-based context, will ensure authenticity of sites before recommendation. As Dedeney (2000:170) points out, 'a good review can be far more useful than an obscure entry in your *Favourites*'.

5.6.3.5 Task 2B (8):

This task required participants to select, comment on and review a website from a list of ELT resources for intermediate students, then make appropriate recommendations about the site's applicability from a learner's point of view. This was BAHA's response:

Concerning me! ,,, I checked the dictionary.reference.com, and I found what I was looking for, I mean new methods and advanced rules in grammar, I recorded the information and details that I found.

So the advantages here we found that there is a lot of information and methods with different languages to ease the translation for who a foreign I got surprised, shocked from what I encountered, I mean what I found from new ways to explain and translate the words with new methods to ease the information receiving [comprehension], in addition

to that, new ideas and advanced methods for grammar teaching
(BAHA).

BAHA was astonished by the amount of information provided by the 'online dictionary" and

its ways of assisting comprehension. He also found its methods of teaching grammar

useful.

As well as the low level of contribution by CS teachers, there seems to be an avoidance of

high-level responses in which teachers engage in a degree of reflection on particular

applications of Internet-based learning. Low-level responses merely involve making

factual responses or exchanging information.

> Ts unreflective (surface) low-level responses signal weaknesses in academic/
> advanced writing skills or weaknesses in critical reflection skills. Task responses in
> general are vague and appear to appease rather than criticise (great idea; I like the
> way…; well done). There is a need for Ts to be more reflective and critical about
> what they read (or hear). Surely the problem is not in the reading material itself (i.e.
> comprehension); it is the Ts who must raise their level of task response from low-
> level to high-level by reflecting on their experience more realistically and thinking
> more critically. (Journal: 7 October 2004).

Low-level response and task avoidance was a recurring pattern that proved to be a

hallmark of this study. As Meyer (2000) observes, the fact that there is no finding, or that

a finding is non-significant is, in its own right, significant. Task avoidance will be discussed

further in Chapter 7 (Causes of poor online participation).

5.6.4 Focus group interviews:

The fact that CS teachers were attending the course voluntarily, rather than participants on

a registered course, presented some constraints. Teachers simply did not turn up for the

Focus Group (FG) interviews if they did not feel like it, or if they had important jobs to do.

After two FG meetings, interviews became less frequented and unpredictable. Eventually,

they shrank to spontaneous 'groupettes', in which I learnt to have the tape recorder ready

(on pause) and whenever an opportunity for discussion arose, I would start off a

discussion.

The FG interviews mainly focused on themes raised by myself or as a result of the task

activities. These included contributions to learning, teachers' cognitive development and

shifts in personal attitudes towards I-CPD or I-ELT. The selection of topic questions and

how to approach questioning and probing needed to be clear beforehand. To facilitate the

presentation of data, selected FG interactions were thematised under the following sub-

headings:

5.6.4.1 Teachers' Internet skills:

SOLO raised the critical issue of Internet skills, for in order to carry out innovative changes

at the classroom level, teachers must be ready to update their own technical skill:

> *Well, I guess, the Internet for teaching is something new and I don't*
> *expect teachers to accept it easily. They have to get used to it. But*
> *first, they need to learn the Internet skills.*

SERVO, however, thought it was the Ministry of Education's responsibility to arrange top-

down training and provide skills training for teachers:

> *Teachers need training in using the Internet for teaching. This is very*
> *important. They need a course like this [intervention course], I think.*
> *The education ministry must give Internet skills courses like this for*
> *Libyan teachers everywhere.*

DOLLY expressed concern about the poor level of skills and, like SERVO, placed the

responsibility on the Ministry of Education:

> *The Ministry of education must give courses about Internet skills,*
> *because the level of the teachers is very weak. I think they must take*
> *this responsibility and they must be serious with it.*

5.6.4.2 Implementations and perceptions of I-ELT:

HIDI claimed that she had already used the Internet to assign homework:

> *I give it [the Internet] as homework. For example, when we have*
> *exercises. I use englishclub, so I ask them to go to this site and bring*
> *me so and so. For example regular and irregular verbs…*

However, HIDI's perception of Internet-supported homework turned out to be a simple

printing out of relevant information for classroom use. I pointed out that printouts could

be made by the teacher; why ask students to do so?

> *Because I want them, first of all, to use the Internet and to know how*
> *to get [find] information. I think that my students are very happy when*
> *they get information from the Internet, because they like to use it. They*
> *feel happy that it's from the Internet, They feel that it's correct hundred*
> *per cent, because it's from the Internet.*

HIDI admitted that, at the time, she did nothing as a follow up to students printing out

information from the Web. That is, she had practised a kind of proxy Internet-supported

classroom approach, one in which students themselves printed out information to

supplement classroom material.

My next probing question was about the potential of the Internet, beyond printouts, which could alternatively be obtained from course-books. HIDI reminded me that she had tried inviting her public school students to participate in remote Internet-based classrooms outside school hours, rather like Teacher B in the FF phase, but some girls could not obtain parental permission:

> *I tried once to agree with the students to meet in a café net in the*
> *evening, but not all the students say yes, especially girls. Boys say OK,*
> *but girls they say no.*

The problem of Internet access to girls drew attention to the need for on-site Internet at public schools so that not only teachers can access I-CPD, but also all pupils can benefit from WELL during school hours.

SOLO's perception of I-ELT was in line with the dual-purpose I-LD model. As noted in the FF phase, two types of teachers were revealed: a Type one user's explicit objective in using the Internet is language development (I-LD), but with an implicit I-ELT objective; a Type two user, on the other hand, views ELT as a main objective but attains LD as a "spin off" effect. SOLO, who conformed to a Type two teacher, stated that:

> *there is a big advantage actually in using the Internet for teaching. I*
> *use the Internet to support something I teach… some grammatical*
> *items or enhance some idea I [want to] explain, and to get some*
> *suitable material to help me in teaching my students.*

SOLO was conscious of this I-LD approach to classroom performance, which prepared him for the more advanced inquisitive students:

> *I guess, once you develop your own language, it will be reflected in*
> *your performance in class. Sometimes, you have to be up to students'*
> *level, some of them have been abroad for years. The Internet helps to*
> *compensate for the [teacher's] knowledge gap.*

ANGI was already planning to incorporate a low-tech e-mail communication model as a basis for homework submission:

> *I learnt from this [intervention] course. Now I know in my next course*
> *how I will teach by [using] Internet. I will improve myself in teaching.*
> *When I introduce myself, I will give my e-mail. I will encourage them to*
> *open e-mails.*

Rather like ANGI, who advocated an e-mail model, SUE had used e-cards to set writing assignments:

> *SUE: In writing, sometimes we have occasions, like Valentine's Day,*
> *like Christmas, so I ask them to send each other cards… e-cards.*

5.6.4.3 Student participation:

As teachers contemplated the idea of engaging their students in out-of-class Internet-

based assignments, the issue of student participation seemed to trouble them, too.

> *HIDI: I give them my e-mail, I ask them to send me something like*
> *this [e-cards], but not all of them did that.*

I asked the group if they could think of reasons behind students' low response to e-tasks.

At the time, the extent of teachers' poor online participation during Phase 3 of the course

was unclear.

> *DOLLY: Not all of them can use the Internet, I think.*

Like Palloff and Pratt (1999), ANGI thought that asynchronous e-mail communication

would be a welcome alternative for shy students to express themselves freely in un-

inhibiting surroundings.

> *ANGI: Most Libyan students are shy by the way, They don't tell you*
> *what they feel or what they think. They will [are more likely to] send it*
> *[their thoughts] to me by e-mail.*

"Is it because they are anxious about committing language errors?" I asked.

> *HIDI: I think it's not a problem [of committing errors] because we are*
> *not native speakers. If we commit mistakes, I don't think that's a big*
> *problem. We did our best.*

> *ANGI: It's not our mother language.*

> *SERVO: And we can learn from our mistakes.*

It is worth noting, here, that student errors discussed in this context are mainly

grammatical, for spelling mistakes can easily be corrected using Word, as Teacher I (FF)

pointed out. Thus, students' poor participation (at least in the e-card exercise) was not

attributed to error-phobia, for language errors are expected and accepted by teachers and

students, a point to which I shall return in Chapter 6. Rather, CS teachers thought the

cause of poor student response was due to a low level of Internet skills. That is why

> *first of all, the students must be [made] familiar with using the*
> *computer and the Internet itself (DOLLY).*

One rudimentary, but effective, way of persuading students to participate in online learning

is by allocating marks for appropriate contributions. ANGI realised that when adopting an

e-mail communication model:

> *I will tell them 'my homework will be through the e-mail'. I will write*
> *the questions there and there's marks on it.*

5.6.4.4 Prospects of I-ELT:

The prospect of school-based Internet was appealing to CS teachers. They realised that

they would be able to exploit the Internet's potential not just to support course-book

material, direct students to interesting web sites or set e-mail assignments, but to include

components of Internet-based teaching in the class. SERVO realised that students can be

engaged in searching activities:

> *The Internet classroom is useful for searching sites, you can chat, you*
> *can send e-mail. Students can communicate with each other…*

He, however, argued that principles and practices of I-ELT were not clear for Libyan

teachers. Moreover, attitudes of education officials to I-ELT were not favourable.

Accordingly, a gradual approach to the implementation of I-ELT in the Libyan context was

proposed:

> *The Internet is still a little bit strange in teaching. It's not very clear*
> *compared to learning. So we need to use [introduce] it in our*
> *classrooms gradually. One hour a week then two hours a week. We*
> *need to make the [teaching] staff, the students, the community to*
> *understand that the Internet is very useful to use in teaching.*

Assuming a gradual bottom-up approach to educational change, SERVO suggested that

pupils are the place to start:

> *We need to give homework to students on the Internet, to send them*
> *certain tasks that can be returned by e-mail attachments.*

5.6.4.5 Independent I-CPD:

One focus group question concerned the impact of the support received during the

intervention course on the independent learning of individual participants. The question

invited responses relevant to both areas of I-CPD: language development and professional

development.

HIDI, as usual, was talkative in f2f settings. She explained how Task 4 on Discussion

Groups (Part 1) had encouraged her to join a Teachers' Club. HIDI was sent a username

and a password and enjoyed receiving information and notifications of new material:

> *I e-mailed the University of Cambridge. They send me some material*
> *from time to time. And really they are helpful. I remember once I asked*
> *them for information for my review of literature. One of them, I think*
> *he is a teacher, he said 'sorry, I'm not at home now. I'll answer your*
> *question later when I get back home' immediately, just [as] he*
> *received my e-mail.*

As SERVO found out, language development was another potential benefit of the Internet,

even when, as a `Type two user', his overt aim is I-ELT.

> *One day I visited bbc.arabic.com. I found many useful teaching points,*
> *like grammar, pronunciation, writing. I chose pronunciation and I found*
> *it interesting to learn from it.*

For DOLLY, the benefit of the Internet combined language development as well as learning

new teaching ideas:

> *It's nice to deal with the Internet. At the same time, you are improving*
> *your language, getting new ideas for teaching, you feel that everything*
> *is improving, you see… The [I-CPD] course has convinced me to use*
> *the Internet to improve in all language skills. Because [now] I know the*
> *websites which are for professional development. Yes, It gives me a lot*
> *of ideas. I tried languagelearning.net and I think it's good. I can*
> *printout what I want.*

DOLLY, however, identified two common problems for teachers to pursue I-CPD on an

individual level: lack of time and lack of home Internet access, the latter of which appears

to hinder female teachers more than males.

> *There are a lot of problems for teachers, because they work. They have*
> *long hours working, you see. And some of them they don't have*
> *Internet at home. So this hinders them to improve themselves, you*
> *see.*

ANGI emphasised a social barrier, which may restrict some female teachers from accessing

public Internet cafés:

> *Since my graduation, [2 years ago] I didn't do anything related to*
> *development, even through the internet I didn't. We didn't have*
> *Internet at home and I wasn't allowed to go to café. Many guys [at the*
> *cafés] look at you like you are [doing] wrong.*

As I pointed out that I had seen females happily working on their own at several Internet

cafés in Tripoli, it appeared that this social barrier is one which is particular to certain

'conservative' families who wish to maintain parental control until their daughters are

married off. In any case, teachers agreed that such a problem can easily be resolved by

establishing institutionalised school-based Internet, where parents can rest assured that

their daughters are in safe environments.

SUE and DOLLY thought that the onus was on teachers themselves (males or females) to

insist on gaining proper access to Internet cafés and prioritise their goals in life:

> SUE: I think most teachers in our schools here, they don't like to
> improve themselves… They are looking for money.
>
> DOLLY: I think teachers must also take chances [the initiative] with
> [by] themselves… And this task we can do it with the Internet. But I
> think teachers want to improve their social level by earning more
> money, see?
>
> SUE: OK, one of my colleague, she is an English teacher. She always
> send her daughter to her neighbour to teach her English. And she is an
> English teacher, you believe that? When I asked her why, she said I
> can't, because I have no time. I have to prepare [do] the house [work],
> and so on.

When it came to priorities, it seemed that an aspiration to improve earnings (due to poor

teacher pay) was at the top; professional development came second. Accordingly,

teachers need to reprioritise development and give it more time even though they are busy

people, for professional growth implies having space to grow into, regardless of personal

commitments (Bolitho, 1986).

5.6.4.6 School-based I-CPD:

CS teachers felt that the education system should provide adequate school-based Internet

facilities for teachers.

> SERVO: The Internet is a new idea. It depends on the schools if they do
> [allow] it for us.
>
> DOLLY: I think the manager in the school [headmaster] must arrange
> courses for teachers to improve themselves, you see. This is important
> for development.

Teachers thought that a negative attitude to change by school heads was responsible for

discouraging teachers from using the Internet, despite existing facilities for ICT subjects.

As SUE found out, the attitude of her school head was not supportive, when it came to

applications of Internet-based learning. Internet chat, in particular, was seen as 'a waste

of time':

SUE: I'll tell you something about mentality. We have a computer lab at our school, more than sixteen PC [for ICT classes]. When I asked the manager [headmaster] to have an Internet at school, he said no no. I said it's very useful for… He said no it's not useful, they are going to chat and do silly things and and… this is the way of our managers… Most of schools now have computers, but they don't want to have Internet.

ANGI: They [school heads] don't encourage the teachers to do good things. They think they know everything.

To organise effective school-based training, attitudes must change before addressing educational policies that foster professional development needs. The unwillingness of public school heads to install Internet in schools not only reflects ignorance about educational technology, it portrays a centralised education system which controls school management and policy implementation in Libya. That is, it was not up to school heads to individually decide if or when to connect to the Internet. However, since computers already existed at secondary schools for the purpose of teaching ICT, a school only needed to subscribe to an Internet Service Provider.

I pointed to the potential advantage that private schools such as FLI has over other public schools, of having an Internet room which teachers could use as an Internet lab. It occurred that, even in private institutions, Internet-based classrooms were not a priority. As ANGI noted, money-making came first: '*they just want to collect money yes. They don't want to pay*'. SHIBO's earlier comment (PCQ) about FLI's lack of commitment to grant teachers free access to the Internet room confirms this predicament.

5.6.4.7 A conflict-teaching approach:

Although teachers were convinced of the Internet's potential for language teaching and learning, at varying degrees, they were not sure if I-ELT would readily appeal to education officials or school heads. At this point, I decided to employ conflict teaching as a scaffolding strategy (Driscoll, 1994). A challenge was set for SERVO and SOLO who were available at the time: To convince the sceptical FLI manager of the merits of I-ELT. A full version of the conflict teaching dialogue is found in Appendix J. In my research journal, I noted that

the FG interview was turned into a conflict teaching paradigm. I played the role of the sceptical FLI manager who needed a convincing argument from EFL teachers

in order to authorise and finance Internet lab sessions at the institution. SOLO and SERVO talked of what they could do to manipulate internet resources to enhance their teaching. While SERVO was thinking of pulling one or two jokes out of his 'Ahajokes' hat, SERVO was inclined to demonstrate the use of e-mail to teach writing composition, though he was unsure of how to help students correct grammar mistakes. To kill two birds with one stone (the I-ELT Project too), I suggested that they prepare an Internet-based mini lesson to deliver to their peers, which would be video recorded as evidence of their success. The motion was passed with cautious excitement. "See you online!" Solo exclaimed as he left the room (Journal: 10 October 2004).

For the purpose of the conflict teaching task, I played the role of the FLI manager and, as teachers' "spokesmen", SOLO and SERVO tried to convince me of the potential of Internet-based ELT. The "manager's" decision on whether to integrate Internet lab sessions into the ELT syllabus or not depended on how well they presented their argument.

Two approaches emerged: *guided learning (*SOLO) and *discovery learning (*SERVO). SOLO's guided learning approach supported I-ELT, but the risk of students wandering off and getting lost warranted the role of the teacher, as an information gatekeeper, censoring and controlling material:

> *SOLO: I am for using the Internet for learning, but to some extent. I guess at least at this stage, it's a big issue… Like when you drop someone into the ocean and tell him 'just learn to swim'. Sometimes the risk is more than its worth. The Internet is very big, very vast. Even if you choose one topic, it's too big for students to enter it, or to study by themselves.*
>
> *They need the help of the teacher. Sometimes, you need to break the material into slices or pieces. Chose some specific items, don't give the students the freedom to navigate on the Internet as they want.*

SERVO's discovery learning approach, however, encouraged learners to explore the Internet at will and discover interesting material by themselves:

> *SERVO: I'm completely for the idea. The Internet is very useful for teaching, because everything is there, about grammar about pronunciation, about writing… Also the Internet attracts students… It's better than the traditional way: the blackboard. It's even better than video. There is a lot of choice in programmes.*

To supplement grammar teaching, SERVO suggested using discovery learning techniques in which students extract particular grammatical items:

> *SERVO: There are good techniques about teaching grammar online called 'discovery technique'. For example, you ask your students, can you find where is the past tense or certain structure, and they will discover where is the past tense.*

I asked about the difference between using discovery techniques on the Internet and on

paper. Participants agreed that, compared to course books, the interactivity of the

Internet's multimedia makes online learning an interesting and attractive way of language

learning.

> *SERVO: The teacher's job is [made] very easy by the Internet. It*
> *motivates, makes things not boring, very interesting. That's the way*
> *that is best for students.*
>
> *SOLO: Yes, when you use multimedia, the information will stick to their*
> *minds, even teaching some language aspect like grammar, which can*
> *be boring. So when you use jokes or games or something, it makes*
> *learning easier and more attractive.*

In either approach, though, teachers need to prepare for their I-ELT classrooms (perhaps

more so in SOLO's guided approach):

> *SOLO: I think I have to prepare for them something… One or two web*
> *page at least so that they don't get lost or get bored…*
>
> *SERVO: Teachers need to prepare the lessons in advance, to prepare*
> *the websites, to prepare the tasks that will be done, what things you*
> *are going to teach, comprehension or new words or pronunciation… to*
> *save the time.*

SERVO noted that that, irrespective of how conservative or liberal an I-ELT approach is, it

is the learning outcomes of the students that matter.

> *SERVO: When they [the policy makers] know the students can learn*
> *language through the Internet, they will accept I-ELT.*

Through taking part in this Interventionist conflict-teaching activity, I was also able to 'kill

two birds with one stone': scaffold SOLO and SERVO to produce more realistic arguments

for incorporating Internet lab sessions in their teaching, as well as to set the grounds for

the I-ELT project as part of data collection.

5.6.4.8 Some concerns in focus group interviewing:

One persistent problem in conducting FG interviews is to organise turn taking without

compromising contribution, so that a clear audio recording can be made. This, however,

proved rather difficult with female teachers who often tended to speak almost

simultaneously. Besides the issue of 'parallel speakers' by female participants, there was

the silent member who spoke only when spoken to.

5.6.5 The I-ELT Project:

At the end of Part two of the intervention course, and in accordance with project-based

learning (see sub-section 2.10.4.2), CS teachers were encouraged to transfer the I-ELT

concepts and techniques they had learnt into practice, hence the I-ELT Project. To support

this project-based learning, a microteaching approach was adopted to create a mini

Internet-based classroom whereby peers took up the role of class pupils while an aspect of

Internet ELT material was the focus of the lesson.

Due to time constraints towards the end of the intervention course, which coincided with

Ramadan (started 14 October 2004), only four CS teachers managed to prepare a lesson

plan, and only three of them were presented and video recorded; the fourth had time only

to prepare a lesson plan. Because of limitations of thesis length, however, only one

example is presented.

5.6.5.1 DOLLY's I-ELT Project: Solicited and unsolicited peer scaffolding

While she was preparing for the microteaching lesson, I asked DOLLY to spell out her

thoughts; a think-aloud technique. DOLLY declared that she was not quite clear about the

procedural steps of an Internet-based lesson, but at least she knew where to start:

> *I'm going to check the BBC website for some topics suitable for my*
> *students. Then I have to choose the web pages, and then the steps of*
> *the lesson (DOLLY).*

Subsequently, I advised DOLLY to focus on a particular language skill and level, then

prepare a relevant sequence of web pages for her students to follow during class. I

pointed to the Internet-based examples (handout) in the chapter 'Focus on Language' by

Windeatt, Hardisty and Eastment (2000:50-65). By the following meeting, DOLLY had a

clearer idea of her lesson plan (Appendix M). Her objective was to introduce elementary

students to listening comprehension through online audio. Learners listen to a

conversation then, depending on the version of the exercise, drag or click (Appendix N; O),

select sentences to complete the dialogue.

In this example of the think-aloud technique, aspects of solicited and unsolicited peer

scaffolding emerged (Appendix K). DOLLY (peer 1), as a more knowledgeable other,

scaffolded a "less knowledgeable" and inquisitive HIDI (peer 2), who was still at the

planning stage of her I-ELT project, thus, solicited scaffolding. By the time SUE joined in,

HIDI had experienced cognitive transformation (however partial) and, in turn, began to

peer scaffold SUE (peer 3), thus, unsolicited scaffolding. It is worth noting here that the

peer scaffolding activity in Part 1 (SUE and DOLLY) is an example of guided peer-

scaffolding.

The fact that less knowledgeable teachers can be peer-scaffolded does not mean they are

passive recipients of knowledge or skill. Teachers, in particular, come with pre-conceived

practices and beliefs that can be hard to dislodge at times. For example, DOLLY planned to

give the Web address for the exercise, page by page, but HIDI expected it to be displayed

on screen as a hyperlink. As HIDI sought explanation, DOLLY's **solicited scaffolding**

was, eventually, welcomed:

> *DOLLY: To show students how to get through from link to other link. To give them more ideas [practice] about using the Internet. And the second one [hyperlinked option], to give them the whole address, to save time. <Peer 1 explaining: HS>*

> *HIDI: Yes, step by step is better, because to give them the whole links one time, I think… confused maybe. Confuse the students in this level. (Peer 2 Agreeing; justifying)*

HIDI also thought that elementary students should read the conversation before

attempting to answer listening comprehension questions about it. DOLLY, however,

provided reasonable scaffolding, which seemed to convince HIDI.

> *HIDI: We have listening [comprehension] in the course book…*

> *DOLLY: This is the same here, you get more than one answer, and you drag the correct one. <Peer 1 explaining: HS>*

> *HIDI: Yes. So when it's [the conversation] written in front of them I think is better. I don't know, may be…*

> *DOLLY: Aah. To give them few minutes before the listening? <Seeking confirmation: HS>*

> *HIDI: Yea, I mean maybe for the first time. Listening just for… how to pronounce correctly and how… (Peer 2 justifying opinion)*

> *DOLLY: Then, it's not spontaneous listening. It becomes reading then. <Explaining: HS>*

> *HIDI: Yes, maybe this one is very fast. Not for me, for the students. (Peer2 softening)*

At that point, SUE (peer 3) joined DOLLY's demonstration and HIDI, in seeking SUE's

opinion, began her own **unsolicited peer scaffolding**.

> *HIDI: Yes SUE, have a look here… You have to fill in the spaces. Just*
> *listen to this… Is it OK? A little bit fast, yes? (passes the headphones)*
> *<Peer 2 promoting peer 3; seeking agreement: HS>*
>
> *SUE: (listens) For elementary, yes [fast]. Maybe for intermediate…*
> *[OK] (Peer 3 stating opinion)*
>
> *SUE: (interrupting, as she was busy listening) How can you repeat this*
> *[online audio]? (Peer 3 seeking support)*
>
> *HIDI: By the mouse, here. <Peer 2 explaining: HS>*
>
> *SUE: To play?*
>
> *HIDI: To play, yes. <Peer 2 confirming: HS>*

However, HIDI had not realised that through Internet audio, learners can independently

repeat or move on at their own pace, which is a great advantage over a tape recorder.

DOLLY had to explain how students can respond in an Internet-based lesson:

> *DOLLY The advantage is that… the students here they can type the*
> *answer, OK? Or drag the answer, it depends on the kind of the*
> *exercise. The second advantage, is if the students have doubts, they*
> *can stop the file and repeat, listen again without causing the rest of the*
> *class to feel impatient, OK? <Peer 1 explaining: HS>*
>
> *HIDI: I'm not against it [online audio], I'm with you really. The point is*
> *that the first exercise [dragging] is a little bit difficult, so we have to*
> *start with the easier…(Peer 2 partially agreeing)*

Although HIDI approved of the online audio exercise, she thought that the dragging

version (as opposed to clicking) was more difficult for her students. Eventually, however,

she conceded that dragging might simply be less interesting.

> *HIDI: Here, [clicking] maybe more interesting than that one*
> *[dragging]. (Peer 2 justifying opinion)*

5.7 Synopsis of the Case Study:

5.7.1 Self-assessed skills:

Although the acquisition of computer skills is an important pre-requisite for learning

Internet skills (swimming abilities before snorkelling, in my journal metaphor), this

condition could not strictly enforced because the intervention course was conducted within

a bounded system (existing teachers at a particular school), rather than a pre-selected

group that meets certain pre-requisites. In consequence, however, this relaxed entry

yielded information about support strategies relevant to novice low-skilled learners.

Some novice low-skilled participants (e.g. NURI) sought L1 support to perform certain

tasks, but this support could not be sustained in order to compensate for the lack of basic

computer skill. Even though KATE succeeded in using her e-mail individually, her introvert

nature constituted a barrier to interacting with the group with whom she had little social

exchange. Other CS members with supposedly high self-assessed Internet skills (e.g.

SUE) had to be scaffolded in sending e-mail attachments. Others (e.g. HIDI) were

scaffolded in basic word processing skills, such as Copy and Paste. While this

individualised scaffolding was necessary, it was time-consuming and impeded participants

from fully appreciating the course and benefiting from independent online learning.

When responding to the self-assessment measure (the PAQ), it seemed that some CS

participants may have overrated their Internet skills, either through ignorance of a

particular sub-skill and/or in an attempt to satisfy self-esteem. Therefore, while the PAQ

provided a rough guide to teachers' skills, it was hands-on PBL and peer scaffolding

instruction that revealed actual skill levels. Hence, assessment of technical skills should be

task-oriented (rather than self-assessed), before embarking upon Internet-based

development courses.

5.7.2 Informal chat:

Case participants engaged in synchronous chat quite readily. Their perception was that

chat messages were informal exchanges that posed no real threat to them. Unthreatening

informal chat could, thus, be used as a discussion platform to orient novice teachers since

errors would not be archived. The immediacy of chat exchange can also be advantageous

in obtaining important feedback from tutors or senior teachers.

5.7.3 Responding to tasks:

In Part 1, teachers progressed through f2f scaffolded instruction and task support (see

sub-section 2.10.4.2). The progress was slow, but steady. Due to irregular attendance

and the voluntary nature of the intervention course, not all participants completed the

tasks and there was no way of exerting pressure on them other than polite reminders. Participants, however, appreciated the practical nature of the course and worked together in a constructivist collaborative atmosphere. Peer scaffolding was sought and encouraged to internalise knowledge or skill and to enhance development.

In Part 2, there was a moderate rate of task-response (37.5%) but a low response rate to comments (12.5%). Case participants needed scaffolding support, by instructor and peers, in order to transform their skills through tasks. Again, due to the voluntary nature of the intervention course, it was inappropriate to apply pressure on lurkers other than through e-mail reminders and/or f2f polite persuasion. In addition to being scarce, task responses tended to lack detail and depth in addressing the question, while comments were uncritical. This reflected a surface approach to learning, which resulted in low-level responses. It can also be said that the Writing Competition revealed a lack of self-reflection, even though only one member managed to respond.

5.7.4 Conceptualising I-ELT:

It appeared that the CS teachers were aware of the Internet's potential for teaching as well as for language development and, often, the two objectives merged. However, under the prevailing low-tech school conditions, teachers limited their scope of I-ELT to basic uses, such as material support, e-mail assignments or simply directing students to interesting websites. They, therefore, needed further instructional support in the principles and practices of I-ELT beyond such simplistic use, i.e. beyond the stage of Internet-supported to Internet-based classrooms. The learning material, the conflict-teaching exercise, and the I-ELT Projects scaffolded teachers in this direction and raised their awareness of applying Internet-based classrooms in Libyan schools.

Even though public schools were classified under low-resourced environments – and that is why the Internet was perceived as a source of material support – teachers realised the advantages of live Internet-based exercises where learners can proceed at their own pace. Through conflict teaching, the argument for an Internet school lab was strongly supported.

5.7.5 Attitude shifts:

Through this renewed awareness and scaffolding of Internet skills, teachers' attitudes

towards I-CPD, I-LD and I-ELT improved significantly. Five teachers responded positively

to the Post-intervention Attitude Test (PAT; Appendix L) which was unanimous and used a

ten-point numerical rating scale from -5 to +5. At the top end, one teacher's attitude to I-

CPD shifted dramatically from -3 to +5 (up 8 numerical points); for I-LD from -4 to + 5

(up seven points); and for I-ELT from -4 to +4 (up 8 points). At the lower end, another

teacher's attitude was more positive to start with; for I-CPD this shifted from +2 to +5 (up

3 points); a similar shift for I-LD from +2 to +5; for I-ELT, this shifted from +1 to +4 (up 3

points). Thus, it can be said that an average increase in teacher attitudes of six numerical

points in I-CPD, I-LD and I-ELT was attained as a result of Internet-supported provision

during the intervention course.

In the PAT comments box, one respondent echoed this attitude shift:

> *The Internet is good for me to improve my language. I found it useful*
> *to learn about grammar, pronunciation and writing. The course has*
> *convinced me it is possible to use the Internet to improve in all*
> *language skill because the Internet uses sound, text, pictures and*
> *video.*

However, with regards to implementing I-ELT in Libyan schools, teachers felt that the

change process involves policy shifts at the top, rather than individual bottom-up efforts by

teachers. Another PAT respondent reiterated this:

> *I realise that this [I-ELT] is a new method of teaching and, although it*
> *is a baby in here [Libya], it enforces itself everywhere, but it still needs*
> *investment by education ministry in Internet labs at schools.*

5.7.6: Learner independence:

Due to the influence of traditional f2f lecturing and teacher-centred techniques, certain CS

teachers displayed attachment to the guiding role of a tutor. Despite posting task

instructions to the YG discussion forum, it seemed that some teachers preferred verbatim

instructional support, which is often succinct and to the point. Perhaps teachers needed

reassurance that they had grasped the idea, and that they were on the "right track". In

doing so, CS teachers corresponded to the 'conforming learners' described by Ludwig-

Hardman and Dunlap (2003) who lack self-direction to learn independently in online environments and tend to prefer conventional instructional support.

5.7.7 Impact of blended learning:

The blended learning model, which used a low-cost Web-based solution through the YG, provided a discussion forum for Libyan EFL teachers in a low-resourced environment. The blended learning model served as a communication platform between teachers and between them and myself as facilitator. A significant impact of blended learning in I-CPD contexts was that participants gained flexible access to online learning material and resources, whilst maintaining the constructive benefit associated with f2f interaction, where peer scaffolding was sought and appreciated. Peers seemed to readily scaffold each other, whether solicited or unsolicited. Within this constructivist learning environment, I encouraged the less skilful teacher to control the mouse to perform a task, while the more skilful teacher gave directions as needed, which simulated instructor-guided peer scaffolding.

In spite of setbacks, such as low task-response rates, low-level contributions and poor ICT skills to begin with, CS participants achieved a breakthrough. For the first time in the Libyan TED context, to the best of my knowledge, in-service EFL teachers made the transition from traditional f2f to online learning, be it in a blended fashion. I believe that blended learning, which integrates f2f lecturing with online interaction, is a more successful and sustainable approach to I-CPD in Libya. As a teacher educator and a prospective online tutor, I also believe that the real potential of online learning can readily be appreciated when blended with f2f contact, rather than stand-alone distance online paradigms. To test this hypothesis and answer the research question raised in Chapter 3, an extended group of Libyan EFL teachers were invited to participate in a 10-week long online learning programme via Merlin. The following chapter reports on this experience.

Certain studies may benefit when the same questions are posed for two pools or 'sites' – a smaller pool that is the subject of case studies, and a larger pool that is the subject of a survey. The answers can be compared for consistency, but the case sites can allow some insight into the causal processes, whereas the survey sites can provide some indication of the prevalence of the phenomenon (Yin, 1984:84).

6.1 Introduction:

The first two parts of the I-CPD intervention course (f2f and blended learning) having been completed, Part 3 was conducted wholly online, from the UK, via a web-hosted Virtual Learning Environment (VLE). This enabled the Case Study to 'funnel out' into a wider context (see Figure 3.1) and, thus, accommodate greater participation by Libyan teachers from Libya and the UK. As pointed out by Yin (1984) above, but with a slight orientation, this study aims to benefit from asking (almost) the same questions about Libyan EFL teachers' development within two pools: a smaller CS pool in which Internet-based language learning and teaching were the issue, and a larger Extended Case Study (ECS) pool where concepts of online learning were the focus of attention.

Basically, the objective of the ECS was to (a) create distance online learning opportunities for Libyan EFL teachers; (b) assess whether, as a result of the support during the blended learning model, distance online learning could be conducive to advancing teacher development in the Libyan context; and (c) appraise how ready Libyan EFL teachers are for independent self-regulated online learning. In addition to what had been learnt in the CS, this online phase was expected to contribute to an understanding of how Libyan EFL teachers voluntarily participate in, and react to, online instruction support away from the direct control of a central figure.

Section 6.2 describes the composition of the ECS. Section 6.3 describes the online course (structure and schedule) and discusses relevant data along with reflections on the online learning experience. Section 6.4 provides analyses of the online participation encountered in the ECS including interviewee statements.

6.2 Composition of the ECS:

While CS sampling focused on places (language institutions), which to all intents and purposes housed a bonded group of teachers, the ECS sampling focus was on people (online participants), thus transcending physical boundaries. As such, the ECS did not constitute a bounded system made up of people, walls and common rules (Stake, 1995). The ECS participants (60) were made up of

- 8 FLI Case Study members,

- 42 in-service EFL teachers from various schools (whom I had met during the FF phase), and

- 10 Libyan postgraduate student teachers based at UK universities.

ECS members were invited by e-mail to participate in distance online learning on Merlin's Virtual Learning Environment (phase 3 of the research) and each supplied with a username and a password. The ECS sampling (other than the CS members) was purposive. Ultimately, the ECS consisted of personal contacts with Libyan teachers (established during the FF phase) who claimed to have reasonable Internet skills and agreed to join the online course, in addition to those PAQ respondents who had expressed consent to join the online course. The end result of such a combination of participants was an unbonded system or a heterogeneous group. The point is that, apart from the CS members who had worked together face-to-face, the ECS mainly consisted of an unbonded group of online participants with little knowledge of each other. As in the CS phase, participation in the ECS was voluntary and the desire to experience a new form of Internet-based learning was the drive for such participation.

6.3 Part 3 of the intervention course: online learning

The online course, which lasted for 10 weeks (20 November 2004 to 27 January 2005), was delivered on the Merlin VLE. Developed by the e-learning team at the University of Hull, Merlin is a web-hosted online learning solution, which means it requires only a multimedia PC and an up-to-date Web browser. In a relatively low-resourced environment, such a web-hosted solution was convenient, for it required no infrastructure

costs (e.g. computer servers) to house the VLE software and generated messages. As Merlin (2004: 1) put it, 'a hosted service means no IT overheads, and no upgrade costs'.

Running overheads usually involve a rental fee. Merlin's web-hosting cost for a six-month access period (from July to December 2004) was estimated at £997.5 for up to 100 students. However, the e-learning team at Hull kindly waived the cost in the interest of academic research on the system, and upon request, the initial period of online access was extended for an additional two months, due to the late start of the course: one month for online users and one extra month for data extraction. While I assumed the role of an online instructor, the e-learning team at the University of Hull offered technical support as needed.

6.3.1 Online course structure:

The online instruction strategy on Merlin followed Salmon's (2002a) five-stage model outlined in the Review. According to Woodward's (1991) loop input approach (see Chapter 1), the online course, or Pathway units, addressed the nature of online learning and Internet-based teacher development, or I-CPD. The online learning material on Merlin (see Part 3 of Appendix E) was structured into eight progressive study units, each of which concluded with a common task (for all participants) and an associated Exchange discussion. As well as the eight Exchange messages to initiate discussion, an extra message about 'The Merlin Experience' was added to elicit reflection on teachers' learning experience. A schedule for the online learning course is outlined in Table 6.1 (week start-dates in Libya coincide with Saturday).

Table 6.1: Online learning units and scaffolding activities

Week	Date	Activity/ Stage	Unit	Description
0	15 – 19 Nov 04	E-mail invitations	_	All ECS participants
1	20 - 25 Nov	S1: Access and motivation	_	Encouraging and reminding
2	27 Nov – 2 Dec	S2: Online socialisation	_	Teacher profiles
3	4 – 9 Dec	S3: Information exchange	Unit 1	Nature of online learning
4	11 – 16 Dec		Unit 2	Advantages of online learning
5	18 – 23 Dec		Unit 3	Drawbacks in online learning
6	25 – 30 Dec	S4: Knowledge construction	Unit 4	Internet Options for Teacher Development
7	1 – 6 Jan 05		Unit 5	ELT gateways
8	8 – 13 Jan		Unit 6	Online journals
9	15 – 20 Jan	S5: Development	Unit 7	Online discussion groups
10	22 - 27 Jan		Unit 8	Key issues in I-CPD for Libyan teachers

S= stage in Salmon's (2002a) five-stage model

The first week (week 0) of the course was used to send e-mail invitations to participants.
In accordance with Salmon's (2002a) five-stage model, Stage 1 (access and motivation)
focused on encouraging participants to log on (week 1). In week 2, participants were
asked to post their personal profiles (Stage 2: online socialisation). The information
exchange stage (Stage 3) included Units 1-3 and extended for three weeks as shown.
These units contained factual information and were supposed to encourage participants to
engage in low-level tasks. Stage 4 (knowledge construction) promoted high-level tasks
through reflection and critical thinking. Stage 5 was designed to support independent
professional development, i.e. to encourage participants to explore online discussion
groups and raise, or respond to, issues according to their situational needs. To stimulate
online discussion within the group, Stage 5 also included a unit on relevant key issues
related to the implementation of I-CPD within the Libyan context.

6.3.2 Access and motivation:

$$Stage one was about encouraging participants to access the online learning environment
and motivate them to actively take part. All ECS participants were duly invited to join
Merlin via individual e-mail messages and each was sent a username and a password with
a link to Merlin. The following was a typical individualised e-mail invite (bold face to
highlight important information):

> I hope you are well and ready for work after the Eid holiday. Here is your
> **username and password to log onto Merlin**, the Virtual Learning Environment
> which will enable you to continue learning online as some of you did on the
> Yahoo group la-tefl. When you log on, click **'Internet CALL to Libya via
> Merlin'**, the name of our Merlin group.
>
> The Quick Reference Guide (which was distributed to all FLI teachers) will
> help you to navigate round Merlin. Alternatively (useful for non-FLI
> teachers), on each screen you can click on HELP (top right-hand corner) for
> more context-specific information, or click on FAQ (frequently asked
> questions) next to HELP. You can also take an **online tour of Merlin** on
> http://www.hull.ac.uk/elearning/merlin/wim-logon.html
>
> On Merlin, we will start by looking at The Nature of Online Learning, which is
> **Unit 1** in **Pathway**. After reading the material do the **online task**. After
> submitting your task, you can **post a comment** on another task response sent
> by a colleague and/or initiate a new discussion in **Exchange**.
>
> **Your user name:………… Your password:……………**

> Do not hesitate to e-mail me should you have any query either via Merlin's
> Mail Box or my private e-mail at texre2@nottingham.ac.uk. The Merlin team
> are also ready to answer further technical queries on merlin@hull.ac.uk. (15-21
> November 2004)

When members log on to the Merlin group, the first screen they see is the Notice Board

(NB), which is used to display up-to-date messages and information by the instructor,

technical support and system administrators. As well as displaying new messages, The NB

also links to an Options page where password, geographical location and e-mail address

changes can be made. To the left of the NB, is a Toolbar, which provides access to the

component parts of the VLE (Mailbox, Exchange, Pathway, Portfolio, and Resource Centre).

6.3.3 Online socialization:

To support online socialisation as in stage 2 of Salmon's (2002a) model, participants were

requested to post their personal profiles, which group members could view by clicking

Who's Who?

> Why don't you send your profile so that you get to know each other better?
> Give a brief introduction to yourself and your teaching experience. You may
> also include your wishes and aspirations for the New Year too. To access your
> profile page, click on 'Go To' box (top) then 'Edit My Who's Who Page'.
> (27 November 2004)

In response to the profile request, six participants (four of whom were CS teachers) sent in

their personal profiles within a few days of the request. The profiles are not included in the

data to suppress participants' identities.

6.3.4 Online task procedure:

The online task response procedure was adapted from the OET course, as outlined in the

Case Study. Participants were requested to read the online material in Pathway units,

respond to a set task at the end of each unit, and then go to Merlin's discussion board

(Exchange) to respond to an existing discussion or initiate a new one.

Merlin's Portfolio feature allows members to build up and submit for assessment a

collection of work produced during the course. The Portfolio facility invites submission of

Work in Progress and Submitted Work. Work in Progress can be created in draft form and

then edited over time individually or in collaboration with peers, before submission. Before

a task response is submitted, the tutor, or other Co-producers with access to the work

(selected by the user), could collaborate and give feedback. Members who can view the work (Audience) can also be selected by the user before submission.

In addition to announcing the task response procedure (below) on the NB, links and specific instructions leading on from the online material were inserted at the end of each Unit, in order to clarify procedure and support participation:

> To proceed with your task, do the following:
>
> Click Produce new work in your Portfolio box below, which takes you to your Portfolio (work done so far).
>
> Click Edit Text and start composing your answer in the white text box (or copy and paste from work in Word).
>
> When you are ready, you must click Save Changes to save your work in Merlin.
>
> Click Edit/Submit to edit or submit your work. Here, you can Add or Remove Co-producers (members to collaborate with) and Audience (members who can see your work).
>
> Click Submit Work. This will make your task response available for me to comment on.
>
> Don't forget to visit Exchange to post a contribution. You can either Reply to existing discussions or create a New Discussion   (4 December 2004).

6.3.5 Task submission problems:

One of the initial problems experienced with Merlin was the clarity of the task submission procedure. Tasks had to be saved (Save Changes), i.e. uploaded into Merlin's server, before submitting (Submit Work), but this was not clear, for usually, clicking 'submit' on other online applications sends a page across. The word 'changes' in step (3) of the task response procedure, above, was also felt to be ambiguous. As P3 (participant number) commented, "*the procedure of task submission on Merlin was a bit complicated for me*".

Hitting Submit without saving work, as in the case of P3, created a blank submission. After a repeat attempt, P3 gave up and decided to withdraw. The problem was identified during week 3 of the course and changes were made to task procedure instructions by including step 3 above. Subsequently, Merlin's technical support team were advised to incorporate one single tab for submission. The advice was acknowledged.

6.3.6 Online task responses:

The online tasks corresponded to the reading material in Pathway units 1-8. At the end of

each unit, a task was set along with appropriate response procedures.

Responding to Task 1 (Unit 1) about the viability of online learning in Libya and the

possible obstacles teachers may face, P1 posted the following message (As in the CS,

participants' responses are unedited):

> *Some of the impediments to the use of the internet do apply to me,*
> *and these are family commitments, no spare time, occasional*
> *difficulties in internet access, and slightly high internet cost. The*
> *unavilability of the internet in the teaching institutes in Libya is one of*
> *the major impediments to use of the internet as a teaching tool for the*
> *teacher to use for his/her classes or for the teacher's self-development.*
> *I presume that if this teaching tool had been available at schools, at*
> *least some teachers would have used it and the others would have*
> *followed suit (P1, 5 Dec 2004).*

Here, P1 identified relevant obstacles, such as family commitments, lack of spare time and

difficulties in Internet access and cost, but the main concern seems to be the lack of

institutionalised access so teachers would not have to worry about cost or finding spare

time outside school hours. It is worth noting that P1 refers to applications in both aspects

of Internet-based learning: professional development and Internet-based ELT.

In Task 2 (Unit 2), participants were asked to rank a list of advantages of online learning,

then briefly justify their ranking. Again, this was P1's response:

> *Having read the task of Ranking Advantage of Online Learning, The*
> *following ranking is done to the order of importance to me.*
> *1- Flexibility and convenience*
> *2- Accessibility*
> *3- The wealth of the Internet*
> *4- Constant access to instruction*
> *5- Multi-sensory learning*
> *6- Online collaboration*
> *7- Blended learning*
> *8- Empowerment*
>
> *The reason why number 1 is my first choice in the ranking is that in*
> *online education there is no fixed timetable for learning as one can*
> *work and learn at any time or place. Learners have the added*
> *advantage of flexible studying at their own pace and at times suitable*
> *to their private life styles. Online learning could be more beneficial to*
> *other individuals who are less sociable or introverts by nature, and to*
> *those who experienced less success in traditional situations. Moreover,*
> *online learning provides ample opportunities for the usually timid*
> *learners to participate more actively in online discussion in rather safer*

> *environments (less pressure) than f2f situations (P1, 15 December*
> *2004).*

Flexible learning ranked the highest for P1, which reflects the important role of the Internet

in providing flexible access to knowledge. However, P1 appeared to copy his justification

from the online material in Unit 2: ' Learners have the added advantage of…'. Such

reproductive learning, as opposed to critical or reflective learning which often emerge from

a learners' own construction of knowledge, does not constitute development, of course. At

this stage, however, encouraging teacher participation was more critical and no comment

was made.

Task 4 of Unit 4 was about ways in which the Internet can be used as a potential option for

enhancing language development for NNESTs:

> *How can the Internet enhance language skills for you as a non-native speaker*
> *teacher? And to what extent, compared with conventional means of*
> *development such as textbooks? Think of a language skill you need to improve*
> *on and an example of an online activity that can help you achieve this.*

P2 responded to this task by raising the issue of portability of textbooks compared with PCs

and gave a useful example of Internet-based language development:

> *I prefer to use textbook because I can take it with me everywhere in*
> *class and outside, but sometimes internet is quick to use. You can find*
> *information quickly by internet. For example to look for authentic*
> *language use by real people is good to improve vocabulary and*
> *listening. The website videonation on BBC is very good example (P2, 26*
> *Dec 2004).*

I responded by praising P3 for his contribution noting that, compared with textbooks, a

laptop resolves the problem of transportability. I also agreed that Videonation provides

good examples of authentic language, but I noted that the inclusion of a web link may

have been more helpful to the group.

Before submission, P1, P2 and P3 selected the audience who could view their task

responses, but no selection of co-producers (members who can edit and provide feedback

about the work) was made P1 and P2. Only P3, who had a failed task submission attempt

(due to confusion with task procedure), selected co-producers. While selecting audience to

view task responses shows a desire (by these participants) to associate with a bonded

group, not selecting co-producers suggests a turning away from, or unacquaintance with,

online collaboration. In all, only three task responses were made as a result of 26 hits.

6.3.7 Online discussion response:

Unlike task responses, contributions to discussion comments in Exchange can be seen by

the whole group and no selection of audience is available. Initially, participants were

invited to start off their discussion topics in Exchange based on the reading material in the

Pathway units 1 to 8. Having received no response from participants up until 13 Dec

(week 4), eight messages were posted to Exchange (Merlin's discussion board) by me to

initiate discussion and stimulate participants to comment. An additional discussion

message about Merlin's learning experience was also posted to elicit teachers' reactions to

the use of Merlin as an online learning platform.

Responses to the online discussion messages were scarce despite the number of hits

(participants who had actually read the messages) tracked by Merlin. In all, eleven

different participants had read the Exchange messages, but only one comment was

received by P1 in response to discussion 5 (Dave's ESL Café):

> *Hello, I hope that you are alright. First of all it's a plaesure for me to be*
> *involved in your Ph.D. study/program.*
> *Well, I went through unit 2:ELT gateways and I surfed some of the*
> *wedsites listed such as developing teachers which is very informative*
> *and interesting however I have found Dave's ESL Cafe' particularly*
> *interesting, recourceful and varied. The amount of information is just*
> *vast. For example the part called stuff for teachers is a very handy tool*
> *for teachers. At the touch of a button/key you can select whichever*
> *item is of interest to you (e.g. grammar, games, speaking ...etc.) print*
> *it out and use it as resource material for your calss or just just to be*
> *updated with new materials for teachers. All in all the internet is an*
> *extremely useful tool that neither teachers nor students can't do*
> *without. (P1, 19 Dec 2004)*

My reply to P1's comment was encouraging and I probed for further comments on

applications to his own teaching contexts:

> *Thank you [P1's first name] for contributing to discussion. I am glad*
> *you found 'stuff for teachers' helpful. Are you planning to use grammar*
> *games or speaking resources for your teaching? Was the stuff helpful*
> *for your language development? Would you say you gained more*
> *knowledge that is particularly relevant to your professional teaching*
> *context? (19 Dec 2004).*

There was no further response.

6.3.8 Tracking and follow up:

Throughout the 10-week access period, 32 out of 60 participants logged on to Merlin, with a total number of 74 log ons and 37 hits (the number of times tasks or discussions are accessed). Merlin's online tracking facility identified those participants who logged on and whether any online activity was carried out, including the passive reading of Pathway material or Exchange comments. A total of 26 hits were recorded in Pathway but only 3 task responses were made (11.5% response rate). With respect to discussions in Exchange, they had been accessed 11 times, but only one contribution was received (9.1% response rate).

Having identified 'lurkers', further encouraging e-mails were sent via Merlin's mailbox, which automatically sent alert messages to participants' private e-mails. This supports the idea that a clear demarcation of stages in online development is impractical, for up to week 8 in the course, 'access and motivation' (Stage 1) was being carried out. Theoretically, the nature of discrete development stages may still be a valid concept, but as pointed out in the critique of Salmon's (2002a) model, individual learners are more likely to pass through them at different rates.

On enquiring of the eLearning Team at the University of Hull whether mail notification via Merlin could be turned off by users, it was found that '*they can indeed and there is nothing that can be done about it*'. This meant that Merlin's mail notification facility was practically ineffective, since it could be disabled by users at any time. To compensate for this shortcoming, targeted e-mail messages were sent to participants' personal e-mails and to the Yahoo Group, as follows:

1. YG reminder to CS invitees who had not logged on at all:

> Dear all,
> During the f2f interviews many of you have expressed concern with not just
> having difficulties with Internet access, but more so with not having the time
> to sit in front of a screen for even an hour! While I appreciate all the
> commitments that you have, whether family or work, I think if one desires to
> achieve success, one will apply extra effort and make time for it.
>
> The Internet is increasingly becoming one of the major players in professional
> development and you don't have to enrol or be invited on a course to use it. I
> for one taught myself how to use the Internet; you learn as you go along, once

you have the will power. As long as you know the language (which you do) and know where to find help when you need it, with a little common sense, you are bound to succeed.

As professional language teachers, all you need to know is a reasonable collection of EFL related websites and resources (save in Favourites) which you can adapt to your teaching if need be, or simply to develop your own knowledge in teaching methodology for example. Getting to Know such websites doesn't take long; in fact some gateways (sites leading to other sites) such as Dave's ESL Café at http://www.eslcafe.com is all you need.

Log onto Merlin now with your user name and password (already e-mailed to you) and join the Libyan EFL teachers' online community. (29 Nov 2004).

Other forms of follow up were as follows:

2. Individual messages to lurkers who logged on but did nothing:

I hope you're well. I note from Merlin's group record that you've managed to log on OK. I hope you found the experience enjoyable. I draw your attention to the **Notice Board** (the first screen you see in Merlin), which has further details of how to proceed.

Also I'd like to invite you to post your comments at **Exchange**, where you have a chance to voice your opinion, or start a new discussion. Why not have a go! (30 Nov 2004).

3. Following up unfinished or un-submitted work. This message was sent to P3 to keep up motivation (Emotional support), after a failed submission attempt (blank submission):

I hope you haven't given up on your first task in Merlin!, you only have one further step to take, and that's to Save Changes before you Submit your task. Why not have another go and let me know if you have any problems. Good luck! (10 Dec 2004).

4. Several long distance phone calls were also made to personally encourage some ECS teachers to log on and/or post a contribution.

6.3.9 Low-level responses:

Despite tracking of lurkers and regular reminders, there was no increase in response. In all, three task responses (as above) and one blank submission were made. However, non task-based messages involving low-level responses were received in the form of several e-mail greetings sent to me through Merlin's mail box. Also, personal profiles were sent upon request (online socialisation) to Merlin's Who's Who for the whole group to view.

SHIBO (CS participant) for example, sent me this New Year message:

> *dear sir, deeply sorry of my being late. pls do forgive me. However first*
> *a happy new year for u in especial and to the family. sir I was so busy,*
> *but beileve me I do enjoy the matter [course] (SHIBO, 4 Jan 2005).*

While I greeted SHIBO, I urged him to get on with the tasks and remind other teachers at

FLI (CS site) to do so. No further response was received:

> Thank you SHIBO for your message. I am glad you finally managed to log on! I
> hope you and our dear respected colleagues could join Merlin soon. There are
> 8 units of short online readings, each followed by a task. Remember, there
> isn't much time left. Log on and read Notice 1 for further instructions. Pass
> my regards to all. (4 Jan 2005).

ANGI (CS participant) sent this apologetic message, but no response was made:

> *realy I'm so sory. Now I can do what we've done [learnt] together in*
> *the course (ANGI, 6 January 2005).*

In replying to ANGI, I took the opportunity to encourage HIDI and DOLLY, who had logged

on but not responded to tasks or discussions:

> Hello ANGI,
> I am glad you, HIDI (Good to see your profile HIDI) and DOLLY have
> managed to log on. Now, you and other teachers at FLI (who should take the
> lead) can actually try distance online learning. Start by going to Pathway, read
> the units and reply to the tasks at the end. Also try responding to discussions
> in Exchange. I have added a discussion about your online learning experience
> on Merlin. Pass my regards to all teachers and staff at FLI. Happy New Year
> to all! (6 Jan. 2005).

It seemed that, despite all the information on the NB and Pathways, ANGI was still unclear

about the task procedure. This was her reply:

> *pls Dr .Reda I need ur help to do the tasks so pls send me the steps. Or*
> *try to send some things I can do. Realy I want to help u and I'm so*
> *sorry about this, again just tell me what should I do. Thank u (ANGI, 9*
> *January 2005).*

At this stage (supposedly a knowledge construction stage), this message reflects a lack of

competency to locate and follow instructions. To support ANGI, I posted full details of task

instructions again and asked her to print them out and display in FLI's Internet room:

> Hello ANGI,
> To get an idea of the task response procedure read **Notice 1** on the Notice
> Board, which is the first thing you see when you log on to Merlin. I have put a
> note at the top to remind everyone. I repeat this for you below: [replicate of
> online task procedure].

> Please remind other teachers to do the same. I suggest that you print out
> this e-mail and display it at the Internet room. They can make copies of it
> should they want to work from an Internet café.
>
> Meanwhile, do not hesitate to mail me should you have any query via Merlin or
> on texre2@nottingham.ac.uk. (10 Jan 2005).

Unfortunately, no further response was received.

Non-task based online activities, such as greetings and profile submission, must have been perceived by ECS participants as low-level tasks. While this demonstrates some kind of responsiveness by participants, it did not commit them to higher-order levels of cognition, such as knowledge construction, which involve reflective and/or critical thinking. That is, according to Salmon's model, participants did not react to scaffolded instruction beyond stages one and two: 'access and motivation' and 'online socialisation'. Apart from the three participants who responded to 'information exchange' tasks, moving up to 'knowledge construction' or 'development' seemed to be out of reach for these ECS teachers who logged on and accessed the material. Were they insufficiently motivated or was the material too difficult for them? Questions concerning the causes of low online participation will be discussed in the next section.

6.4 Discussion of ECS data:

Before discussing participation by ECS members, I would like to reflect on the Merlin experience from my point of view as an online tutor, thus pointing out system shortcomings which may have influenced contribution.

6.4.1 My reflections on Merlin:

As noted earlier, Merlin's mail box had a notification facility through which participants could be notified of Merlin messages via their private e-mail accounts. However, participants could access this facility through Merlin tools and irreversibly disable notification, which undermines Merlin's notification facility.

Unlike NBs on other online conferencing forums, such as First Class for example, Merlin did not provide links to various notices. New notices had to be inserted on top of old ones,

and users scrolled down the page to check for new messages, which is not very user

friendly. This query was posted to Merlin's technical support:

> What if I want to keep an old notice (such as the Welcome message) and post
> a new one or ones? Currently there is no option to do this. When I used First
> Class, I recall that old tutor messages were accessible (via links) throughout
> the course. (25 Nov. 2004).

In reply, it was suggested that I use different colours for each new message. Although this

resolved the issue of old notices, the problem of tedious scrolling and the time taken to

download whole notices, rather than discrete links, remained.

For an online tutor, the main concern is making sure messages get across to recipients,

and are not just sent across. Unlike f2f communication, sending online messages means

they have been sent but not necessarily read and/ or understood. While Merlin, as a VLE,

provided a way of knowing if messages or instructions had been read and by whom, an

instructor could not require messages to be read once posted, let alone solicit a response.

Moreover, participants had the option to turn off the e-mail notification facility in Merlin's

mailbox.

6.4.2 Low online participation:

As summarised in Table 6.2, teachers' online participation in tasks and discussions was

very low. The response rates are measured with respect to the actual number of hits

recorded, i.e. the number of times a task or discussion is accessed by participants. Despite

the extension period and the numerous reminders, participation did not increase.

Table 6.2: Summary of online task responses and comments

	Hits	Responses	Rate
Tasks	26	3	11.5%
Discussions	11	1	9.1%
Total	37	4	10.8%

Only 32 users logged on (out of 60) with 74 log ons and 37 hits in total. Only four

contributions were received: three task responses involving two participants (P1 and P2)

and one discussion reply from P1. One participant (P3) had a failed task submission

attempt and gave up.

6.4.3 Causes of low online participation:

The lack of participation in distance online learning by ECS members was a major cause for concern. As noted by the Merlin coordinator:

> *I feel you are encountering the difficulties of online learning and tutoring... and certainly reading more background information, the conditions for your teachers are far from being ideal!... perhaps as you said, you might wish to revise your expectations. (30 Nov 2004)*

Consequently, an emergent research question was: *What are the likely causes of low online participation by Libyan teachers?*

To seek answers to this emergent question two interviewing techniques were pursued: (1) long-distance semi-structured telephone interviews (ranging between ten and thirty minutes each) with local teachers in Libya; (2) focus group interviews with UK-based teachers, thus achieving triangulation of data using two independent sources.

6.4.4 Telephone interviews:

Most teachers interviewed (11; 9 males and 2 females) via long distance telephone calls claimed that the shortage of spare time was a major reason for the low online participation on Merlin. **The scarcity of spare time** for male teachers was mainly blamed on part-time teaching in private schools to compensate for low pay. Female teachers were just as preoccupied due to family commitments. When the personal and social commitments are added to teaching duties, the end result is a serious lack of spare time, energy or motivation to pursue professional development.

For two other participants, **slow Internet speeds** were offered as a reason for poor participation. They said that downloading a Merlin page took too long at times. I explained that this usually happens at peak times when lines are busy and that one could work on something else (multi-tasking) while waiting for a page to download.

For three respondents, **the cost of private Internet** access was a deterrent, since teachers had to pay for Internet connections to access the course. Even though the hourly fee is one Dinar, Internet access cost does accumulate over the length of the intervention course, a respondent complained.

Four **CS teachers** who were contacted complained that they could **no longer gain free access** to the Internet room at FLI and that they had to resort to using private cafés, but less frequently due to the scarcity of spare time out of school. A call to the local engineer revealed that subscription with the Internet providers had run out and that the FLI head had not renewed it. Earlier (Chapter 5), SHIBO had warned of such irregular access for FLI teachers.

Two interviewees pointed to the **lack of positive teacher attitudes** to development as a whole, since there was no organised in-service provision. In other words, responsibility for setting up teacher development programmes was placed on education authorities. Again (paid) time was seen as a crucial factor; if time for organised development is set by schools or education authorities, then teachers expect to be paid for it, but when they engage in development independently, no financial reward is offered.

One respondent declared that most Libyan **teachers felt apathetic about CPD** as a whole. He stated that they were perhaps accustomed to, or even content with, the current "teach and go" state of affairs and that any commitment to independent professional development would eat into their "money-making time" in private schools. Professional development was, thus, seen as a burden because public-sector teachers' pay is comparatively low, incompatible with the cost of living (see Chapter one) and, moreover, teachers are not paid for the time they might spend on professional development.

The voluntary informal nature of the intervention course was also raised by three participants. They thought that because participants were under no obligation to contribute to the programme, they could just log on to "look around" (i.e. lurk) and log off as if nothing had happened. Such teachers were not aware of Merlin's tracking facility (they were not informed) and it probably would not have made much difference had they been told. Some kind of incentive, such as a training allowance, would probably offer a more realistic motive for teachers to participate, it was suggested.

As for the level of online tasks and discussions, the interviewees who had accessed them (four) thought the **tasks needed an intellectual effort** to first read and assimilate the

material before composing an adequate response. This required time, which they claimed they did not have much of. On the other hand, engaging in the socialisation task (posting of teacher profiles) was seen as relatively easy and teachers responded to it without much preparation. The tutor greetings sent by the two CS participants (ANGI and SHIBO) were also seen as attempts to catch up with the online tasks, but again excuses were made about time and access problems.

One respondent confirmed that the **task submission procedure on Merlin** was somewhat problematic due to the Edit/Submit function and that the idea of co-producers was unclear. When I explained the concept, he suggested that due to the inexperience of Libyan teachers, more preparation time is needed to get used to online collaboration and the VLE tools.

P1 and P2, who responded to three tasks and one comment between them, admitted that they had spent some time to assimilate the tasks before composing a response. P1 realised that online flexibility to work at one's own pace and time is an advantage for non-native speakers of English, but spare time is needed in the first place to engage in such tasks. Selecting audience from a list of teachers' names to view the submitted work was considered a good idea by P1 and P2, because they felt more comfortable knowing that their writing would be seen by friends. The process of online collaboration with co-producers, however, was a new domain of experience, which teachers needed to acclimatise to and was thus avoided, it was acknowledged. P3, who had a failed task-submission attempt, was not available to comment on his experience.

Data from telephone interviews seems to suggest that low online participation was mainly due to the lack of spare time because of the many personal commitments and excessive part-time teaching by Libyan EFL teachers. However, it can be argued that while teachers had time to access the Internet for personal e-mail communication, some did not bother responding to the e-mail invites to log on to Merlin and did not make an effort to respond or even read the material in depth. The attempts by P1 and P2 can be seen to represent

the first small steps by Libyan EFL teachers to adapt to online learning, but there is a long way to go yet.

On one occasion, I happened to phone one participant during the evening while he was at a local Internet café. Even though he was checking his e-mails, I persuaded him to log onto Merlin, which happened to be the first time he had done this. I directed him to open his e-mail invite to obtain a password and, eventually, guided him through Merlin's Pathway material (downloading the page took only a minute) and then left him on the understanding that he would send a task response. That never happened. A degree of apathy coupled with low motivation may be apparent causes, but data from the focus groups seems to support the idea of being anxious about committing errors of an intellectual kind.

6.4.5 Mini-focus groups:

From the group of UK-based Libyan EFL teachers (10 males) who were part of the ECS, two mini Focus Groups (FG) were convened with three members in each. One single issue was the focus of discussion: obstacles to distance online participation on Merlin for Libyan teachers. To obtain rich data, FG members were permitted to speak in Arabic or English as they wished. The data was audio recorded and translated as applicable. Participant numbers are again used for anonymity.

For P4, the main obstacles to online participation were the **personal commitments, the short duration of the course and its timing** which, it was claimed, coincided with assignment submission deadlines:

> *I think the main reasons in my case are one: the timing of the online course was unsuitable, two: personal and family commitment and three: the course duration was too short.*

In P5's case, timing of the course was also unsuitable (for the same reasons), but the lack of spare time was the main problem:

> *Participation was low because the timing of the online course was unsuitable, but mainly because of the shortage of spare time.*

Allocation of sufficient spare time and effort to read the units and respond to online tasks was seen as a problem for UK-based participants, due to **study commitments**. From the

outset, when asked to join the online course, P5 complained about not having enough time because '*time is always a problem*', during the academic year, due to the heavy workload (assignments and ongoing background reading).

It can be said that a combination of factors including shortage of spare time and study commitments contributed to low online participation. However, P6 argued that these are superficial excuses. P6 thought that there was **a sense of carelessness about working online**, i.e. it was not taken seriously because teachers were not obliged to contribute. The general attitude, particularly of teachers in Libya, was that they already knew enough to do the job they were supposed to do, that is, teach the same class the same old lessons over and over again. There were no incentives to learn more or engage in "time-wasting" CPD when they could earn more money working overtime instead.

P6 also noted that, due to isolation from peers and tutor, it was **easy to lose interest or get distracted** by *other things* when learning online; a strong sense of self-motivation and commitment were, therefore, needed to successfully engage in and complete online tasks. P6 concluded that **online learning misses out on f2f contact**. Online learners thus need f2f contact to reinforce social bonds between them and between them and the tutor.

It was unanimously agreed that, from a cultural point of view, learners in Libya are used to having a teacher as a focal point to guide and direct learning, to provide approval and clarification when necessary and in-service teachers are no different. While learning online, however, the tutor can only track teachers' progress and stimulate development through engaging them in motivating and authentic tasks. The onus is on teachers as online participants to access, read, process and contribute to the set tasks.

It was also felt that, as products of the Libyan education system, teachers were used to formal assessment through tests and examinations, i.e. to a certain kind of pressure being applied in order to keep students on a learning track and then having to produce something at the end of the course, for which assessment marks are given. As **formative assessment was uncommon** and **the intervention course was voluntary**, online participants felt under no obligation (other than a moral one) to participate.

P7 stressed that, in addition to time constraints, two other pedagogic factors contributed to low online participation: (1) Libyan **teachers were unfamiliar with online learning that relies on self-directed study** without the physical presence of a tutor and that they needed f2f support not only to socialise with other group members, but also to obtain tutor reassurance, which is often spontaneous and concise, regarding progress; (2) **A lack of teacher confidence** to carry out the tasks and discussions **due to relatively poor standards of written English**.

Upon re-inspecting hard copies of the set online material (units, tasks and discussions), respondents agreed that the tasks and discussions might present some comprehension problems, but were appropriate for the average Libyan teacher. However, the problem for participants was **the prospect of having to apply intellectual effort and time in order to compose an appropriate response**. P7 noted that

> teachers' experience in online communication is not high enough to
> participate in it. I think the tasks are a bit difficult [high-level] and
> some teachers don't have enough confidence they can do [engage in]
> online discussion.

P7 confirmed what had been said in the telephone interviews about teachers' **perception of online tasks and discussions as high-level**. However, with regards to responses to teacher profiles (low-level tasks), P7 stressed that

> it's a chance for them [teachers] to prove they can do something
> online. Everybody can write something about himself. This is an easy
> thing [low-level] to do, for them, I think.

Therefore, the online tasks associated with Stages 3 to 5 (Salmon's model) were perceived as high-level, from an intellectual point of view, while the profile task (Stage 2) was seen as low-level. P8, with whom other FG members agreed, emphasised that since the tasks and discussions were perceived as high-level, **more time and effort were needed to understand (and perhaps translate) the material before attempting to respond**. P6 pointed out that in addition to some language deficiency rooted in the cancellation, in 1986, of the English syllabus for six years (see Chapter 1), a further intellectual effort was required to search for and compose an acceptable response commensurate with a teacher's prestigious status in the eyes of colleagues.

Although the mini-group participants did not contribute to online tasks or discussion, they thought that selecting audience to view submitted work does not necessarily improve participation, because work could be sent to the online tutor (with no audience); it is in collaborating with co-producers (which was avoided) prior to submission that benefit can be gained. It was echoed that, in order to maximise the online experience, teachers need f2f support to practice online interaction and engage in simple task submission before starting an online course.

Since **learning involved an unbonded ECS group** most of whom were not familiar with each other, participating in discussion involved a greater burden:

> *Teachers find themselves faced with some difficult [high-level]*
> *discussion tasks which need time and [intellectual] effort to do, and if*
> *they send anything without preparing, it's not good for them [their*
> *prestige] in front of other teachers, specially if they don't know them*
> *[unbonded group], because they will know who is the sender (P7).*

When composing task responses, which by default are posted to the tutor, participants could choose the members with whom to collaborate (co-producers). They could also select the audience who can view their final submission, thus creating a bonded group. It is in the discussion board where comments are viewed by the whole group that an unbonded group was perceived.

It can thus be hypothesised that low online contribution was not due to fear of committing linguistic errors, for teachers, as P9 pointed out, could prepare error-free responses using adequate references and/or Word's 'spelling and grammar' check, as much as **a fear of posting intellectually insignificant or poor responses** which, in the case of discussion comments, would be read by the whole group. For a more detailed discussion, see sub-section 7.3.1.4 of the Conclusion chapter on identifying intellectual-error phobia.

6.5 Synopsis of the ECS:

Despite minor linguistic errors, ECS participants engaged in non task-based contributions, such as greetings (learner-tutor) and group-based personal profiles (learner-learner), quite easily. It seems that because such low-level socialisation tasks did not require an

intellectual effort, i.e. they were not the subject to any kind of cognitive assessment or scrutiny, they were perceived as less threatening.

In addition to serious time constraints brought about by excessive part-time teaching (to supplement teachers' low income), a further barrier to online participation was the prevalence of an apathetic attitude to professional development as a whole. The careless attitude of "teach and go" is most likely due to a combination of constraints, chief among them is the lack of spare time and teachers' low pay, compounded by a serious gap in INSET provision.

It seems that the core base of teachers in Libya was not exactly ready (yet) to embrace distance online learning. More to the point, they were perhaps not ready to act independently as autonomous online learners. This leaves open the option of blended learning, a model of which was applied in the CS. Traditional f2f training is still valued by Libyan teachers, but a mixed, or blended, mode of learning seems to be a viable proposition for Internet-based CPD, where an instructor can assume a more central role in the learning process and where traditional f2f contact is utilised to set goals and follow up inactive, or lurking, participants.

Online learning was not taken seriously by ECS teachers, perhaps due to the informal voluntary nature of the intervention course. In assessed teacher development programmes, finding incentives for teachers to participate is not a problem; tutors simply designate marks to task responses. However, in non-assessed or informal development, as was the case with the intervention course, learner contribution relies on the intrinsic motivation of individual teachers. Given the low teacher-pay conditions in Libya at the time of research, intellectual incentives alone, such as the sense of achievement and the desire to develop professional knowledge, do not appear to be sufficient attractions.

My expectations that Libyan teachers would readily adapt to distance online learning were perhaps unrealistic. Subconsciously thinking of my own participation in the OET course (First Class was used for online conferencing without prior training) I may have underestimated the amount of training Libyan teachers would need in using Merlin's VLE.

In addition to the poor attendance of CS teachers, time was insufficient at the end of the ECSS phase to provide adequate training. Only two CS teachers attended a Merlin demonstration; others were given copies of the Quick Reference Guide as a source of help. At the start of the ECS, participants were pointed to Merlin's online tour and the Frequently Asked Questions. In addition, participants were made aware of the context-sensitive help in Merlin, which (when used) gives access to help topics particular to the screen currently in use.

Compared with blended learning as demonstrated in the CS phase, the remoteness of online learners deprives the tutor of direct control; non-contributors can only be enticed to participate by encouraging e-mails. It is in the f2f component that participants might feel under some kind of extrinsic pressure, as they know they have to confront the tutor at the next session. This may seem to contradict the principle of self-initiated development, but because of Libyan teachers' committing errors in (distance) online learning as evidenced by the ECS phase, it seems that they need to be adequately oriented, not only to the nature of online learning and VLE tools, but to the pedagogic gains, learning possibilities and development potential of online learning through blended formats in which f2f socialisation with tutor and peers can provide sufficient support and motivation. In this sense, Libyan EFL teachers are encouraged to 'regress to progress' (Day, 1999:38) and it is, therefore, suggested that, for the Libyan context, incentivised non-voluntary blended learning paradigms can pave the way for self-directed and independent I-CPD.

In the next and concluding chapter, a blended learning support model is suggested within an integrated vision of Internet-based development. In this proposed model, Libyan teachers can benefit from independent as well as group learning, through school-based and organised INSET provision.

Chapter 7: Findings, Conclusions and Recommendations

…all research text must be seen as presenting an argument, and in doing so must make explicit certain essential components. These consist of five sorts of information that readers need access to: about the focus of the study, about the case(s) investigated, about the methods employed, about the main claims made and the evidence offered in support of them, and about the conclusions drawn (Hammersley, 1995:96)

7.1 Introduction:

In this final chapter, findings from the three phases of the study are summarised and answers to the research questions outlined in Chapter three are provided. Data from the Fact Finding (FF) phase reflect the state of conventional CPD and Internet-based CPD in Libya with respect to the three teaching sectors (public, private and petroleum). Findings from the Case Study (CS) relevant to blended learning are contrasted with those from online learning as reported in the Extended Case Study (ECS). The main barriers to online participation, an emergent research question, are then highlighted. Conclusions emerging from the study are drawn and a strategy to promote integrated Internet-based development in the Libyan context is presented. Limitations to the study and recommendations for further research are outlined. The chapter concludes with reflections on my own personal development.

7.2 Summary of findings:

The findings of the study are summarised and categorised in subheadings that reflect the research questions outlined in Chapter 3.

7.2.1 Status of INSET provision:

Although the study originally intended to research Libyan in-service public-school teachers during term time, encounters with EFL teachers during the summer holiday brought me into contact with teachers from three different sectors: the public-school sector, the private sector and the petroleum companies sector. This enriched the study and provided a way of contrasting development across these sectors. As a result, the revised version of **Q1**, which originally addressed the status quo of INSET provision for public-sector teachers, included the two other sectors. With the aid of the PAQ and subsequent personal interviews, it was possible to glean relevant INSET policies pertaining to each of the three

sectors and, in terms of teacher development practices and provision, a noteworthy

petroleum sector was identified.

Unfortunately, top-down INSET provision for the public sector is generally poor, short-term

and responsive, rather than sustainable and structured. It also relies on input from

experts based on policy directives or curricular updates, instead of teachers' needs. The

last INSET course for EFL teachers was in 2003 in response to the launch of the new

secondary syllabus and the subsequent difficulties encountered (see Chapter one).

Because private schools mostly rely on experienced public sector teachers (and

inspectors), INSET provision seems unimportant for the private sector. By attracting

experienced in-service teachers to work part-time, private schools capitalise on public

school teachers' need to improve their income and save on training outlay. However,

some inexperienced graduates who are offered teaching positions at some private schools

undergo an induction period and are encouraged to encounter different levels of students.

The INSET policy for the petroleum sector appears more structured and organised. In

addition to induction and mentoring for newcomers, which is lacking in public schools,

practising teachers take part in regular in-house courses and some are sent abroad for

further training.

With respect to **Q1a**, teachers from the three sectors were generally aware of the need to

develop their knowledge and skills. The teachers who were surveyed acknowledged that

CPD was ultimately an individual pursuit in which teachers (as professionals) are

responsible for their own development. At the same time, these teachers also believe that

education authorities (as a body responsible for schools) must provide regular training and

that, through school-based activities, teacher-initiated learning can enhance development.

Although teachers believe that CPD is important to them - and to their students'

achievement - spare time for development is scarce. Most public sector teachers spend

their spare time teaching at private schools to supplement their relatively low income

compared with those teaching exclusively in private or petroleum sectors and,

subsequently, CPD (of any form) is of low priority in their lives. Moreover, realistic

incentives for high achievers are non-existent and, eventually, even self-motivated teachers grow apathetic about commitments to CPD.

With respect to **Q1b**, teachers pursued development through a variety of means as conditions permit and according to personal motivation. Language development was seen as a way of improving classroom performance and was thus perceived as part and parcel of professional development. Accordingly, development mainly occurred on an individual rather than collaborative level.

Despite low-resourced school conditions and poor INSET provision, some self-motivated teachers pursued independent CPD through conventional means. In their own time and at their own expense, they engaged in general reading of newspapers, magazines, course books or teachers' books (when available); and listened to English broadcasts. Peer discussion was also practised but on a limited scale due to time constraints. Several teachers followed an academic route to development by enrolling on postgraduate courses, at their own expense.

The Internet's potential for development was realised by most teachers, but they believed that schools, as extensions of education authorities, should provide training for unskilled teachers, connect schools to the Internet and create opportunities for I-CPD.

> *Schools should provide Internet facilities at the teachers' place of work so the Internet is within easy reach, which should be free of charge or at a very low hourly rate. Having gained Internet access at schools, teachers should be urged to participate in online learning and, if necessary, join ICT courses to improve their computer and Internet skills. Courses like this one [the intervention course] are very important for teachers in developing and enhancing their level in the world of language teaching (Teacher C: FF).*

7.2.2 Internet skills and attitudes:

Research question **Q2** concerns the state of readiness of Libyan EFL teachers to adopt I-CPD, their present Internet skills, attitudes and usage. It was found that teachers' self-assessed Internet skills (**Q2a**) averaged 3.25 on a 5-point scale (intermediate ability). At first glance, this rating appears to be encouraging, but due to an apparent over-rating of skills by certain (overconfident) teachers, such assessment levels can only be regarded as

a rough guide, for in actual fact CS data revealed basic weaknesses in both computer skills and Internet skills (see sub-section 5.5.6).

For the time being, as evidenced by the FF data, improving Internet skills for motivated in-service teachers remains more of an individual pursuit than through organised INSET or school-based training. Even though computers can be found at most secondary schools for teaching ICT, Internet facilities are missing, let alone Internet-skills training.

Private schools that have Internet connections tend to be commercially oriented. That is, computers and Internet facilities are used to generate income through private courses and line rental; thus, Internet access for teachers at private schools is limited to personal use rather than organised development.

In the petroleum sector, more emphasis on technical skills training is evident. Teachers receive Internet training and gain free Internet access to on-site Internet facilities. Although the Internet is not connected to language classrooms, teachers take pupils to the Internet room for Internet-based learning as part of their language course.

Libyan teachers' attitudes (**Q2b**) to I-CPD averaged 4.47 on a 6-point scale, approximating to Agree. A similar value of 4.42 (Agree) reflected the mean of I-LD attitude. This shows that Individual teachers, from all three sectors in the Libyan context, are well aware of the significance of I-CPD and the impact of flexible Internet access in sustaining professional development and bridging the INSET gap in under-resourced conditions. The problem is finding time to commit themselves to development. In general, public sector teachers, who are more at risk of not receiving training, think it is the responsibility of the education authorities to organise training provision, including computer and Internet-skills, for that is the norm in a centralised education system such as the one in Libya.

Although most teachers interviewed during the FF phase expressed willingness to participate in the online course, the ECS revealed that distance online learning was not taken seriously, mainly because participants were not obliged to do so. The general attitude of teachers was that they already knew enough to do the job they were supposed to do: teach the same class the same old lessons over and over again and get paid. They

felt there were no incentives to engage in CPD of any kind when they could earn more money (roughly four times as much per month) working overtime instead.

Teachers' mean usage of the Internet (**Q2c**) was 2.83 (approximating to Sometimes) on a 5-point Likert scale. However, the mean I-LD usage was marginally higher (2.92) compared with I-CPD usage (2.74). This result reflects the fact that Libyan EFL teachers, as non-native speakers of English, attach more value to their language development activities which are perceived to translate into better classroom performance and improved professional competence. Two types of I-LD users emerged: a type one and a type two user. A type one user's explicit objective is to advance language skills, but with implicit I-ELT objectives; a type two user overtly searches for I-ELT material while improving language skills. Such knowledge can help educators to support the particular needs of individual teachers and their learning preference.

Four types of I-ELT transpired within low-resourced contexts: (1) Internet-supported classrooms, in which ELT material could be downloaded and printed out to support teaching; (2) Internet-based classrooms, which were applicable to petroleum sector institutions wired to live Internet; (3) Remote Internet-based classrooms, where some teachers were able to engage students remotely in Internet cafés; (4) WELL, where teachers encouraged students to access the Internet for language learning.

7.2.3 Supporting Internet-based development:

Research question **Q3** focused on means of supporting Libyan EFL teachers' independent I-CPD under the prevailing low-tech school conditions. In addition to enhancing CS teachers' Internet skills, using the Internet for learning and teaching, and creating opportunities to engage with online learning platforms, the I-CPD intervention course provided a constructive platform for delivering appropriate scaffolding for teachers to develop through progressive stages: f2f learning (Part 1), blended learning (Part 2) and online learning (Part 3).

Part one of the intervention course was presented in Power Point and delivered to CS teachers to support new Internet skills through task support. Part two used a Yahoo Group

(YG) as an online discussion platform to support teachers' interaction with, and response to, using the Web for language learning (WELL) and for supporting teaching activities (I-ELT). Part three used a web-hosted VLE (Merlin) to engage ECS participants in distance online learning.

7.2.3.1 Supporting Internet skills:

To support teachers' Internet skills (**Q3a**), a CS group was created. The bounded system inherent in the nature of the CS (see sub-section 3.4.1 of the Research Design chapter) presented some drawbacks in that members were of mixed abilities and it was assumed that participants who had expressed interest and subsequently volunteered to join the intervention course possessed basic ICT skills. Through f2f task-based observation, it emerged that some CS participants lacked basic computer skills, such as transferring files or using Copy and Paste in Word and this hindered their potential for progress.

Even though individual instructional support was provided to low-skilled teachers, this was insufficient in the short space of time within the f2f part of the course. Despite seeking additional L1 support to catch up, the withdrawal of one teacher (NURI) from Part one of the course was due to his lack of computer skills. Moreover, full support was not feasible for such a teacher to catch up with the rest of the group, who were ahead of him in tasks and activities.

The withdrawal of KATE, on the other hand, was due to her apprehension at having to work with the CS group, with whom she was not totally familiar. Despite emotional support and encouragement to communicate with me or with her friends from outside the group, she withdrew from the course.

Despite the fact that two CS teachers dropped out during Part one, the remaining members participated well in problem-based activities. McLoughlin's modified support elements (see sub-section 2.10.4), such as using e-mail, chat and instant messaging (task support) were deployed as CS teachers were engaged in Internet-based learning; there were few incidents where CS members needed further clarification on completing tasks

(instructional support); instances of collaboration, e.g. sharing information, negotiation of meaning and constructing knowledge were also evident (peer support).

Both solicited and unsolicited peer support emerged, where more experienced teachers engaged in peer supporting less skilled teachers in gaining more knowledge or skill (Vygotsky's ZPD). In the course of this, experienced peers appeared to reinforce their own learning, e.g. sending e-mail attachments (SUE and HIDI). As emphasised by Vygotsky's constructivism, 'instruction is most efficient when students engage in activities within a supportive learning environment and when they receive appropriate guidance that is mediated by tools' (Vygotsky 1978, cited in Gillani and Relan 1997: 231).

However, while scaffolding activities showed that peer scaffolding is effective, it is important for the instructor to check the correct internalisation or transformation of skills or knowledge of peer 1 (previous knowledge) before he or she is allowed to scaffold peer 2. This connects with Vygotsky's ZPD and Dodge's (1998) model of Input (ZPD-1), Transformation (scaffolding activity) and Output (ZPD+1), as discussed in Chapter 2. Moreover, CS data (SUE and DOLLY) showed that in the presence of an instructor, peer scaffolding can serve two purposes: re-conceptualisation of peer 1 knowledge or skill and scaffolding of peer 2.

7.2.3.2 Blended learning support:

Part 2 of the intervention course created a context for providing blended learning support (**Q3b**) by combining f2f and online interaction. A YG, called la-tefl, was set up as an example of a low-tech low-cost platform for online discussion that teachers themselves could easily implement for development purposes in under-resourced settings. The intention of the blended model was to demonstrate to teachers that online learning is no longer viewed with scepticism for it can be "tamed" by conventional means of learning and, rather than venturing into the unknown, the feasibility and flexibility of blending simplifies the concept of online learning and brings it closer to the minds and hearts of Libyan teachers, where online instruction is not only supported by f2f contact with tutor and peers, but can also combine paper-based material with online resources.

In using YGs, one CS member (SOLO) gained valuable experience through discussion with teachers from other countries, but he was wary of cultural diversity (see sub-section 5.5.4). SHIBO explained how he came across interesting discussions in 'School and education' groups. The real potential of online chat was realised when, by gaining access to expert knowledge, one teacher's (DOLLY's) query was answered. This encouraged other teachers (e.g. HIDI) to search through online groups and subscribe to development-orientated mailing lists.

However, the mixed levels of CS teachers' Internet skills were an obstacle to instructional scaffolding and may have also limited the transformation of learning (ZPD) for some teachers with low ICT skills. As Van Der Stuyf (2002:12) observes, while scaffolded instruction is individualised so it can benefit each learner, 'this is also the biggest disadvantage for the teacher [educator] since developing the supports and scaffolded lessons to meet the needs of each individual would be extremely time-consuming'.

One way round the individualised nature of scaffolding instruction was to foster peer scaffolding, which appeared to occur in solicited and unsolicited contexts in a socially bonded CS group, where the more experienced teachers readily demonstrated their technical skill in a constructivist learning environment. For example, while preparing for the I-ELT Project, DOLLY scaffolded HIDI in a solicited context, and then HIDI offered her own unsolicited support to SUE (sub-section 5.6.5.1).

In addition to peer scaffolding, problem-based and project-based learning were used to scaffold teachers' I-CPD in the blended CS phase. Other support strategies included conflict teaching, discovery learning, Socratic questioning, reflective thinking and instructional support. Through conflict teaching, a challenge was created for two participants (SERVO and SOLO) where they had to argue in favour of incorporating I-ELT activities through Internet-supported and Internet-based classrooms at their school.

7.2.3.3 Task involvement and learner independence:
During the blended CS phase, as Table 5.3 showed, the level of participation in task-based responses (37.5%) and in comments (12.5%) was relatively low. In general, the task

responses reflected minimum engagement with tasks, i.e. responses seemed superficial and lacked adequate depth, while comments on other tasks were more appeasing than critical and did not project critical reflection. Although CS participants had been provided with pre-designed reflective diaries to support reflective practice, they made no use of them at all (sub-section 5.5.8).

Despite task procedure being posted on the YG, some CS participants appeared to be unclear about how to respond to online tasks. It seemed that they did not bother to check the YG instructions beforehand, and those who had, did not make a printout to work with offline or offsite. It looks as if CS teachers appreciate L1 instruction, which they can solicit verbally, more than L2 written instruction typical of online environments, perhaps because the latter requires more effort to access, read and interpret. At the same time, socialisation with peers in f2f meetings, the reassurance that they had grasped the idea, and that they were progressing as well as everyone else were also appreciated. Although CS participants benefited from the flexibility of blended learning, which offered opportunities for f2f and L1 support, they seemed to lack self-direction to develop independently online, thus corresponding to 'conforming learners' (Ludwig-Hardman and Dunlap, 2003) who tend to prefer explicit and structured support.

The degree with which learner independence may have increased, due to the intervention course, could not be statistically verified, but observations suggested that most CS teachers grew more confident in using the Internet for both independent and interdependent development. Their new-found awareness of the Internet's potential for CPD positively influenced their attitudes and the newly gained technical skills scaffolded them to new zones of knowledge.

7.2.3.4. Supporting Internet-based ELT:

Participants in the CS believed in familiarising themselves with the principles and practices of Internet-based ELT, not only to advance themselves as professional teachers, but in order to support their lessons and assist pupils in utilising the Internet for language learning. Participants' perceptions of I-ELT, however, varied from the very sceptical to the

optimistic and the pragmatic. In addition to the need for updating teachers' skills and providing technical infrastructure, teachers thought that I-ELT should be introduced at public schools but gradually, starting with Internet-supported classrooms before venturing into Internet-based lessons where learning is live and interactive (the pragmatic view). For those (private and petroleum sector teachers) who practised Internet-supported classrooms in their teaching, the move to Internet-based learning was a sensible one (the optimistic view), but pupil participation was an issue of concern.

As a culmination of the blended learning phase, and in accordance with task support principles (sub-section 2.10.4.2), CS teachers were supported to take part in project-based learning by designing their own Internet-based lessons. This I-ELT Project was delivered in microteaching format and was video recorded. The project scaffolded CS teachers beyond the stage of Internet-supported classrooms and engaged them, for the first time, in preparing and delivering Internet-based lessons, i.e. utilising a live Internet connection in a classroom context (Internet lab), rather than using printouts from websites to support lesson content (Internet-supported classrooms).

DOLLY in particular made a reasonable effort to prepare an Internet-based lesson plan (Appendix M), which she delivered successfully. Her use of the BBC's listening skills resources to engage (teachers acting as) pupils shows that, with adequate skills training and support, Libyan EFL teachers have the potential to implement classroom-based ELT, despite the low-resourced school conditions.

Following Part two of the intervention course, positive shifts in teacher attitudes were noted in favour of three aspects of Internet-based learning: professional development (CPD), language development (LD) and ELT. On a 10-point numerical scale, CS teachers self-rated shifts in attitudes as a result of the intervention course. An average increase of six numerical points was attained in the three aspects of Internet-based development: I-CPD, I-LD and I-ELT.

7.2.4 Supporting online learning:

In low-tech school conditions lacking ICT, providing a VLE solution to support a fully-fledged and distance online learning (**Q3c**) is almost impossible. However, Merlin's web-hosted solution (see sub-section 3.3.3) proved convenient and practicable. The Merlin web-based VLE required no infrastructure cost, but a rental fee was involved which was waived by the e-learning team at the University of Hull. It must be noted, however, that even though I was granted access to Merlin from June 2004, ECS members' access did not commence until I had completed Phases one and two of the research, at which point CS members were ready to join in. Accordingly, ECS teachers' time on Merlin lasted for 10 weeks from mid-November till the end of January 2005. Throughout the 10-week access period to Merlin, only 32 out of 60 online participants logged on. The total number of log-ons was 74 with 37 hits. Only two participants responded to tasks and discussions; another had a failed attempt. In all, three task responses and one discussion comment were posted and, despite reminders, no further online responses were made.

However, while the response level to online task-based activities was low, non task-based activities, such as greetings and profiles, did take place. This seems to indicate that participants who did not respond to PBL avoided activities which required higher-order levels of cognition e.g. reflective or critical thinking. That is, according to Salmon's (2002a) 5-stage model, participants did not react to scaffolded instruction beyond the Motivation and Socialisation stages; moving up to Information exchange, Knowledge construction or Development entails reflecting on personal development and applying it to one's own teaching context (see sub-section 2.7.3).

7.2.4.1 Causes of low online participation:

With future Internet-based development initiatives for EFL teachers in Libya (or other countries with similar contexts) in mind, the modified **Q3d** explored the causes of low online participation by the ECS members. In contrast with the blended part of the intervention course, CS teachers progressed fairly well through Salmon's (2002a) five stages of online development; contributions could be solicited more effectively during f2f

contact, for participants knew they would have to explain their lack of participation (to the tutor) in subsequent meetings, even though the course was voluntary. The saying 'out of sight, out of mind' seemed to apply to the ECS participants who, in the absence of a tutor, avoided active participation in online activities. Their behaviour conformed to those pedagogic concerns associated with transferring online, described in section 2.8 of the Review.

In order to answer **Q3e**, a numerical rating attitude test was conducted at the end of the CS Phase. Five teachers' attitudes towards I-CPD, I-LD and I-ELT improved significantly. One teacher's attitude to I-CPD moved up 8 numerical points; for I-LD 7 points; and for I-ELT 8 points. Another teacher's attitude to I-CPD shifted up 3 points; a similar shift for I-LD; up 3 points for I-ELT. An average increase in teacher attitudes of 6 numerical points in I-CPD, I-LD and I-ELT was attained as a result of providing Internet-based support during the intervention course.

7.3 Conclusions:

Having presented a summary of the findings which gave answers to the research questions set out in Chapter three, the conclusions of the study are discussed under three main categories: developing theory, developing practice and developing policy.

7.3.1 Developing theory

7.3.1.1 Internet-based constructivist support:

Consideration of constructivist Internet-based support theory, described in Chapter two, led to the construction of a multi-dimensional support model that was synthesised from relevant theoretical principles (see sub-section 2.10.5 and Figure 2.7). Using Salmon's (2002a) five-stage model as a basic framework, the multi-dimensional support model incorporates Vygotsky's concept of ZPD, McLoughlin's (2002) modified support elements (instructional, task and peer support, Dodge's (1998) notions of input, transformation (ZPD) and output stages, and Applebee and Langer's (1983) concepts of horizontal and vertical scaffolding, to which emotional and procedural scaffolding were added.

The objective of the model is to provide pedagogic constructivist support for the development of novice teachers in Internet-based environments. The model can be applied to:

a) blended CPD (see phase two of the research) where teachers interact through an appropriate progressive mix of Internet-based technologies and f2f meetings as required (Pincas, 2000; Graham, 2005; Stockley, 2006a);

b) online CPD (see phase three of the research) where participants are engaged in asynchronous discussion separated by distance and/or time (Clark, 2000).

7.3.1.2 Supporting blended learning:

As a result of teachers' responses to multi-dimensional support in phase two of the research (CS) and in comparison with the ECS phase, the data suggests that blended learning constitutes a positive experience to support novice Libyan teachers' I-CPD in low-skilled and low-resourced environments and is thus more appropriate and productive than distance online learning. The study demonstrates that, by employing constructivist multi-dimensional support, discussed in sub-section 2.10.5, blended I-CPD seems to:

- Offer teachers the chance to utilise f2f meetings to bridge online instruction gaps, socialise with peers and strengthen group bonding, and engage in peer scaffolding in solicited and unsolicited contexts (see section 2.9 of the Review). Constructivist support assisted with social cohesion is thought to have encouraged CS members to overcome *intellectual-error phobia* (ie-phobia for short) as I chose to call it and readily interact online via the YG to respond to high-level tasks, although in a limited way. Compare CS task responses in Table 5.3 with ECS responses in Table 6.2.

- Enable the instructor to utilise f2f sessions to offer individualised instructional or emotional support to encourage individuals who experience particular academic, technical or personal difficulties. Timely emotional support is particularly critical for timid users who are fearful of group-based communication (see Kate's case in the CS).

- Provide teachers in f2f sessions with opportunities to practise aspects of teaching methodology and relate to theoretical principles discussed online. The I-ELT project

(sub-section 4.6.5) was a good example of this, where teachers interpreted theory into practice through microteaching, and gained constructive feedback.

- Enable the instructor to personalise scaffolding support to the particular needs, contexts and pace of participants, e.g. vertical (move to higher levels of cognition), horizontal (give further explanation or instruction), emotional (offer encouragement, enlist interest, promote sense of ownership, etc.) peer (solicited, unsolicited), and L1 support. The use of participants' first language can assist instructional support for NNEST learners in order to minimise anxiety; Nuri's dependence on L1 is a case in point (see sub-section 5.5.1).

- Facilitate practice in using asynchronous communication in a progressive manner with the help of an instructor and peers within unthreatening environments before interacting independently online. As explained in Table 7.2, online orientation can be designed to advance from simple real-time chat to e-mail to online discussion.

- Support the organisation of f2f induction where participants can practise using the VLE tools and facilities in the presence of an instructor and peers so that they gain confidence before they can contribute individually to tasks and comments online.

Given that this is the first time Libyan EFL teachers have been engaged in Internet-based CPD, the positive experience gained through the CS phase, and the subsequent positive views expressed by CS teachers on blended learning are seen as an encouraging sign for adopting blended I-CPD. That is why for the foreseeable future, it is anticipated that blended learning, rather than distance online learning, will be a significant contributor to teachers' I-CPD in Libya. This echoes my belief that Libyan NNEST teachers in general, as products of the present teacher-centred ITT system, are still dependent reproductive learners used to receptive, rather than independent, interactive and reflective learning. Accordingly, Libyan teachers will continue to need the central supportive figure of a tutor in blended contexts to facilitate and support CPD opportunities.

Moreover, embedded teacher-centred traditions, which have dominated education in Libya, favour social face-to-face interaction and teachers seem to have difficulty growing out of such deep-rooted traditions. Therefore, it is envisaged that in a blended I-CPD model, while the degree of online interaction can be progressively increased as suggested by Mason (1998), an instructor, as Pincas (2000) has pointed out, acting as manager of learning, can adopt a "semi-central" role where f2f contact is utilised to set goals, discuss task objectives, keep learners on track and follow up lurking participants.

Therefore, to create optimised I-CPD for the Libyan context, blended learning can offer a realistic solution. The present low-resourced school environments can be supported via web-based YGs, which are low-cost and low-tech. Using the constructivist multi-dimensional support model, teachers can be engaged in online discussion, sharing of experience and collaborate to construct knowledge, while maintaining social contact with instructor and peers to reinforce social bonding. On the other hand, teachers can generally gain useful feedback from more experienced peers or school inspectors, who are often too busy to call in person frequently enough (see Chapter one). At the same time, as Daly and Pachler (2007) have suggested, teachers can link with other online networks and benefit from regional and international communities of practice.

However, engaging novice in-service teachers in I-CPD activities is not without its problems. As discusses in Section 2.8 of the Review, certain pedagogic concerns or barriers can hinder successful online participation.

7.3.1.3 Barriers to online participation:

In contrast with the CS, the ECS (phase three of the research) did not produce sufficient data to reflect multi-dimensional scaffolding in all the five development stages of Salmon's (2000a) model, i.e. beyond the stages one and two. This was due to a tendency towards lower-level participation pertaining to stages one (access and motivation) and two (Online socialisation), as opposed to higher-level participation associated with stages three to five (exchange of experience, construction and development). That is, constructivist support strategies, such as the multi-dimensional model used in this study, can continue to be

applied online, but the implementation of such support does not necessarily guarantee success. Subsequently, a number of constraints or barriers to online participation have been identified.

Based on data collected from telephone interviews and mini focus groups carried out during the ECS (see sub-sections 6.6.4 and 6.6.5), it can be concluded that barriers to online learning may be categorised into five main areas: personal, contextual, pedagogic, instructional and professional.

1) Personal constraints were associated with social or family commitments which, in turn, ate into potential spare time teachers may have had. As was the case with conventional CPD (see the FF phase), teachers' time was scarce because many had to teach extra hours in private schools to supplement their low income. It is no wonder then that teachers complain of having no time in their lives to participate in online professional development - they have basic survival needs to attend to. It is noted that, at the time of writing, the pay increase package school teachers had been promised in 2005 has still not materialised.

Shortage of spare time in relation to the perceived effort needed to comprehend the online material and respond to the set tasks or discussions was part of the problem for teachers. However, despite what some teachers said, time or cost was not a critical cause of low participation or of engagement in I-CPD in general; the 37 participants who logged on to Merlin had time to do so, and some paid for it. Moreover, the ECS participants to whom I offered telephone instructions to log on to Merlin and respond to tasks did not do so. The reason given by the UK-based teachers was that the timing of the online course was unsuitable as they were preoccupied with coursework assignments with imminent deadlines.

2) The contextual constraints were particular to the Libyan context and may be divided into technical and managerial. Technical constraints relate to issues such as slow Internet speeds and cost (be it low) of private Internet access (see the FF phase), which according

to some teachers can be a burden as connection costs accumulate. The absence of school-based Internet facilities forced teachers to find spare time (which is already scarce) outside school hours to access the Internet. To this can be added educational management constraints represented by the lack of realistic financial or promotional incentives for in-service teachers to take part in CPD. In conditions characterised by poor pay, providing financial incentives through a fixed allowance or increased pay could greatly encourage teacher participation in professional development.

3) The pedagogic constraints relate to issues of pedagogy rooted in the traditional transmission system in Libya, which is teacher-centred rather than learner-centred. Such teacher-centred traditions lack a strategy for promoting independent self-regulated learning throughout the education system. Having been taught using traditional transmission models and graduated with less than adequate meta-cognitive skills, CS teachers appear to have found tasks which required higher-order levels of cognition too demanding, and an avoidance strategy was adopted.

4) Instructional constraints relate to course delivery, instructional issues and Merlin VLE. Due to time constraints, the preparation time to adequately prepare the CS participants for online learning was relatively short. It was also unfeasible to convene all ECS participants for an orientation session before the online course. For novice users to acquire online learning skills, first they need adequate induction, i.e. instructional support in f2f modes where they can receive guidance from an instructor, and gain sufficient hands-on practice before working independently. To facilitate induction support for Libyan teachers who are unfamiliar with VLEs and are used to traditional teaching, it is suggested that an additional f2f induction stage 0 is incorporated into the multi-dimensional support model (see sub-section 7.3.1.6 for a further discussion of an orientation stage).

While Merlin, as a VLE, provided a tracking facility, a way of knowing if material had been read and by whom, an instructor could not oblige participants to read messages once posted, let alone solicit a reply. Moreover, participants had the option of turning off the e-mail notification facility in Merlin's mailbox. Merlin's task submission procedure was also

felt by some participants to be ambiguous, due to confusion between the Save and the Submit tabs.

5) The professional constraints refer to teachers' lack of confidence in responding successfully to tasks or discussions and the fear of committing errors that were subsequently archived online and potentially made available to group members. This exposure to weaknesses in linguistic and/or academic knowledge, which was perceived to undermine their professional status, seems to have been a key factor in the ECS's low levels of online response. One FG respondent argued that the lack of online contribution by teachers was unlikely to be due to poor writing skills, access problems or lack of ICT skills; rather, it was their fear of committing academic-oriented errors in unbonded asynchronous contexts.

7.3.1.4 Identifying intellectual-error phobia:

As the cross-tabulation of online responses (Table 7.1) shows, ECS participants had little trouble contributing, in one way or another, through low-level non task-based communication, such as greetings or personal profiles, which did not require much reflection and had less room for error.

Table 7.1: Cross-tabulation of online activities

	Bonded group	*Unbonded group*
Low-level	Greetings: 10 (Tutor)	Profiles: 6 (ECS group)
High-level	Tasks: 3 (Selected audience)	Discussions: 1 (ECS group)

Therefore, it can be said that while ECS members posted low-level activities to bonded (tutor/ selected audience) and unbonded groups (other ECS participants), they must have felt threatened in communicating high-level responses (tasks or discussions), where the potential for committing intellectual-errors is greater.

Thus, ie-phobia is suggested here as a significant obstacle to online participation, but more so within unbonded group contexts. Whittle, Morgan and Maltby (2000:16) have identified

this "intellectual property issue" when highlighting students' concerns with exposing their thoughts and ideas to the scrutiny of the whole group. As McConnell (2000:84-85) points out, the openness of asynchronous online communication is such that participants can read all the messages posted by group members, which could be discouraging and 'might prove rather threatening', due to fear of making fools of themselves (McConnell, 2000) by posting trivial responses which are archived and hence, could be viewed by other online participants. As a result, most ECS participants adopted a task avoidance strategy pertaining to high-level tasks and archived asynchronous communication was confined to unthreatening low-level tasks.

In responding to discussion comments, the ie-phobia seems to be greater, because participants could not select the audience to view their work as in the task responses. Compared with blended learning (in Part 2 of the course), bonded CS members posted both low-level and high-level tasks; they (e.g. SOLO, SHIBO, DOLY and HIDI) also participated in online chat through Yahoo Groups. While such groups fall within the unbonded category (for CS members), synchronous messages associated with chat communication are not archived, thus the potential for ie-phobia is alleviated.

In a study by Compton (2004) bonded individuals initiated much of the interaction in online learning. Likewise, in the present study CS members, who were already familiar with each other, participated more than the other teachers, but only in low-level tasks (four out of six teacher profiles posted). However, as explained earlier, the ECS members were from different institutions (some from the UK) who were not necessarily familiar with each other. When e-mail invites were being sent to ECS participants at the end of the CS phase, I recall DOLLY (CS participant) expressing concern when she realised the extent of membership in the online group. At the time, I did not realise that such unbonded group composition might influence participation.

7.3.1.5 Revised 6-stage I-CPD support model:

Owing to the pedagogic concerns associated with online environments (discussed in section 2.8 of the Review), learning online is bound to be problematic particularly for novice in-

service teachers with relatively low Internet skills, such as those encountered during this study (see sub-section 4.3.2). Online induction/orientation allows both instructor and learners time to practise and grow familiar with the online tools and facilities.

To iron out initial "teething" problems associated with I-CPD, whether through Web-based groups or VLEs (see sub-sections 2.6.3.3 and 2.6.3.5 respectively), there should normally be a period of induction, or course piloting, for both instructor and learners to get over any difficulties or glitches in the system. Moreover, induction minimises withdrawal rates (NURI and KATE are CS examples; section 5.4), which as Edward (2003) notes, have reached 40% within his institution due to inadequate induction being the prime cause. Although an induction stage was attempted at the conclusion of the CS (see end of sub-section 5.3.3.2), due to FLI teachers' circumstances (see section 6.5), such an induction stage was regrettably incomplete.

Figure 7.1, below, demonstrates a revised version of the multi-dimensional constructivist support model (Figure 2.7) discussed in Chapter two. In this revised model, a f2f induction, or orientation session (stage 0), is incorporated, hence a 6-stage multi-dimensional I-CPD support model. Accordingly, prior to commencing an online programme, this orientation stage would give novice participants the opportunity not only to socialise and establish social cohesion that would help them communicate online at later stages, but also to explore the learning environment hands-on and try out the different VLE tools in the presence of a tutor who would potentially be able to answer queries and quell any myths about e-learning by doubters. Based on CS data (sub-section 5.5.1), it might also be appropriate to use the first language to complement instruction for novice learners in non-native contexts, thus gaining more time-on-task.
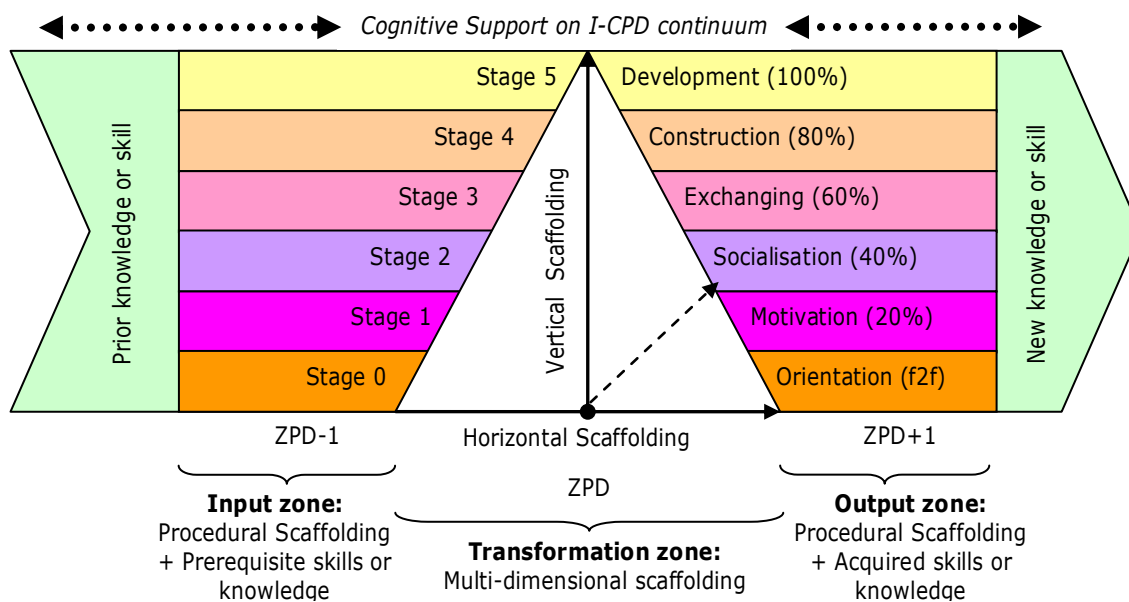
Figure 7.1: Revised multi-dimensional I-CPD support model

Accordingly, for novice Libyan EFL teachers with low ICT skills and situated within low-tech conditions, a 6-stage multi-dimensional I-CPD support model (Figure 7.1) is envisaged. This revised model, which incorporates an additional induction or orientation Stage 0, as opposed to Salmon's (2002a) five-stage model, constitutes a constructivist framework for facilitating I-CPD.

As pointed out in the Literature Review, the constructivist multi-dimensional model supports multiple aspects of novice teachers' CPD: Horizontal, Vertical, and Emotional scaffolding which occur within a transformation zone (ZPD) and are inherent in McLoughlin's (2002) modified support elements (see sub-section 2.10.4).

That is, within a ZPD, instructional, task or peer support can be Vertical (encouraging higher levels of cognition), Horizontal (offering explanation at the same cognitive level) or Emotional (encouraging participation, keeping in pursuit of task, introducing humour, and minimising stress)

The fourth dimension – Procedural Support – is particular to procedural aspects, such as task preparation, facilitating tasks or clarifying objectives. It is noted that Procedural Support is normally carried out by an instructor either before or after the ZPD. As phases two and three of the study demonstrate, Emotional Support (represented by the dashed

arrow) includes motivational and attitudinal support, which is particularly relevant to online instruction, where learner isolation and/or frustration can influence development and task progress.

Examples of the four multi-dimensional scaffolds (Horizontal, Vertical, Emotional and Procedural) can be found in the CS phase (sub-section 5.6.5.1) and for more elaborate detail, see Appendices I (Guided peer scaffolding) and K (Solicited/ unsolicited peer-scaffolding).

The centre triangle of Figure 7.1 represents a dynamic ZPD, where Horizontal, Vertical or Emotional I-CPD constructivist support takes place. Here, a learner can be scaffolded vertically, according to Salmon's (2002a) five-stage model, thus moving to higher-levels of online interaction (Stages 1-5), e.g. from socialisation to information exchange, or horizontally according to the complexity of the task, where more information or conceptual knowledge is needed to assist transformation.

It is within the Transformation zone (ZPD) that multi-dimensional scaffolding activities are enacted. The input zone, ZPD-1 (minus one) denotes pre-requisite technical or cognitive skills prior to undertaking a task; ZPD+1 (plus one) is the output zone of the scaffolding instruction depicting acquired skills or knowledge after task completion. This output zone also acts as a threshold from which to scaffold and motivate learners to achieve yet further development, e.g. having practised real-time chat, novice participants can move on to e-mail communication.

Thus, the ZPD triangle is a dynamic entity situated, as the double dotted arrows indicate, within a teachers' I-CPD continuum that evolves from ever changing situational needs and contexts, and is directed towards acquiring new knowledge and skill in order to ultimately accomplish professional competence goals. While the double dotted arrows above the ZPD triangle represent the dynamic continuity of development, they also reflect a spiral movement that developing teachers are involved in from time to time – perhaps triggered by external circumstances or a new kind of challenge – so that they appear to regress or return to an 'earlier' stage before moving on again.

The revised 6-stage multi-dimensional I-CPD support model is thus characterised by the following features:

a) It adds an orientation Stage 0 to Salmon's model. The orientation stage should preferably be compulsory while subsequent online participation is incentivised to maximise participation;

b) The model incorporates content + support (Mason, 1998), in which the proportion of online to f2f components is progressively increased as learners advance and become more independent, e.g. 20%, 40% and so on;

c) The model fosters flexible learning, where individuals are scaffolded to progress according to their own pace and personal abilities. That is, participants should not be expected to strictly comply with the model stage by stage; each learner can be supported at his/her own stage of development and can spiral forward (or backwards) according to individual needs.

As noted in Chapter two with reference to Salmon's (2002a) five-stage model, a clear demarcation of stages is almost unattainable in practical terms. While an instructor may set certain targets to be achieved by the end of each stage, some learners may take longer than others to reach those targets, and at any one time an instructor may be dealing with varying levels of attainment. This is why Internet-based support needs to be individualised and multi-dimensional. Novice learners will need one kind of support, and low achievers another. Initially, therefore, teachers could be supported emotionally first, then horizontally before attempting to move up vertically to higher levels of cognition.

7.3.1.6 Supporting online orientation:

Libyan teachers used to traditional transmission models need to be orientated to Internet-based learning environments and to independent self-study required by online learning through periods of f2f contact. For the purpose of supporting novice low-skilled teachers in low-tech environments, the orientation stage is further detailed in Table 7.2.

Table 7.2: Framework for supporting online orientation

	Bonded	*Unbonded*
Synchronous	**STEP 1** a. One-to-one chat b. Group chat	**STEP 2** c. Group chat (e.g. Yahoo or MSN)
Asynchronous	**STEP 3** d. One-to-one e-mails e. Group e-mails or mailing lists	**STEP 4** f. Familiarisation with VLE tools g. Online socialisation

As the cross-tabulation suggests, there is a need for a smooth transformation from synchronous to asynchronous communication to progressively scaffold novice teachers before they are expected to successfully participate in distant online learning on a VLE. In addition to enhancing social cohesion before beginning online interaction, an online orientation session conducted f2f would ensure that any learning difficulties, apprehension or fear of technology are resolved through tutor or peer scaffolding.

Learner apprehension about participation with respect to high-level cognitive tasks (as perceived by participants) in asynchronous communication, suggests a need for adjusting scaffolding strategies to enable ie-phobic learners to (a) become familiar with each other in f2f meetings and support group bonding before going online, (b) allow for preparation time (orientation session) in order to familiarise participants with interacting online and with the VLE tools, (c) simplify task complexity so as to encourage non-threatening participation and engage users in low-level online tasks, such as profile exchange or posting of self-initiated topics of interest before tackling more demanding higher-level reflective tasks, and (d) create opportunities to engage in synchronous unthreatening group chat where messages are not archived and, even within unbonded groups, participation can take place without ie-phobia.

Therefore, incorporating a progressive framework of online orientation as Stage 0 in the multi-dimensional support model, as proposed in Figure 7.1 and Table 7.2, will assist the social cohesion of the online group and support participants to become familiar with the online environment and, eventually, with the asynchronous nature of online communication. This echoes Tennant's (1997) argument that a bonded group is not

formed at the outset of learning; it emerges as a result of realising the relevance of group

interdependence or where the needs of the group converge.

Synchronous chat with colleagues (one-to-one or group contexts), as in step 1, is thought

to be constructive in helping novice users make a smooth transformation to

communicating with unbonded groups, such as Yahoo or MSN groups (step 2). As noted in

Chapter 5, the informal nature of online group chat can be capitalised upon and integrated

into a blended model to facilitate unthreatening environments for novice users who are

reluctant to publicly communicate their thoughts in a 'typewritten form' (McConnell,

2000:84) and, hence, errors do not constitute a potential threat to participation.

Successful participation in steps 1 and 2 will then scaffold error-conscious users to

exchange asynchronous messages (where communication is archived), such as one-to-one

or group e-mails which can also include mailing lists involving bonded groups (step 3). A

final step in the online orientation support would be to introduce users to the VLE and its

tools and engage them in (asynchronous) online discussion (step 4), which may combine

bonded and unbonded groups depending on attendance during the f2f orientation.

Having completed an orientation session, participants should be able to engage with online

discussion with less inhibition and become more confident in exchanging asynchronous

messages with bonded and unbonded groups, thus supporting independent development

and the potential for constructing their own knowledge and advancing professional

development.

Most CS participants in blended learning made the transfer from step 1 to 2 quite easily,

but it was in asynchronous contexts within the ECS (tasks and discussions) that

participation was noticeably low. Online discussion with unbonded groups was met with

more ie-phobia than task responses sent to bonded groups (selected audience), but both

tasks and discussions were perceived as high-level. To relieve ie-phobia and support

independent online interaction, Libyan NNESTs must also realise that the language used in

text-based discussion need not be totally perfect. As Salmon (2002a) observes, native

speakers themselves often communicate with each other using a mixture of written and spoken language, or 'Netspeak'.

Although there ought to be some kind of intrinsic motivation and a basic level of meta-cognitive skills to undertake independent self-directed study, tutors also have a responsibility to track teachers' progress and stimulate online interaction through meaningful motivating tasks. As teachers gain more meta-cognitive skills and become more familiar with online communication, more time for online learning can be incorporated in accordance with the content + support model (Mason, 1998:12), where the proportion of online interaction is increased as users acquire more independence, thus, establishing their own development agenda.

7.3.2 Improving teacher development practice:
7.3.2.1 Teacher skills and motivation:

To effectively exploit the potential of the Internet for professional development and render optimised and holistic I-CPD approaches possible (see Chapter two and this sub-section), ICT skills and the ability to conduct independent self-regulated, reflective and collaborative study are necessary pre-requisites. Libyan teachers also need to enhance their meta-cognitive skills, the ability to read and reflect more critically, for learners who lack these skills are unlikely to succeed online (Kearsley, 2000).

As evidenced by the performance of several motivated teachers in the FF phase, CPD of any form requires personal commitment to put aside a regular time slot, say two hours a week, at whatever cost. As Bolitho (1986) emphasises, a commitment to professional growth implies having a dedicated space to grow into, regardless of personal commitments. Hence, teachers must be sufficiently motivated to prioritise professional development in their lives and to manage time more wisely 'irrespective of external constraints (low pay, long hours, inadequate resources, etc.)' (Head and Taylor, 1997:6), of which there appear to be no shortage in the Libyan context.

7.3.2.2 Enhancing I-ELT practices:

Although fact finding data showed that Libyan EFL teachers are interested in I-ELT and that as advanced learners of English, they practised WELL to improve their own language (I-LD), concepts of I-ELT need to be further clarified from a pedagogic and technical point of view through appropriate interventions. As more public schools are being equipped with computers, they need to be connected to the Internet so that teachers can practise Internet-based classrooms to support self-paced language teaching and learning, i.e. moving beyond the stage of merely using the Internet to reproduce ELT material.

As was noted in the CS phase, remote Internet-based classrooms, where pupils are taught in an Internet café (see sub-section 4.6.5.3), is an interesting variation of Internet-based classrooms particular to the Libyan context. This phenomenon indicates a trend towards I-ELT, be it in private schools, but it needs to be further explored and enhanced in public schools contexts, since it is the same students who often seek to improve their English at private schools.

An understanding of teacher learning preferences and Internet-based learning strategies is likely to place training providers in a better position to develop appropriate activities (Terrell and Dringus, 2000) that support professional development needs for a target group of teachers. While discovery learning techniques, facilitated by the Web's hyper textuality, allow teachers the opportunity to freely navigate the Web in a non-linear fashion and construct knowledge according to own strategies or preferences, instructional support can be individually tailored to the type of learner to create tasks that support particular I-LD, I-ELT or I-CPD opportunities.

7.3.2.3 Holistic I-CPD:

The complexity of teacher development is such that professional growth can take place through a variety of resources and means. As Day (1999:2) has argued, sustained development takes place when the planning and implementation of CPD is a 'joint responsibility of teachers, schools and government' (see Interpretations of CPD in Chapter 2). Accordingly, as was discussed in Chapter two with respect to conventional CPD, holistic

development is where independent and interdependent approaches to I-CPD, which are

perceived as bottom-up forms of development, can be combined with web-based top-down

INSET. The flexibility and immediacy of Internet-based resources for EFL teachers in

under-privileged school conditions, poor INSET provision included, was a strong motive for

adopting this view and for carrying out the intervention, through which teachers' bottom-

up I-CPD was supported.

Therefore, for busy Libyan EFL teachers in under-resourced contexts, a holistic I-CPD

approach seems likely to work best. This would allow teachers to benefit from

interdependent group-based learning, i.e., top-down I-CPD and collaborative school-based

development, as well as self-directed independent I-CPD (Figure 7.2). Note that at the

centre is the I-CPD continuum depicted by the multi-dimensional support model developed

in Chapter two and later refined in the this chapter (Figure 7.1).

The rationale for a holistic I-CPD approach (Figure 7.2) is that all three sources of

development combine, separately or concurrently, to support dynamic Internet-based

development, such that:
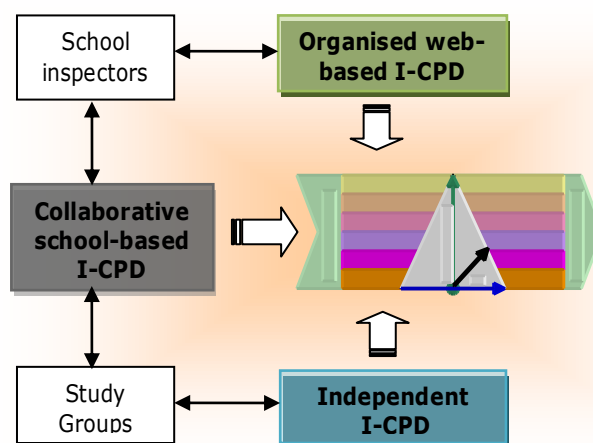
Figure 7.2: A holistic I-CPD approach

1) **Organised top-down I-CPD** provides structured web-based INSET and development

in which teachers can gain access to a set curriculum, content knowledge and useful

pedagogic knowledge based on the teacher's books that teachers seem to be short of (see

sub-section 4.5.7.4). Using a web-based group, trained teacher educators or school

inspectors can provide instructional support and feedback.

Using a dedicated website, the National Centre for Educational Planning and Training (NCEPT; see Chapter one) can also organise top-down I-CPD, or web-based INSET, which can provide access to ELT methodology and pedagogy, as well as the new national curriculum, thus resolving the problem of reported shortages in teachers' books and workbooks (see Chapter 4). At the same time, by deploying Internet-based technology as a context for providing constructivist development support, teachers can be progressively supported to engage with and participate in different Internet-based platforms (see sub-section 2.6.3).

2) **Collaborative school-based I-CPD** enables teacher-centred collaborative development to address local needs at the school level. While the themes for school-based I-CPD are based on teachers' needs, they can be regulated by input from study groups and delivered in conjunction with school inspectors. Connecting public schools to the Internet will not only enable pupils to access the Internet and take part in Internet-based learning, but will provide opportunities for teachers to engage in needed development during school hours, where time can be locally organised and supported, instead of having to find time to use Internet cafés privately.

Even though teachers can independently access online learning through Internet cafés to pursue professional (I-CPD) or language (I-LD) development, schools must support teacher learning by allocating time and space for them to articulate their development needs and foster school-based I-CPD within school timetables.

3) **Independent I-CPD** where teachers capitalise on existing Internet skills and facilities, however scarce, to enhance professional development on a personal level is encouraged, in addition to (1) and (2) above. Independent I-CPD will potentially reduce the strain on teacher training providers by teachers filling the learning gap for themselves by themselves.

7.3.2.4 Optimised I-CPD:

To realise optimised CPD, as pointed out by Pickering, Daly and Pachler (2007) in Chapter two, *shared, collaborative* and *reflective* I-CPD must be fostered and encouraged. First,

shared I-CPD means that Libyan teachers should move beyond being passive recipients of INSET directives, scarce as they may be, or the simple exchange of classroom experiences at training sessions, to being involved, as potential agents of change, in improving teaching practice. This entails empowering teachers to not only to articulate their CPD needs at individual, classroom or school levels, but also to connect teachers in networked communities of practice. The formation of the of the YG Libyan Association for Teachers of English as a Foreign Language (la-tefl) as a core element of the CS blended learning phase could be used as a stepping stone towards achieving that target. See sub-section 5.3.2.2 for more details. See also section 7.6 for further suggestions.

Second, collaborative I-CPD for Libyan teachers entails a change of attitudes and step away from individuality towards openness and interdependence, i.e. the sharing and construction of knowledge to achieve common goals between at least two teacher colleagues on a sustained basis (EPPI, 2005). While there was insufficient ECS data to support collaborative development, the blended CS phase (guided peer scaffolding, Appendix I; solicited/ unsolicited peer scaffolding, Appendix K) suggests that, with appropriate instructor guidance, a collaborative culture can be nurtured to support personal meanings of teachers' collective experiences (Lattuca and Creamer, 2005). See also Day's (1999) four stages of collaborative development in sub-section 2.3.3.

Inspectors of English at Libyan schools have a more constructive role to play in supporting collaborative I-CPD than just routine inspection, feedback or report writing, as evidenced in Chapter one. Inspectors should collaborate with school teachers in overseeing teacher-centred development where CPD is contextualised and teachers' needs are espoused. In conjunction with the NCEPT, ICT skilled inspectors can assume the role of online facilitators of learning, initiate and maintain collaboration and act as I-CPD facilitators for networked teachers, e.g. through group discussion.

Third, scholarly reflective practice must be supported to enhance I-CPD. In the CS, teachers did not respond to reflective diaries despite being provided with prompts. This demonstrates that Libyan EFL teachers need further support in answering questions at an

appropriate depth, reflecting more critically on their experience and linking relevant

practical issues with theory. Perhaps more pressure to seriously engage with development

opportunities needs to be applied through formal or voluntary, rather than involuntary

means, as was the case in the intervention course (see section 7.5 on Limitations of the

study).

Even though asynchronous online activities using realistic tasks or discussion are supposed

to encourage reflective thinking by virtue of time delays (Ehrmann, 2003), the lack of deep

learning and critical thinking can limit the meaningful construction of knowledge, reduce

confidence and consequently restrict participation even in blended formats. In voluntary

non-incentivised contexts (as was the case in this study), the phenomenon of the non-

participant and the quiet participant, as Hammond (1999) has pointed out, can be

exacerbated further as there is no pressure on group members to contribute.

7.3.3 Developing policy:

To alleviate obstacles to I-CPD, discussed in sub-section 4.6.6, and pave the way for

holistic and optimised I-CPD in Libya (see sections 2.4 and 2.5), a number of policy-driven

measures have to be in place.

7.3.3.1 Attitudes to change:

Overall, as demonstrated by the FF data, Libyan EFL teachers possess reasonably positive

attitudes towards I-CPD which can be exploited when contemplating the introduction of I-

CPD interventions. However, equally important are the attitudes of educational officials

and school heads to fostering Internet-based technology and actually implementing school-

based development. Such change in attitudes in favour of the new technology is deemed

necessary so, as Heppel (2001, cited in Pachler, 2005:134) points out, 'technologies can

no longer be confiscated at the school gate'; SUE's narrative in Chapter 5 is a case in point.

7.3.3.2 INSET policy:

The present INSET policy of improvised and responsive top-down training serves only to

answer immediate curricular needs rather than sustainable development and fails to satisfy

teacher-centred and long-term development, hence, the INSET gap. If there is to be any

change in the Libyan TED context, the education officials must realise the need for an

improved and sustainable INSET policy that is CPD oriented and sustainable, rather than

short-term responsive, and skills-based (see Chapter one). Better still, such top-down CPD

policy should be set up to complement independent and school-based CPD based according

to holistic and optimised approaches, as discussed in sections 2.4 and 2.5. See also sub-

section 7.3.2.3 and Figure 7.2.

7.3.3.3 School-based CPD:

In countries like the UK, where centralisation was abolished, schools have the freedom to

plan and carry out their own CPD agenda. A centralised Libyan education system,

however, should not neglect or marginalise the role of schools in supporting localised

teacher needs and nurturing bottom-up teacher-led development within a holistic and

optimised CPD climate, particularly as most schools are now equipped with computers to

teach ICT (see Chapter one). What schools now need is a commitment by the

Government to connect them to the Internet, to go online and use digital technologies to

support CPD and enhance teaching and learning.

Given adequate skills preparation and ICT resources, if one school proves successful in

implementing school-based I-CPD, other schools are likely to follow suit, paving the way

for a national school-network that encourages collaborative learning and fosters the shared

construction of knowledge under an optimised perception of CPD. Disadvantaged teachers

such as females or those living in remote areas, as the LOU president pointed out in

Chapter one, stand to gain the most from a national network of teachers.

7.3.3.4 Internet-skills training:

EFL teachers need a structured programme of ICT and Internet skills training to enhance

existing skills and enhance their potential for implementing holistic and optimised I-CPD.

This is particularly important for teachers' development, as well as self-esteem, since a

large proportion of school pupils are now more computer literate than their teachers

(Teacher C: FF).

Prior to conducting any Internet-based programme, however, pre-requisite ICT skills should be checked hands-on, rather than relying on users' statements, as was the case in the PAQ. As Salmon (2002a:12) advises, online moderators 'should not be complacent about entry level skills to online learning'.

7.3.3.5 Independent study skills:

Libyan teachers seem not quite ready to accept the challenges of independent learning, thus corresponding to 'conforming learners' who lack self-direction to learn independently in online environments (Ludwig-Hardman and Dunlap, 2003). Therefore, it is thought that more structured preparation in meta-cognitive self-directed study skills is required before teachers can be expected to succeed online. Perhaps this can also be integrated into the orientation stage of the multi-dimensional support model (see sub-section 7.3.1.5).

Despite the assumption that asynchronous communication allows participants more time to reflect on messages before posting a contribution, Libyan teachers still need to improve their writing and communication skills so that they become more confident in participating online. By placing more emphasis on critical reading and critical thinking skills during initial teacher preparation, student teachers can be trained to *read* critically and *think* independently and, thus, grow more confident in expressing their opinion (orally and in writing) without the inhibiting fear of criticism (see intellectual-error phobia in sub-section 6.4.6).

7.3.3.6 Institutional access:

Teachers need proper access to Internet facilities at their workplace, as well as access to quality resources and research material to 'guide and refine their practice' (Lynch, 1998:3). Free institutional Internet access must be made available for school teachers to access Internet-based learning at times that suit their teaching schedules and do not necessarily conflict with their personal or social commitments. Even though individual teachers can and do use Internet cafés, they should not have to incur the cost of development, for Internet cost accumulates and can deter continuous development.

7.3.3.7 Pay conditions:

Pay conditions for public sector teachers, in particular, should improve so that they do not have to work in their spare time to supplement income. This will not only bring job satisfaction to in-service teachers, but is likely to motivate new graduates to join the profession at a time when more qualified teachers are needed to teach the new secondary syllabus.

7.3.3.8 Incentivisation:

To increase participation in development activities, CPD programmes should be incentivised, for even motivated teachers can lose interest in low-pay conditions. Teachers should be adequately encouraged, either through increased financial rewards and/ or career promotion upon successful completion of organised CPD. The present system of time-related promotion seems to demotivate rather motivate teachers, as it does not reward good performers and equates them with other "teach and go" colleagues.

7.4 Significance of the study:

The FF phase of this research has shown that despite the low-tech under resourced conditions within public sector schools and the lack of organised INSET, Libyan EFL teachers' positive attitudes to development, moderate Internet skills and experience of using the Internet for various reasons are motivating signs for further improvement in I-CPD. These teacher assets can certainly be capitalised on in blended learning where social contact with peers is maintained, constructivist learning is facilitated through meaningful tasks and Internet-based development is supported through a variety of scaffolding strategies including direct instruction, collaborative peer support, task modelling, discovery learning, reflective thinking and first language support, as evidenced by the CS phase.

Despite the low level of online participation, the ECS phase can be viewed as a pilot study for future online professional development within the Libyan context. Now that a number of probable causes for poor online participation have been identified, perhaps with appropriate orientation and longer periods of online access, improved levels of participation can be achieved within a multi-dimensional blended support model.

Consequently, the data collected throughout the three phases of the study not only

provides background information about the status quo of the Libyan TED context (in three

teaching sectors), but provides unique baseline data about a typical group of in-service EFL

teachers (eight) who participated in one way or another in the three phases of the study.

Since this is the first time data of this kind has been collected in Libya, teachers' interaction

with, and response to, Internet-based support provision might be used as a stepping-stone

for further research in the field under investigation.

The study has also contributed to the development of a pedagogic online support

framework for Libyan EFL teachers in low-tech school environments, namely the multi-

dimensional support model (Figure 7.1). The incorporation of an online orientation stage in

the proposed model is of particular benefit to novice users. While blended learning might

prove to be the way forward for in-service teacher development in Libya for the time

being, likely causes of low online participation, such as ie-phobia, which emerged in the

ECS, are worthy of further study.

7.5 Limitations of the study:

Educational research, like any other human activity, can suffer from limitations and flaws.

Such limitations can be due to defects in research design, interpretations of data, or failure

to anticipate certain problems. This section acknowledges the limitations that are thought

to have unfavourably influenced the direction of this research.

7.5.1 Sample size and administration:

Due to the unanticipated late entry into the field of investigation (June 2004), public school

teachers were away for the summer vacation and access to public schools was denied.

Although a number of public-sector teachers were approached and interviewed while they

were working in private language schools, it was felt that had the study taken place during

the school year, more teachers would have participated in the research and the

intervention course. As a result, the PAQ's sample size was relatively small (37), but

considered sufficient for carrying out statistical analysis (see section 4.3 in the Data

Collection and Analysis chapter).

Also, the advantage of anonymity often associated with questionnaires and which some respondents took for granted did not apply to the PAQ. This was because as teachers were asked to indicate their willingness to attend the planned intervention course, they submitted their e-mail addresses, which were later used to invite them to the online part of the course. For the sake of a higher PAQ response rate, it may have been possible to administer the PAQ anonymously while collecting teachers' attendance preferences and e-mails on a separate occasion. However, because of convenience sampling procedures followed during Fact Finding, I was not sure of meeting the same teachers again. In any case, being able to identify respondents helped to glean data about the training status in the three teaching sectors.

As teachers in each school could not be brought together (due to their different teaching hours), the PAQ had to be self-administered and this may have been, as Kumar (1996) points out, inappropriate when spontaneous responses about attitudes are required, since subjects get more time to contemplate.

7.5.2 Timing of data collection:

It was unfortunate that the latter section of Part 2 of the intervention course (blended learning) coincided with Ramadan, which began on 14 October 2004 (day 4 of the course). As Ramadan is the month of fasting in the Muslim culture, official working hours in Libya are from 9 am till 1pm, instead of 8am till 2pm. As a result, attendance was irregular and this impacted upon the induction to Merlin, planned to take place by the end of Part 2.

Because FLI teachers were occupied with teaching at different hours, it was also difficult to arrange a fixed focus group slot during the day to suit everyone. Instead, teachers were invited to drop in at the Internet room whenever they had time to spare, which resulted in rather spontaneous 'groupettes'.

7.5.3 Voluntary participation:

Because of the voluntary nature of the intervention course, participating teachers were not obliged to take part in learning activities. During the CS, I was able to remind teachers to respond to online tasks in f2f sessions, but despite polite persuasion, participation in

blended learning was low. During the ECS, reminders to participate were made through

personal e-mail messages and some long-distance telephone calls, with no improvement in

response rate.

While voluntary participation is sound policy from an ethical viewpoint, within certain

pedagogic contexts, where the participation of subjects (as learners) is crucial to the

investigation, it is obviously desirable if some sort of motivational incentive, such as

payment for course completion, is incorporated into the research strategy to ensure

continuation and persuade contribution, i.e. a 'research bargain' beyond that of altruism as

a motivation (Sapsford and Jupp, 1996:107).

However, the giving of money to subjects in exchange for participating in research

activities is considered unethical in Arab cultures. For the purpose of conducting academic

research, it is thought that subjects have a moral obligation to respond according to their

capacity and personal commitment. While this renders respondents responsible for

supplying data, the researcher can only exercise gentle persuasion and courtesy.

7.5.4 Limited orientation to Merlin:

Only two CS members attended the limited Merlin orientation towards the end of Phase 2,

due to coincidence with Ramadan. Absentees were given printed Quick Reference Guides

to help with Merlin, which may or may not have been used. This limited orientation to the

VLE is likely to have influenced preparation and subsequent online contribution by those

participants.

7.5.5 Period of online access:

Although the period of granted online access to Merlin was seven months in total (from

June 2004), the ECS did not commence until mid-November, which allowed participants

ten weeks of access. In retrospect, it may have been wise to have requested online access

to commence at a later date, but the problem was that I needed to arrange for such access

before leaving the UK for fieldwork. I also needed access to carry out my own induction of

Merlin while uploading the course material. I reiterate here my high expectation that

Libyan EFL teachers, particularly the CS members, would readily engage in online learning and discussion without much trouble.

Some of the problems encountered would perhaps be overcome if the following measures were taken:

- Stipulating a more rigid level of pre-requisites for entry to the intervention course with respect to computer skills (see sub-section on Case participants). As pointed out in the Needs analysis of the intervention course design (sub-section 5.3.1), whilst case participants' computer skills were not assessed for entry purposes due to scope and size limitations, it was made clear that entrants were expected to be familiar with using the computer before learning about the Internet. Later data analyses, however, revealed that some case members' computer skills were less than adequate (see section 5.5 for more details).

- Setting aside free time for development. Although CS teachers were given permission to attend the five weeks' Intervention course (from 10-12 am), they had to return to teaching after two weeks, and attendance relied on teachers' timetables.

- Offering realistic incentives that would entice teachers to participate. Formal incentives such as promotion, pay rise or certificates of completion which can only be incorporated under formal interventions by the education authorities responsible for development were not part of this study. I hope that under a holistic approach to CPD more realistically incentivised programmes can be initiated. Whilst obligatory approaches to development programmes may guarantee attendance, they do not necessarily guarantee active participation.

- Providing a structured and compulsory induction to the VLE platform used prior to going online, as pointed out in the Blended I-CPD support model (sub-section 7.3.1.2). This would ensure that teachers are familiar with the VLE environment through online socialisation, thus supporting more positive participation in higher-level tasks and discussions later on (see Framework for online orientation in Table 7.2).

7.6 Recommendations for further research:

To fully examine the impact on teachers' interaction, participation and development within Internet-based environments in the long term, a longitudinal study would seem to be necessary. A longitudinal study of this kind would naturally require more access time to the research field than was permitted by this study, say for example a full academic year excluding an orientation stage, as suggested in this chapter. The Internet skills intervention course of this study (see Figure 5.1) could be used as the basis for teacher orientation leading to full involvement. To save time, teacher orientation could be held during the summer period, but an adequate and authentic level of computer skills would have to be set as an entry pre-requisite.

School-based Internet-based development is yet another significant area for collaborative development that warrants further research. To carry out school-based I-CPD, schools need to be equipped with the necessary technical infrastructure and teachers must possess adequate ICT and Internet skills. However, rather than wait for all schools to be connected to the Internet, a pilot school-based I-CPD programme could be set up, say, in three typical schools at three main cities in Libya (e.g. Tripoli, Benghazi and Sebha) where such schools are equipped with computers and linked to the Internet and the teachers are appropriately trained. With suitable orientation, as suggested in the Conclusions chapter, the intervention course may be used as a blue print for Internet-based development in such a proposed study. Such a pilot scheme may also be an opportunity to test out the suitability of other popular VLEs, e.g. WebCT and Blackboard, at the three different schools.

At a second stage of the proposed research when Libyan schools are connected to the Internet (see the Introduction chapter), and having selected an appropriate VLE, the pilot schools can be interconnected to form a national school-based I-CPD network. This would provide an online platform for discussion and feedback from which potential data can be collected. As more schools get ready, they can also join in. The research initiative may involve trained ELT inspectors as online tutors, the objective of which would be to

investigate the effectiveness of online collaboration between teachers and that of inspection feedback between teachers and inspectors.

A parallel research venture to the school-based scheme is Web-based INSET. Whereas school-based I-CPD would focus on teacher-centred needs, a web-based INSET component can provide top-down training pertaining to ELT methodology and material common to all schools and EFL teachers in Libya. Although blended delivery is also envisaged in top-down INSET provision within an integrated I-CPD model, courseware design and online delivery provide focus for further research.

I-ELT is also a potential area of research work. As Libyan EFL teachers are already familiar with Internet-supported classrooms, the next stage would be to research their adaptation to, and implementation of, classroom-based I-ELT in public schools. Again, a number of appropriately equipped schools and trained teachers might take part in a pilot scheme. Such research would be of great value if the results could be fed back into the system as tried and tested local ideas.

Despite operational problems, online learning provision by distance education institutions is now common in most Arab countries. The LOU, as the leading provider of distance education in Libya (see Chapter 1), should spearhead a research project to establish online learning as a potential mode of support for its 19 centres across Libya. A proposed online project for the LOU could also utilise a pilot scheme at one of the distance learning centres to assess the pedagogic outcomes of student learning as well as the effectiveness of certain VLEs, online instruction and other technical and administrative support services.

7.7 Reflections on personal development:

As a NNEST and teacher educator, I viewed my doctoral research as part of my ongoing personal professional self-development. As Bourner, Bowden and Laing (2001) observe, a doctorate degree appeals to those who regard their personal and academic advancement as part of their professional development.

During the course of this research, I have been able to acquire and develop new skills. Notably, prior to commencing fieldwork, I had the opportunity to enhance my research methodology skills in relation to quantitative and qualitative approaches, ICT and Internet skills, web publishing skills and most significantly, online instruction skills gained during an Institute of Education (London) Online Education and Training (OET) course on which Anita Pincas was the course leader.

By participating in online tasks and discussions as a learner on that course, which lasted for ten weeks from January to April 2004, I gained useful insights into the pedagogic nature of online education and the skills involved in online learning and teaching. Essentially, the course prepared me for the role of online tutor on the intervention course that I later organised. During the OET course I learnt how I might adapt the low-tech ICT environment to the professional development needs and contexts of Libyan teachers. This latter experience was both challenging and satisfying, despite the relatively low levels of participation.

Schostack (2002) points to a researcher's 'double tracked journey' where one track takes a researcher along a journey of self-growth and development in which decisions are taken that impact upon a second track, involving people influenced by the research:

> For some, their journey takes them into political, even hostile
> environments where they hope to change the circumstances of people's
> lives. For others, it is a journey of wonder where strange worlds are
> encountered and where they hope only to describe, explore, and
> understand (p. 3).

Much of the satisfaction in accomplishing this research work has not only come from the realisation that I have made a learning journey in which I developed new skills and acquired knowledge I did not have before I began this research, but also as a result of having empowered a small number of Libyan teachers with crucial Internet-based learning skills with which to further their online learning and enhance their Internet-based professional development.

In deciding to follow a different, and perhaps more problematic, research focus than that originally planned (delivery of teacher education in conventional contexts), I recall Robert Frost's (1915) lines:

Two roads diverged in a wood, and I-

I took the one less travelled by,

And that has made all the difference.

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Appendices

Appendix A: Outline of the Libyan education system

The Libyan education system, as described by Abou Jaafar (2000:18), comprises five levels:

- **Pre-school (optional)**: 3 years, for children aged 3 to 6
- **Primary Education**: consists of three stages:

  - 3 years for children aged 6 to 9
  - 3 years for children aged 9 to 12
  - 3 years for children aged 12 to 15

- **Intermediate Education and Training**: 3 years for age groups 15 to 18 and subdivided into specialized baccalaureates, technical and vocational institutes and centres.
- **Higher Education**: including universities, higher institutes and technical centres. It extends from 4 to 6 years for some university faculties, such as medicine.
- **Postgraduate Studies**: these cover two postgraduate degrees: Masters and Doctorate.

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┌─────────────────────────────────────────────────┐      ┌──────────────┐
│  Primary Education: Years 1-9 (age 6-15)        │◄─────│  Pre-school  │
├─────────────┬─────────────┬─────────────────────┤      │  (age 3-6)   │
│  Years 1-3  │  Years 4-6  │  Years 7-9          │      └──────────────┘
└─────────────┴─────────────┴─────────────────────┘
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┌───┐
│ Intermediate Education: Years 1-3 (age 15-18)   │
└───┘

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        Specialised                      Technical and
        Baccalaureate                    Vocational Institutes
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| Basic Sciences | Engineering Sciences | Life Sciences | Social Sciences |

┌───┐
│ Higher Education: Years 1-4 (age 18-22)   │
└───┘

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University degree                              Higher Institutes of
BA or BSc                                      Education or Vocational
                                               Training (BA or BSc)

Postgraduate Studies                           Employment market


        Postgraduate                                   Basic Training
        Diploma


Masters degree
MA or MSc


Doctor of Philosophy
PhD
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Dear teacher,

This questionnaire concerns your professional development as a practising English language teacher in Libyan secondary schools. The questionnaire is part of a doctoral research at the University of Nottingham (UK) in conjunction with the University of Al-Fatah. The purpose is to explore teachers skills and attitudes with respect to the Internet in language development and in Continuous Professional Development or CPD. An integral part of the study will be an intervention course in Internet skills, which will involve learning about the Internet's resources and online learning environments.

In the first section of the questionnaire you will be making a self-assessment of your Internet skills. In the second part you are required to indicate how you feel about certain ideas concerning the role of the Internet in your professional development. In the third and last part, you are requested to indicate the frequency with which you actually use of the Internet.

There are no right or wrong answers to the questionnaire. Please respond to each statement as honestly and realistically as possible since only this will guarantee the success of the research. Please place a tick inside the square which you think best reflects your personal opinion or judgment. Please read the notes carefully before filling each part. If you answer in a group, please do not confer with your partners in order to respond to a particular statement unless absolutely necessary. It is your own individual opinion I am after not of your colleagues. Should you have a query about the wording of any of the statements, please say so and I shall do my best to help.

While the questionnaire is about Internet-based learning, it is not meant to assess you or evaluate your Internet skills in person. Moreover, your identity will not be disclosed and any information submitted will be kept confidential. Subsequently, any published information resulting from this research shall not include personal details that can be used to reveal your identify. Your participation in the research is valued and appreciated.

Thank you for your assistance.
Reda Elmabruk

Part One: Internet skills self-assessment

Each statement in this part concerns a particular Internet skill. Please respond to each statement by placing a tick inside the box which you think best reflects a true assessment of your present ability.

Key	1	2	3	4	5
	Very low	*Low*	*Intermediate*	*High*	*Very high*

Section One: Communication skills

No.	Skill	1	2	3	4	5
1	Setting up new personal e-mail accounts from scratch					
2	Using e-mail to compose and send text messages					
3	Replying to a received e-mail message					
4	Forwarding e-mail to a third party					
5	Sending text file attachments with e-mail messages					
6	Using e-mail to send image file attachments					
7	Saving or printing attachments received by e-mail					
8	Reactivating an e-mail account after it has been deactivated					
9	Using MS or Yahoo Messenger to conduct live chat					
10	Using NetMeeting to conduct live communication					

Section Two: Navigation Skills

No.	Skill	1	2	3	4	5
11	Using Internet Explorer to look at any Web site using its URL (Web address)					
12	Familiarity with a browser's function icons such as forward, backward, home, refresh, and favourites					
13	Navigating round a web site using embedded hyperlinks					
14	Saving, or book marking, favourite web site addresses					
15	Returning to favourite web sites already saved on a computer					
16	Appendix F: Using Internet search engines to look for sites of particular interest					
17	Evaluating web sites relating to particular areas of interest					
18	Downloading and saving interesting web pages from the Internet					

19	Printing a web page on a local printer					
20	Copying and saving images from a web site					
21	Downloading and installing browser plug-ins such as Acrobat Reader and Real Player					

Part Two: Teacher attitudes

Please respond by placing a tick under the category which you think best reflects your personal feeling or attitude. You must decide for your self whether to agree or disagree. If you agree, decide if your agreement is strong 'strongly agree', not so strong 'agree' or if you agree in part 'partly agree'. Similarly, if you disagree select from 'strongly disagree', 'disagree' or 'partly disagree'. The key below will help you to formulate your response.

Key	SA	A	PA	PD	D	SD
	Strongly Agree	*Agree*	*Partly Agree*	*Partly Disagree*	*Disagree*	*Strongly Disagree*

Section three: Internet-based CPD (I-CPD)

No.	Statement	SA	A	PA	PD	D	SD
22	I think the Internet is excellent for EFL teachers' CPD						
23	I like to keep abreast with current developments in EFL teacher education through the Internet						
24	I do not feel that I-CPD will develop my cognitive skills (theoretical knowledge) any further						
25	I am prepared to join an I-CPD programme with any recognised institution in Libya						
26	I am not confident enough about using the Internet for my CPD						
27	When teachers are confident enough in using the Internet they will pass on their skills to their pupils						
28	I do not think that I-CPD will develop my teaching skills any further						
29	All I need from I-CPD is a list of useful resources or URLs						
30	I cannot afford I-CPD; it costs too much						
31	Schools should link to the Internet to encourage I-CPD						
32	EFL Teachers must be able to direct pupils in the proper use of the Internet for language learning						

No.	Statement						
33	EFL teachers are ready to embrace I-CPD						
34	The flexibility of learning in I-CPD is very appealing for me						
35	I think that I-CPD will expand if adopted by schools						

Section four: Internet for Language Development (I-LD):

No.	Statement	SA	A	PA	PD	D	SD
36	E-mail is useful for improving my writing skills						
37	Internet Chat facilities improve my writing skills						
38	Video material on the web enables me to develop my authentic English						
39	I do not know how to use the Internet to develop my English right now						
40	EFL Internet resources are not the best way to develop my English language skills						
41	Audio on the web is not so effective in improving my listening skills						
42	Audio on the web is not so effective in improving my speaking skills						
43	My English vocabulary is not likely to expand with the Internet						
44	My reading speed will improve with the regular use of the Internet						
45	The Internet English jargon hinders my language development						
46	I cannot find my way round the massive load of information on the World Wide Web						
47	I cannot foresee any applications of Internet in my language development						

Part Three: Internet usage

In this section, please describe your actual usage of the Internet. Use the code in the box below to respond to each statement by indicating the frequency with which you carry out each action. Remember that the actions refer only to your English language usage of the Internet.

Key	A	U	S	R	N
	Always	Usually	Sometimes	Rarely	Never

Section five: Internet in CPD

No	Action	A	U	S	R	N
48	I visit favourite websites related to TEFL					
49	I read articles related to TEFL					
50	I look for lesson activities related to my teaching context					
51	I search the web for TEFL related sites					
52	I look up academic journals for contents related to TEFL					
53	I recommend interesting TEFL sites to my colleagues					
54	I recommend interesting TEFL articles to my colleagues					
55	I look up video material related to TEFL					
56	I look up audio material related to TEFL					
57	I join newsgroups of particular interest to my field					

Section six: Internet in LD

No	Action	A	U	S	R	N
58	I use the Internet to send e-mails and improve writing					
59	I use the Internet for one-to-one chat (text only)					
60	I use the Internet for one-to-one voice chat					
61	I use the Internet to access news articles and improve reading					
62	I look up English meanings of new words in online dictionaries					
63	I look up synonyms of new words in online thesaurus					
64	I read articles of general interest to improve my language					
65	I join chat rooms for group discussions					

Part Four: Participation

In this last part you are asked to indicate your willingness to participate in an Internet skills course due to take place in September 2004. The course will involve some degree of learning as well as commitment in terms of attendance and participating in discussions. Please tick the boxes below to show your preference.

Section seven: Internet skills Course

The Internet skills course will run for five weeks and will consist of two parts. The introductory face-to-face part (2 weeks) will be held at …………………………., Tripoli. The second part (3 weeks) will combine face-to-face and web-based learning. Please indicate your voluntary consent to participate in the course by ticking the box below. Remember that you should possess a reasonable level of computer skills in order to benefit fully for this part of the Intervention course.

Yes, I would like to take part in the Internet skills course this September	

As a follow up to the Internet skills course, there will be a distance online learning course via Merlin. The course addresses issues relevant to in-service EFL teachers and you will be able to participate in online learning and discussion. Please indicate your consent to participate in the online course by ticking the box below.

Yes, I would like to take part in the online course via Merlin	

Section eight: Focus group Interviews

For the purpose of data collection, you are requested to participate in focus group interviews. Topics are expected to address arising from the course and Internet applications in teachers' continuous professional development within the Libyan context. Please indicate your consent to participate in these interviews.

Yes, I would participate in focus group interviews	

Section nine: Questionnaire results

Should you wish to receive a summary of the questionnaire findings, please tick this box. Most likely this will be e-mailed to you in due course.

Yes, I wish to receive a summary of the questionnaire findings later on	

Part Five: Demographic Information

Teacher's name	
Age	
Sex	
Name of school	
Teaching sector (public, private or petroleum)	
Highest EFL teaching qualification	
Qualifying institution	
Year of graduation	
TEFL experience outside school if any	
INSET training	
Internet training	
Your E-mail address	
Contact telephone (for course information)	

Finally, I sincerely thank your for your contribution to my research by responding to this questionnaire and taking part in any interviews. I wish you every success in your teaching career.

The researcher,

Reda Elmabruk

My personal e-mail: texre2@nottingham.ac.uk

Appendix C: Interview schedules for teachers, inspectors and school heads

No	Question	Prompts/ Probes
1	Is CPD an individual pursuit or is it the responsibility of the EA? Or can it be a collaborative effort in a network of teachers?	Not to confused with INSET.
2	How important is CPD in the life of a practising EFL teacher in Libya?	Other social and economic constraints. Priorities. Incentives.
3	As an EFL teacher with years of experience, what is it that you do to keep abreast with current developments in the field of TEFL?	Journals, textbooks, courses, conferences, peer discussions, etc.
4	What is it that you want to do more of to develop your teaching performance and skills in TEFL?	Self reflection, action research, TEFL resources, peer observation.
5	What kind of support is provided to you in this concern from your school, or educational authorities?	INSETT training, journal subscription etc.
6	Are there any professional bodies or EFL teacher associations that bring together Libyan EFL teachers and create a professional forum for organised CPD?	What if any? Scale, proportion. If not why not? Willing to join?
7	What means are available to you in your context that you can take advantage of towards your own CPD?	No prompts! Obtain realistic response.
8	How effective do you find the Internet as a tool for online learning and development?	How effective? Useful? Practicability?
9	Have you consciously used the Internet for this purpose before?	What sites? How found? How useful to CPD?
10	How often do you use the internet for the purpose of CPD?	Access? How long?
11	Have you received any training in using the Internet before?	What? When? How long?
12	Do you think you need training in using the Internet's resources for EFL teacher CPD?	What? Organised by whom? Pay privately?
13	What do you think are the prospects of using the Internet's resources for language teaching at your school?	Problems? Short term? Long term? Pupils ready?

Additional questions for Inspectors:

No	Question	Prompts/ Probes
14	How do you perceive the role of TEFL inspectors in providing a climate that encourages PD?	Motivate. Direct. Encourage. Collaborate
15	What facilities are provided by schools and education authorities towards an active CPD climate?	ICT climate. Future plans if any?
16	How can teachers make effective use of the Internet as a resource for their own self-development?	How can you help?
17	Can inspectors contribute to creating continuous professional development network through web-based training such as yahoo groups, e-mail communication and discussion forums?	CPD forum of local teachers. CPD national network, annual conference.

Specific questions for school heads:

No	Question	Prompts/ Probes
18	What kind of provision does the school provide to help teachers with their professional development? What is the role of schools and education authorities towards creating active CPD climate?	Motivate. Direct. Encourage. Insentives for teachers.
19	What technical facilities or support are available for teachers to engage in CPD?	ICT climate. Future plans if any? Support from LEA?
20	How can teachers be encouraged to make effective use of the Internet as a resource for their own self-development?	Low-tech conditions. Internet-based lessons. Pupils needs
21	Can schools contribute to creating a CPD network through web-based training such as yahoo groups, e-mail communication and discussion forums?	CPD school forum or SIG. CPD national network. Annual conference.

Dear teachers,   Date: 9 September 2004

As part of a doctorate research by Mr. Reda Elmabruk at the University of Nottingham, sponsored by the University of Al-Fatah, an Internet skills course will be held for FLI teachers of English. The venue for the course will the Institute's Internet café and is planned to run for five weeks from Saturday 25 September 2004. The hours will be from 10 to 12 am.

The course is an introduction to the Internet and will cover Internet communication and navigation skills. Teachers will also have an opportunity to explore web resources useful for English language teaching and development, but to fully benefit from the course you are expected to be familiar with using a computer. At the end of the course teachers are expected to prepare and present an Internet-based mini-lesson as part of an I-ELT project.

This Internet course is voluntary and you are not obliged to attend or complete it. However, please indicate your readiness to participate in the course and associated research activities, such as group interviews, by inserting your name and signature below. The course is FREE of charge but since places are limited, they will be allocated on a first-come first-served basis.

Thank you

(Name and signature of FLI deputy head)

No	Teacher's name	Signature
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

Part 1: f2f Task-based support (2 weeks)

Section A: Core Internet Skills (PPP)

1. Course introduction and aims

2. What is expected of you

3. A brief history of the Internet

4. The Internet and the WWW

5. Connecting to the Internet

6. Web applications

7. Internet communication: E-mail

   - Task 1: Setting up new e-mail accounts in Yahoo. Reactivate if applicable.

   - Task 2: Using the new e-mail to send and receive messages from peers. Sending file attachments.

8. Instant messaging

   - Task 3: Using the e-mail to sign up for and use Yahoo messaging. Inviting colleagues to try out synchronous text chat.

9. Discussion groups

   - Task 4: Finding and joining a Yahoo group to discuss a topic of interest.

10. Using Internet Explorer: Internet navigation

    - Task 5: changing the home page.
    - Task 6: Using embedded links to navigate round a Website.
    - Task 7: Finding and handling images.
    - Task 8: Exploring Windows media. Finding interesting links to video, radio or television material.

11. Search engines and directories

    - Task 9: Using Google and Yahoo engines to search for ELT resources.

    - Task 10: Narrowing down search results to look for particular sites.

Section B: Further Internet skills (file sharing)

1. Guide to the Internet (online)

   - Introducing the world Wide Web
   - Using the Internet
   - Task 1B.1

2. Search and evaluation skills

- Searching and Evaluation skills: paper-based
- Virtual Training Suit (VTS): online
- The Teaching Pack on the VTS: online
- Assessment and evaluation: online
- Task 1B.2

3. Managing technology on the Web: paper-based

- Task 1B.3

Part 2: Blended learning (3 weeks):

A: **The Internet for Language Learning (WELL).** The material was concerned with issues of using the Internet for language learning from a learner's point of view, in other words issues around Web Enhanced language Learning (WELL). Here, reference was made to an Arabic article which surveyed web site resources for learning English language skills through the web.

B: The Internet for Language Teaching (I-ELT). Teachers were introduced to applications of the Internet in language teaching activities. They contemplated ways of exploiting the Internet in Internet-based classrooms within low-tech local contexts. Both Internet-supported and Internet-based classrooms were considered.

C: I-ELT Project (microteaching).

D: Introduction to Online Learning via Merlin.

Part 3: Online learning via Merlin VLE (10 weeks)

Unit 1: Internet options for teacher development

Unit 2: ELT gateways

Unit 3: Online journals

Unit 4: Online discussion groups

Unit 5: Nature of online learning

Unit 6: Advantages of online learning

Unit 7: Drawbacks in online learning

Unit 8: Key issues in I-CPD for Libyan EFL teachers

Each Pathway unit shown above was linked to a discussion section on Exchange (Merlin's discussion board).

Appendix F: Proposed Reflective Diary form

Name of participant	
Task reference	
Task question	
Learning outcomes	
Learning problems if any	
Applications to local teaching context	
Implications to professional development	
Other comments or suggestions	

This is an example of a synchronous chat exchange that took place, via Yahoo Messenger, between two case study participants at FLI during the I-CPD Intervention Course on day 4 (28 September, 2004). Consent of the two participants involved was sought before copying the exchange.

Unfortunately the smiley faces (smilies), which were used to complement the chat messages, were not copied into Notepad, because Office XP, and thus Word, was not loaded onto the computer (the Server) on which the chat took place. Therefore, I indicate the original smilies within bracketed text. DOLLY is a female, while BAHA is a male (pseudonyms). Typewritten errors are left unedited.

DOLLY: hi

BAHA: hi

DOLLY: what s your opinion about this course

BAHA: well,,,,,,somehow it`s useful

Dafffi: doyou want to come in ramadan [month of fasting in the Islamic calander]

BAHA: by god`s willing what about u?

DOLLY: for me i want to come every day

BAHA: concernin me i wanna come per min enjoy all the moment especially the cute moment

BAHA: say hi to ANGI

DOLLY: this you in ramadan (a moody smiley)

BAHA: this u n ordinary dayz (a sleepy smiley)

DOLLY: thanks for your kind (an evil face smiley)

BAHA: not at all it`s my duty

DOLLY: oh really

BAHA: what r u preparin to type?

BAHA: y u did stop? hello,,,,, it`s me

DOLLY: N but this

BAHA: hey r u there

DOLLY: N i m still here (angry smiley)

BAHA: what ru doin

DOLLY: stop talkin (purple face smiley)

BAHA: talkin what , im just hintin u get it? hey ,still alive?

DOLLY: thank god

DOLLY has signed out. (9/28/2004 12:16 PM)

Website review form

GENERAL INFO	
Name of site	
URL of site	
Date visited	
Reviewer	
SITE SUMMARY	
Description Add a short description of the site	
Content summary Give a brief summary of the contents of the site	
SITE DETAILS	
Information Is the site content correct, reliable and accurate? Is the writer an expert in this subject?	
Currency Is the site up-to-date? When was new information last added? When were the pages last updated?	
Content Is the content interesting, relevant, funny, useful or entertaining? How would you describe it?	
Presentation Is it attractive and easy to navigate? Does it use a lot of graphics, sound or multimedia files?	
Functionality Does it all work? Are there any broken links or missing pages? Does it take a long time to display pages?	
VERDICT	
	Excellent ( ) Very good ( ) Good ( ) Average ( ) Poor ( )

Appendix I: Guided Peer-scaffolding

As in the Literature Review, the symbols HS (Horizontal Scaffolding), VS (Vertical Scaffolding) and ES (Emotional Scaffolding) classify the type of scaffolding instruction shown in angle brackets.

SUE: To send this page, we have to click here [mail] first. And you can choose 'send a link' or 'send a page'. I'm going to choose here, send a page. Click here… Wait.

DOLLY: Yes.

I: What's happening now? <Keep in pursuit of task: ES>

SUE: I think… there is something here called 'done'. (Seeking support)

I: What's 'done' here? 'done' what? <Probing: HS>

SUE: The page is sent to… (Wrong answer)

I: Has the page been sent now? <Probing: HS>

SUE: Yes. (Confirming wrong answer)

I: I don't think the page's been sent.. What have we just done? Send or attach the page? <Prompting: HS>

SUE: Attach. (Correct response)

I: So that means the webpage has been attached to the e-mail, not sent. <Confirming: HS>

SUE: What does it mean here then 'done'? (Seeking clarification)

I: You click it and see. <Prompting discovery-learning: HS>

SUE: Emm… (Transformation)

I: You see, the file's not been sent, this is still the e-mail.

DOLLY: Yea. (Transformation)

SUE: Now write the e-mail [address]… I think you're [to DOLLY] quicker than me [in typing]… (Requesting peer 2 assistance)

I: Two fingers are better than one finger, ha ha. <Introduce humour: ES>

DOLLY: (types the wrong e-mail address)

SUE: No, no, no (dictates the correct address) <Peer 1 instructing: HS>

DOLLY: Yea… And the subject here, what are we going to write? (Peer 2 requesting assistance)

SUE: Where, which subject?

DOLLY: Here, under 'two'.

SUE: E-mailing 'two-learnt', the page! <Peer 1 instructing: HS>

DOLLY: Ah, yes. The name of the page you're going to send, that's OK. (Transformation)

I: What have you done now? <Keep in pursuit of task: HS>

SUE: Wait, wait. (Peer 1 confused*)*

I: You've clicked 'Attach' again, go back. <Direct Instruction: HS>

SUE: Refresh? (Wrong response)

I: Go back, here. <Direct instruction: HS>

DOLLY: Can we send the page or the link… during our e-mail? (Requesting information)

I: (Turning to SUE) She's asking you. <Prompt peer scaffolding>

SUE: No, no. I have a mistake here. I typed 'print e-mail' and press enter. (Avoidance strategy)

I: Now what do you do? <Probing peer 1: HS>

SUE: Something wrong happened.

DOLLY: Can I send this out, the link or the page, during my e-mail? (Repeat request)

SUE: Yes, like that, like now. (Incorrect response)

DOLLY: No, I mean during my e-mail? Can I send the page I want to? (Repeat request again)

SUE: Yes. (Incorrect response again)

I: OK…From the page. You send it from the Web page. <Direct instruction>

DOLLY: During [within] this one! Yes. (Internalisation)

I: Now, what have you done? <Probing>

SUE: you have to click 'Attach'. (Wrong response)

I: No, that's your mistake before, ha ha. <Minimise stress: ES>

SUE: Ha, ha, send, send! (Transformation)

I: It's already been attached, look. <Direct instruction: HS>

SUE: Yes, yes, yes. (Confirmation)

I: (Pointing) That's if you want to remove it, that's if you want to attach something else. <Direct instruction: HS>

SUE: Aaah. (Transformation)

DOLLY: OK, here (message box), *we have to write… [a message]*

I: You can type here in the [message] box, yes. <Direct instruction: HS>

SUE: Aaah, if you...

DOLLY: If you want to..

I: Add something, yes. Can you go down? No, no. Not back, down. <Confirming; direct instruction: HS>

SUE: Ah, yes.

I: 'Are you sure you... '. Read this! <Prompting discovery learning: HS>

SUE: 'Are you sure you want to send an empty message'?

DOLLY: Yes.

I: Because it's got nothing, just the… <Partial solution: HS>

DOLLY: Just the webpage.

I: Which is 12k as you can see (pointing). <Clarification: HS>

DOLLY: OK. (Internalisation)

I: Now, what? <Keep in pursuit of task: HS>

SUE: Send. (Correct response)

I: Send. Yes. (Supportive feedback: ES)

The following conflict-teaching interaction took place between SOLO and SERVO and myself, pretending to be the FLI manager (in comic sans serif font):

SERVO: Well, you have to think about why the Internet attracts the students. I think learning by the Internet is a new process, not as the television way, sitting and watching. On the Internet we see students looking for information and learning by doing tasks.

SOLO: Especially with pictures or cartoons. Otherwise you have to draw, you have to prepare. The Internet makes the task easier for you. And it saves you money.

I: Can't you do that off line? Or by printing out material for them beforehand? Why should the school provide the Internet room for classes, when it can generate needed income as a café net?

SERVO: The Internet connection, I think, is cheap…

I: But we have to subscribe. And we can get 8 Dinars an hour, that's roughly about two thousand Dinars a month.

SERVO: I think, nowadays, the Internet is available everywhere.

I: Exactly, so you can tell your students to go to an Internet café in their own time. They can visit the sites and follow the exercises you want them to do, can't they?

SOLO: I guess it's difficult for the students themselves to get to the Internet. They need the teacher to support them or to choose the specific points about a specific subject. Otherwise they would be lost. And even if I ask them to go to Internet cafés, to check some sites they may not go.

I: I would expect you to tell your students to link to specific sites and to do specific tasks…

SOLO: Well, I don't think they will get the utmost benefit required by them. Since they have to pay, they want to get something back. Also for some students, learning is something boring, so he will not spend his money on something boring. Ok, he will say I'll check the website [as instructed], but I will go to something more enjoyable.

I: If it's boring for him in the Internet café, it will probably be boring for him in the Internet lab too.

SOLO: Well, in the Internet lab he doesn't have any other choice.

I: It would still be boring for him.

SOLO: It's still boring, still boring, but…

I; How would you make the Internet more interesting for bored students?

SOLO: Well, it depends on the teacher and activities and how does he tackle the material within the website, and how does he help them to learn. Sometimes, the student will come across some difficult terms, even for teachers themselves, not only for students. So the student

needs the help of the teacher to explain some instructions, some vocabulary, some grammatical structures, some cultural points. And the student will come across dialects like 'I'm gonna', 'I gotya'.

SERVO: This is American I think.

SOLO: Yes, that's another problem: the difference between American and English dialects

I: You could use a tape recorder for this couldn't you? What would be the benefit of the Internet in this case?

SOLO: The Internet can be also useful, because sometimes the whole class will be under the supervision of the teacher, and he will lead them.

I: You could still do the same thing in an audio class. Students would be listening and you would be leading.

SOLO: Well, I guess the audio class is very specific, very limited compared to the Internet. You could have a lot of examples, sentences, vocabularies more than we have on tape.

I: I'm still not very convinced by your argument. What about you [SERVO]?

SERVO: I suggest to start [I-ELT] as a test. Two hours per class a week…

I: Two hours! That's a lot, isn't it?

SERVO: Well, just one hour a week. We bring our students here [to the Internet room] and we try to…

I: What would you do in this hour, if I gave you permission to go ahead?

SERVO: We will exchange e-mails, to talk, we will make it free for the students…

I: Free! What do you mean 'free'?

SERVO: Yes, free talk, free practice. They will do what ever they want on the Internet.

I: I thought you said the teacher must prepare the sites before the lesson rather than give them a free rein.

SERVO: This is a free hour for the students to practice what they learnt in the school [class]. If I was prepared, it will be easy. They will, for example, go to specific websites for grammar or discovery technique. They will read topics online, they will try to answer the comprehension questions. If we have enough time, we can give them writing tasks, to write e-mails to each other. This will give chance for them to check spelling before they send their e-mail.

I: Look! I am going to give you one hour at the end of this week, and your peers are going to pretend to be your students. I'm going to sit here and watch, OK? If I'm convinced perhaps I'll be able to do something.

DOLLY (peer 1) as the more knowledgeable scaffolded HIDI (peer 2) who was still at the planning stage of her I-ELT project (solicited scaffolding). HIDI then attempted to scaffold SUE (peer 3) in unsolicited scaffolding. I intervened to elicit clarification or support an argument as appropriate:

DOLLY: Look at the site BBC World Service, Learning, English, Multimedia, London. Unit one: Transport: 'Choosing transport', the unit here (pointing to the webpage). The first listen 'Choosing transport from Heathrow into town'. <Peer 1 instruction: HS>

HIDI: How can you get… After you write 'bbc.com', then you go to 'learning english' or what? <Peer 2 inquiring>

DOLLY: Yes, 'learning english'. <Peer 1 confirming: HS>

HIDI: 'learning english' then? <Peer 2 requesting information>

DOLLY: 'multimedia', then London, Unit one exactly. <Peer 1 reconfirming instruction: HS>

HIDI: Do you have to write [the Web address] then? <Peer 2 requesting information>

DOLLY: I write [the address] on the blackboard and the students have to type on their screens, see? <Peer 1 confirming: HS>

HIDI: Aaah, you don't find it on the left of the screen? <Peer 2 checking>

DOLLY: No. <Peer 1 confirming: HS>

HIDI: Sometimes, you just get to the site and you find links on the left of the screen or… it's written. <Peer 2 stating pre-conceived practice>

DOLLY: No, no. <Peer 1 confirming: HS>

I: Is there another way you could use, instead of copying the address from the board? <Instructor probing peer 1: HS>

DOLLY: What do you mean? <Peer 1 requesting clarification>

I: Perhaps have it typed in a document on the computer? <Prompting peer 1: HS>

DOLLY: You mean to save the site [address]… Yes, I can? But here, there is a choice whether to give the students step by step [instruction], for example, to go through 'BBC service' then go to 'learning English'… <Peer 1 justifying>

I: What's the advantage of this [manual] option, then? <Probing peer 1: HS>

DOLLY: To show students how to get through from link to other (sic) link. To give them more ideas [practice] about using the Internet. And the second one [hyperlinked option], to give them the whole address, to save time. <Peer 1 explaining: HS>

HIDI: Yes, step by step is better, because to give them the whole links one time, I think… confused maybe. Confuse the students in this level. <Peer 2 Agreeing; justifying>

DOLLY: Remember, this is the first Internet class for them. They have to go step by step, and then they can do more exercises themselves at home or go to the net [Internet café]. Now I'm going to press [click] the button here, the red one. <Peer 1 confirming, justifying; further instruction: HS>

HIDI: What's that? <Peer 2 requesting support>

DOLLY: To play. <Peer 1 instructing: HS>

HIDI: Emm… To listen to the conversation. <Peer 2 internalising>

DOLLY: Students have to put the headphones, and listen. Try to listen, OK? <Peer 1 instructing: HS>

I: Can you hear something HIDI? <Probing peer 2: HS>

HIDI: Yea. A dialogue.

I: Are these [exercise printout] the same sentences you are hearing? <Probing peer 2: HS>

HIDI: Yea.

I: So you can read as well as listen. So it's reading and listening, not just listening? <Probing peer 1: HS>

DOLLY: Yes, reading and listening. For elementary students, see? Here, look. Listen to the conversation, there's a dialogue between Fiona and John. And here, complete the conversation by dragging the red lines (Appendix L/2). So here we have a space for the students to drag the [correct] sentence they hear. OK? <Peer 1 explaining: HS>

I: Can you, HIDI, do the dragging? You can pretend to be a student and answer number one… ha, ha. <Prompting peer 2: HS; humour: EM>

HIDI: No, no don't… ha, ha. Don't examine me! <Peer 2 acknowledging humour>

DOLLY: Ha, ha. <Peer 1 supporting humour: ES>

I: Well, you can't be a teacher and a student at the same time, can you? <More humour: ES>

HIDI: I know, I know, I'm just joking. <Peer2 Acknowledging humour>

I: I know you are… Don't lose it [the dragged response]! <Direct instruction to peer 1: HS>

DOLLY: You have to put a click and then… Click and hold, yes. Then drag. For example, this is number three… (sound) correct sound. <Peer 1 providing further instruction: HS>

HIDI: What happens if they chose the wrong answer? <Peer 2 requesting information>

DOLLY: Try it. Drag a wrong answer and see. <Peer 1 Prompting discovery learning to peer2: HS>

HIDI: (drags a wrong answer and a 'wrong' sound bleeps) Aaah…

DOLLY: What do you think? <Peer 1 probing peer 2: HS>

HIDI: It's a bit difficult if they do it for the first time. <Peer 2 stating opinion>

I: What is difficult? <Probing peer 1: HS>

HIDI: Because in listening, the students need to listen more than one time. And then they can choose [a correct response]. I think if she gave them the exercise before listening, or similar, then they… Try to fill the spaces. <Peer 2 justifying opinion>

I: Remember, they don't have it [the conversation] in the book, this is just listening. <Clarification to peer 1: HS>

DOLLY: This is just listening, yes. <Confirming support: HS>

HIDI: We have listening [comprehension] in the coursebook… I guess what I think the answer, for example, like here 'How shall we get into city centre?' You will get more than one answer [multiple choice].

DOLLY: This is the same here, you get more than one answer, and you drag the correct one. <Peer 1 explaining: HS>

HIDI: Yes. So when it's [the conversation] written in front of them I think is better. I don't know, may be…

I: This is written, isn't it? <Confirming; checking: HS>

HIDI: Yea. Before the listening try to read it. <Peer 2 suggesting>

DOLLY: Aaah. To give them few minutes before the listening? <Seeking confirmation: HS>

HIDI: Yea, I mean maybe for the first time. Listening just for… how to pronounce correctly and how… <Peer 2 justifying opinion>

DOLLY: Then, it's not spontaneous listening. It becomes reading then. <Explaining: HS>

I: That's correct. If you give them the conversation by reading, then they listen to it again, they've read it before. <Agreeing: HS>

HIDI: Because here, there's more than one way to fill this [clicking or dragging]. <Peer2 justifying>

DOLLY: By listening, always by listening. <Peer 1 explaining: HS>

HIDI: Yes, maybe this one is very fast. Not for me, for the students. <Peer2 softening >

At this point SUE (peer 3) joined DOLLY's demonstration and HIDI, in seeking SUE's opinion, began her own **unsolicited peer scaffolding**.

HIDI: Yes SUE, have a look here... You have to fill in the spaces. Just listen to this... Is it OK? A little bit fast, yes? (passes the headphones) <Peer 2 promoting peer 3; seeking agreement: HS>

SUE: (listens) For elementary, yes [fast]. Maybe for intermediate... [OK] <Peer 3 stating opinion>

HIDI: Because, we have listening in elementary and we let them listen more than one time. <Peer2; justification>

DOLLY: They can listen more than one time, yes. I can repeat for them two or three times. <Peer 2 explaining: HS>

I: Can't they repeat by themselves? <Probing: HS>

DOLLY: It depends on the student himself or herself. If they know the answer the first time, there's no need for repeating. If he doesn't know, he can repeat. Here, we have two choices for example... if some students have difficulties, they can try the basic version here, you see? Each sentence has four choices, and they have to take the correct one. After that they can check if their answer is correct or not. <Peer 1 explaining: HS>

I: So, what is the advantage, here, of using the Internet, over an audio tape? <Probing: HS>

DOLLY The advantage is that... the students here they (sic) can type the answer, OK? Or drag the answer, it depends on the kind of the exercise. The second advantage, is if the students have doubts, they can stop the file and repeat. Listen again without causing the rest of the class to feel impatient, OK? <Peer 1 explaining: HS>

HIDI: I'm not against it [online audio], I'm with you really. The point is that the first exercise [dragging] is a little bit difficult, so we have to start with the easier...<Peer 2 agreeing; exception>

DOLLY: But, it's the same... listening. <Peer 2 explaining: HS>

HIDI: Here, [clicking] maybe more interesting than that one [dragging]. <Peer 2 justifying opinion>

SUE (interrupting, as she was busy listening): How can you repeat this [online audio]? <Peer 3 seeking support>

HIDI: By the mouse, here. <Peer 2 explaining: HS>

SUE: To play?.

HIDI: To play, yes. <Peer 2 confirming: HS>

SUE: And how can you stop it?

HIDI: Here. <Peer 2 explaining: HS>

I: Are you going to give your students some homework to do, DOLLY?

DOLLY: Yes. As a homework, I'm going to give them lesson three 'In the underground station'.

Dear teacher,

Using the attitude scale below, I would like you to show your reaction to the use of the Internet in each of the following categories, both before and after the intervention course. The categories under question are Internet-based Continuous Professional Development (I-CPD), Internet-based language development (I-LD) and Internet-based English Language Teaching (I-ELT).

Please indicate your attitude along the scale by placing an **x** inside the double arrow under the digit which best reflects your attitude. The scale extends from totally negative attitudes (-5) to fully positive ones (+5), with zero being neutral. Please use the text boxes to add any comments.

1) My attitude to **I-CPD before** the course was:

-5	-4	-3	-2	-1	0	1	2	3	4	5

My attitude to **I-CPD after** the course is:

-5	-4	-3	-2	-1	0	1	2	3	4	5

Please comment on what caused your I-CPD attitude to change:

2) My attitude to **I-LD before** the course was:

-5	-4	-3	-2	-1	0	1	2	3	4	5

My attitude to **I-LD after** the course is:

-5	-4	-3	-2	-1	0	1	2	3	4	5

Please comment on what caused your I-LD attitude to change:

3) My attitude to **I-ELT before** the course was:

-5	-4	-3	-2	-1	0	1	2	3	4	5

My attitude to **I-ELT after** the course is:

-5	-4	-3	-2	-1	0	1	2	3	4	5

Please comment on what caused your I-ELT attitude to change:

Welcome to London.

Level: Elementary.

Time: 15 minutes.

Aim: Listening skill (particularly Listening Comperhension, choosing, dragging the correct sentence as well as Listening for pronunciation, the showa sound). as er /ə/ a /ə/

Technical Requirements: one Computer per group of 2 students with Internet connection, web browser and headphones.

preperation: I Visit some sites offering listening skill exercises, quizzes, tests)

I select the the exercise that goes with my students' level as well as their grade.

In the notebook, I write down the difficult words to explain them to the students the class before going to the Internet lab as well language tips "Grammar" just to save time and concentrate only on listening.

suitable site :- www.bbc.co.uk/worldservice/learning engl /multimedia/london 1 unit 1

Title :- welcome to london.

Exercise :- Unit 1 The way from Heathrow to the city

Procedure :-

1. Allocating 2 students to each computer.
2. writing the site address on the board.
3. Sending the students to the site I prepared, if they're familiar with the Internet, I give them the site address www.bbc.co.uk/worldservice/learningenglish/ multimedia/london/unit 1

But if they aren't, I'm going to explain how to get to this site step by step starting with yahoo groups up to bbc.worldservice then click on welcome to london then on the exercise.
Now the exercise has two ways to be done the first way is to drag the sentences while they're listening.
This way is maybe suitable to recognise good students and I think some of them will have difficulties because the speaker is fast.

The second one is to try the original version where the whole dialogue is written and they tick the correct one from 4 choices.
After they do it they have to click on check to see if their answers are correct or wrong while they're listening again.
when the whole class has finished, I check with them the number of hits 11 correct attempts 11 very low number of hits might indicate that they want to practise it more and more or lower exercise than this.

Appendix N: DOLLY's Internet-based exercise (drag version)

BBC   News | Sport | Weather | World Service | Languages

Text Only Version

BBC WORLD SERVICE.com   LISTEN TO BBC W START RADIO PLAY

You are in: Learning English > Watch and Listen > Welcome to London

Learning English - Welcome to London

- Learning English
- News English
- Business English
- Watch and Listen
- Pronunciation Tips
- **Welcome to London**
- Top of the Pops
- Singer and the Song
- Beyond the Postcard
- Music Directory
- Video Nation
- Retro English
- **Grammar and Vocabulary**
- **Communicate**
- **Quizzes**
- ----------------
- **Teachers**
- **English by Radio**
- ----------------
- **FAQ**
- **Contact Us**
- ----------------
- RELATED SITES
- **BBC** WEATHER
- **BBC** SPORT

Transport   Hotel   Cinema   Shopping   Work   Eating Out

Unit 1: Transport

Listen 1: Choosing transport from Heathrow into town

After they collect their luggage, John and Fiona think about the best way to get into the centre of London. They know a taxi will be too expensive, but they can't agree on the best form of transport.

Instructions for exercise

Listen to the dialogue by pressing the play button below (▶). When you have heard it, drag the sentences into the white boxes in the correct order. Use the language tips at the bottom of the page to help you.

▸ **Flash exercise not working? Try the basic version.**

1. Listen to the conversation

[========================]   ▶   ⏸   ☐

2. Complete the conversation by dragging the red lines

We could get stuck in a traffic jam on the coach.
So let's take The Tube now, it is more convenient.
Well, we could take The Tube.
The Heathrow Express is quicker, but it's expensive.

Fiona:
How shall we get into the city centre?
John:

Fiona:
I suppose we could, but how about taking the 'Airbus' coach?
John:

Fiona:
Yes, it is rush hour. So, what about the Heathrow Express?
John:

Fiona:
And we'll have to change onto The Tube later anyway.
John:

Attempts = 0

Language tips - vocabulary

the Tube - the popular name for the underground train system

Units

Unit 1: Transport

▸ Listen 1: Choosing from Heathrow int
▸ Listen 2: At the tio
▸ Listen 3: In the Ui station
▸ Read 1: Comparin options
▸ Speak 1: Compari 'schwa' sound

Unit 2: Hotel
Unit 3: Cinema
Unit 4: Shopping
Unit 5: Work
Unit 6: Eating Out
Useful links
BBC London trave

Appendix O: DOLLY's Internet-based exercise (click version)

BBC   News | Sport | Weather | World Service | Languages

Text Only Version

BBC WORLD SERVICE.com   LISTEN TO BBC W START RADIO PLAY

Learning English
News English
Business English
Watch and Listen
Pronunciation Tips
Welcome to London
Top of the Pops
Singer and the Song
Beyond the Postcard
Music Directory
Video Nation
Retro English
Grammar and Vocabulary
Communicate
Quizzes
- - - - - - - - - - - - - - - -
Teachers
English by Radio
- - - - - - - - - - - - - - - -
FAQ
Contact Us
- - - - - - - - - - - - - - - -
RELATED SITES
BBC WEATHER
BBC SPORT

You are in: Learning English > Watch and Listen > Welcome to London

Learning English - Welcome to London

Transport   Hotel   Cinema   Shopping   Work   Eating Out

Unit 1: Transport

Listen 1: Choosing transport from Heathrow into town

After they collect their luggage, John and Fiona think about the best way to get into the centre of London. They know a taxi will be too expensive, but they can't agree on the best form of transport.

Instructions for exercise

Listen to the conversation by clicking on the link below. You will need Real Player to do this.
Have a look at the faqs section of the website if you have problems listening to the audio.
To complete this exercise you need to select the one correct sentence from each set of four options. Press the 'check' button to see whether you chose the correct response.

🔊 Listen to the conversation

Complete the conversation

Fiona:
How shall we get into the city centre?

John:
We could get stuck in a traffic jam on the coach.
So let's take The Tube now, it is more convenient.
Well, we could take The Tube.
The Heathrow Express is quicker, but it's expensive.

check

Fiona:
I suppose we could, but how about taking the 'Airbus' coach?

John:
We could get stuck in a traffic jam on the coach.
So let's take The Tube now, it is more convenient.
Well, we could take The Tube.
The Heathrow Express is quicker, but it's expensive.

check

Units

Unit 1: Transport

▸ Listen 1: Choosing from Heathrow int
▸ Listen 2: At the tic
▸ Listen 3: In the tr
▸ Read 1: Comparin options
▸ Speak 1: Compari 'schwa' sound

Unit 2: Hotel
Unit 3: Cinema
Unit 4: Shopping
Unit 5: Work
Unit 6: Eating Out
Useful links
BBC London trave