Correlation Between Affective Factors Related to Information and Communication Technologies (ICT) in Distance Language Learning (DLL) and a Sense of Satisfaction Related to Progress

Thesis

UNRESTRICTED

CORRELATION BETWEEN AFFECTIVE FACTORS RELATED TO INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) IN DISTANCE LANGUAGE LEARNING (DLL) AND A SENSE OF SATISFACTION RELATED TO PROGRESS

SUBMMITTED FOR MASTER OF RESEARCH DEGREE
ROXTON STANLEY BELL
PGCE, Dip.Trans., PGCEdM, BA (Trans) , BA (English and TEFL)
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ABSTRACT

This study is motivated by the recent development of information and communication technologies (ICT) applications to language learning in distance mode (DLL) together with the fact that, as yet, little research on affective factors associated with these developments has been carried out. The study consists of a survey that seeks to find correlations between the following affective factors: levels of ICT-related anxiety (AX_ICT); levels of satisfaction with progress (SP); and attitudes towards the role of ICT in distance language learning (AT_ICT). The method of analysis is based on SPSS software. The study concludes that there is a positive correlation between (SP) and (AT_ICT), but there is no correlation between (AX_ICT) and (SP) or (AT_ICT). However, the study shows that if the category "ICT-related anxiety" is parsed into smaller elements, a negative correlation can be established between some of these itemised ICT-related anxiety elements and (SP) and (AT_ICT).

CHAPTER 1: AIMS AND OBJECTIVES

1.1 Aims

The main aim of this study is to explore whether there are any correlations between attitudes towards the role of information and communication technologies (ICT) and the degree of satisfaction and sense of progress a student experiences in Distance Language Learning (DLL). The study also seeks to establish how these attitudes correlate to levels of ICT-related anxiety and how these levels of anxiety correlate to levels of satisfaction with progress.

The three different aspects of ICT-enhanced language learning considered in the study are: consulting materials on screen, interacting with materials and interacting with people. These aspects were included in the study because they are recurrent features in the type of language courses under scrutiny in the present study

For the purpose of this study the main variables involved are defined as follows:

- Satisfaction with progress: This variable represents the learner's sense of satisfaction derived from his / her own sense of progress and achievement, as opposed to the sense of achievement that results from external measurements of achievement such as an evaluation or an instance of institutional assessment.
- Attitudes towards the role of ICT in DLL: this variable represents how effective learners feel the use and incorporation of ICT is in their study of a language at distance mode.
- Levels of ICT-related anxiety: This variable represents how at ease / ill at ease learners feel when using and incorporating ICT in their study of a language at distance mode.

1.2 Objectives

Taking into account that the affective factors described in section 1.1 are composed of various constitutive elements, the aim of this study, i.e. the analysis of the correlation between those affective factors, can be broken down into smaller objectives that include those constitutive elements. In addition, some objectives related to socio-cultural aspects and general perception of the learning process have been included on the list, since they will serve as controllers of the main variables.

These objectives are summarised as follows:

Objectives related to Satisfaction with progress:

- To assess the learners' overall sense of motivation and how this correlates to the variables described in section 1.1
- To assess the learners' overall sense of progress and how this correlates to the variables described in section 1.1
- To analyse how effort (quantified in hours of study per week) and how this correlates to the variables described in section 1.1

Objectives related to attitudes towards the role of ICT in DLL and levels of ICT-related anxiety

- To identify any preferences learners may have between online / face-to-face language tuition.
- To assess the overall attitude learners have towards ICT
- To evaluate learners' attitudes towards the use of Lyceum, and how these attitudes correlate to the variables described in section 1.1 (for a brief explanation about Lyceum see section 1.3 below)
- To explore learners' attitudes towards the course website, and how these attitudes correlate to the variables described in section 1.1
- To investigate learners' attitudes towards the recording their assessments online, and how these attitudes correlate to the variables described in section 1.1
- To identify learners' attitudes towards the use electronic communication, and how these attitudes correlate to the variables described in section 1.1
- To evaluate learners' attitudes towards the materials of their course, and how these attitudes correlate to the variables described in section 1.1

Objectives related to socio-cultural aspects and general perception of the learning process.

- To establish attitudes towards language learning, based on previous language learning experience, difficulty and importance attributed to the language

learning process and to compare how these attitudes correlate to the variables described in section 1.1

- To explore the link between the appreciation of the target community culture and evaluate how this appreciation impacts on levels of language anxiety in a DLL context.

1.3 Why a study on affective factors and the role of ICT in DLL?

Much has been researched and written in the area of affective factors such as anxiety in general, and in the area of anxiety in learning in general and anxiety in language learning in particular. Considerably less has been researched and written about anxiety in DLL, and in particular, about ICT-related tension in DLL. In recent years, ICT has developed greatly and ICT applications have become increasingly user-friendly and are fostering an increase in distance learning in general. Part of this development includes some important ICT applications for DLL such as Lyceum. Lyceum is a synchronous computer-mediated communication (CMC) software which allows groups of people to speak to one another in real time over the Internet using Voice over IP conferencing. Lyceum was developed at the Open University in the UK and was introduced into language tutorials in 2002. It also offers an interactive whiteboard (for writing, drawing and importing images, e.g. from the Web), a concept mapping device (for taking notes or writing short texts), a word processor (for jointly writing and editing longer documents) and a written text chat facility. Researchers are constantly trying to assess the levels of effectiveness these types of software have in on-line teaching and new software is being developed and improved. As from the next academic year, The Open University will incorporate the use of a new type of software, Elluminate, in its on-line language courses. Elluminate's Collaborative Communications Framework (CCF) was developed to ensure all participants stay in sync, regardless of Internet connection speed. This technology enables all students, to get an interactive learning experience, with no lag time or garbled communication. The Open University, and more particularly, its language department, will be making increased use of ICT since language courses will be gradually shifted to a blend of online and face-to-face tutorials, hence the relevance of this study.

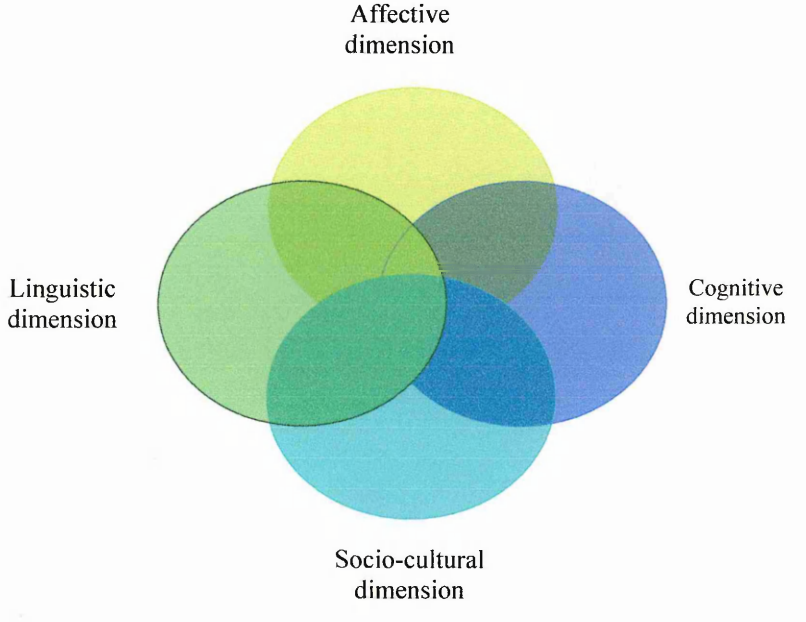
The use of software for language learning has been reported at different stages, from the pilot projects since 1997 (Hauck & Haezewindt, 1999, Shield 2000, Kötter 2001, Hewer and Shield 2001), to reports of the mainstream use (Hampel 2003, Hampel & Hauck 2004). Recent articles include task design (Rosell-Aguilar, 2005), tutor roles (Hampel & Stickler, 2005, Rosell-Aguilar, 2007), tutor impressions (Rosell-Aguilar, 2006a), and student impressions (Rosell-Aguilar, 2006b). However, none of these studies has as their focus a correlational account of the affective factors mentioned in section 1.1. Hence, there is a need for further research on the subject of ICT-related anxiety and attitudes towards the role of ICT in distance language learning that incorporates such new technologies.

This study has also been driven by some personal motives: as a professional language teacher I was formed in the Structuralist tradition, during the first stages of my career, and then in the Generativist tradition. The affective dimension had always been absent from my studies on second language teaching. However, after being a practitioner for more than fifteen year I came to realise the importance of the role of affective factors in second language teaching and learning. It was during a survey on motivation and drop-out rates I was conducting in my capacity as head of MFL in a local college that I came across a significant amount of literature on affective factors in second language learning. Since that moment, I have always wanted to research further this fascinating aspect of knowledge and make my personal contribution. Hence, the present study.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

As stated in the previous chapter, the main aim of this study is to examine the hypothesis that there is a correlation between tension or anxiety related to the use of information and communication technologies (ICT) and the degree of satisfaction and sense of progress a student experiences in DLL (Distance Language Learning). It is the aim of this chapter to briefly review existing literature related to second language acquisition theories (SLA) and then move on to review the fields mentioned above, placing special emphasis on anxiety in DLL and ICT-related anxiety. This review will provide a framework in which the place of affective factors research can be identified as an integral part of SLA research. In so doing the theoretical foundations for the present study will be laid and will provide a starting point for researching a relatively unknown area of knowledge. Although this study should be anchored in the affective dimension of SLA, I have included a brief overview of other dimensions of SLA because I believe that, far from being isolated entities, all these dimensions are closely intertwined and share a number of intersecting spaces. Therefore, in order to better understand one dimension of SLA it is vital to have an understanding of the others. The following Benn diagram may help visualise hoe the different dimensions of SLA are interrelated.



2.2 Second language acquisition (SLA) theories

Gregg (1990) points out that the ultimate goal of second language acquisition research is to develop a theory for second language acquisition, but that it is the general consensus of the linguists' community that such a theory does not exist. Beyond this point, that consensus begins to disappear, as is noted by Long (1985, 11) in a discussion of the problem of SLA construction, where it is explained how terms such as "theories", "models", "perspectives", "hypotheses", "theoretical claims", "approaches" are generally used in free variation in the SLA literature. However, Ellis, (1994, 18) argues that there are three distinct factors that provide accounts of second language acquisition that are essential for a comprehensive grasp of the subject. They are: the cognitive factor, the linguistic factor, and the affective factor. Mitchell and Myles (2004) add to that list the socio-cultural factor and the sociolinguistic factor.

2.3 Cognitive accounts of second language acquisition

The focus of cognitive accounts is not on abstract linguistic knowledge, but on the extent to which the learner has achieved proficiency of the formal and functional properties of language and the mental processes involved (Ellis 1994, 348). The present study attempts to account for the manner in which ICT-related affective factors mediate and facilitate the achievement of that proficiency. Most cognitive accounts have developed within a general theoretical framework that identifies several steps in the mental process responsible for L2 acquisition that goes from second language (L2) input to L2 output. These steps, originally developed by Gass (1988) are: L2 input; noticed input; comprehended input; intake; explicit knowledge; implicit knowledge (Interlanguage system) and L2 output. Different theories and models of second language acquisition vary depending on which step they place emphasis on. For example, Selinker's (1972) interlanguage theory is mainly concerned with implicit L2 knowledge, whereas Krashen's (1981, 1982) monitor theory is concerned with identifying the relationship between implicit and explicit knowledge and how they are used in L2 output. Variability theories such as Tarone's (1983) and Ellis's (1985c) provide an account of L2 knowledge in relation to observed L2 output. The Competition model in Bates and MacWhinney (1987) and the Operating principles (Andersen 1984a) are focussed on how input is noticed at different stages of development. The multidimensional Model in Meisel, Clahsen, and Pienemann (1981) emphasises the

interaction between implicit knowledge and output to be developed to produce different structures. Lastly, skill-learning models in Anderson (1983) and McLaughlin (1978b) refer to the different ways knowledge is presented, depending on the need to use L2 in different tasks.

2.4 Linguistic accounts of second language acquisition: a generative perspective

Children are exposed to too little linguistic data to determine by themselves the linguistic knowledge they attain. This gap between experience and attainment is known in the literature as the logical problem of language acquisition. Chomsky (1981a, 1986a) suggested, as a solution to this problem, the existence of an innate Universal Grammar (UG), i.e. a system of knowledge of what a natural language can be and innate domain-specific procedures for arriving at a grammar.

In adult second language acquisition, abstractly speaking, there is the same logical problem. However, in practice, they differ in that, in the case of adults, foreign language learning differs in degree of success. Bley-Vroman (1989) explains this difference in terms of The Fundamental Difference Hypothesis: in adult foreign language learning general problem-solving systems substitute the domain-specific procedures present in child language development. In addition, native language knowledge acts as a surrogate for Universal Grammar. This study seeks to investigate how the use of ICT and the levels of anxiety related to ICT impact on these general problem-solving systems.

2.5 Affective accounts of second language acquisition: Anxiety and Motivation.

2.5.1 Language anxiety

Even when much has been written about language anxiety, it is always useful to provide accurate definitions and agree on the meaning of the terms used. It is generally understood that language anxiety is the discomfort and stress a learner experiences when learning a language as opposed to learning any other type of subject Rebecca Oxford (1999) argues that language anxiety is fear or apprehension occurring when a learner is expected to perform in the second or foreign language. For Gardner and

MacIntyre (1993) language anxiety ranks high among factors influencing language learning regardless of whether the setting is formal or informal.

Scovel (1978) advocates the existence of a positive mode of anxiety that can be helpful or facilitating, such as keeping students alert and active. However, most research shows that there is a negative correlation between anxiety and performance. This negative effect could operate both directly by reducing participation and avoidance of the language or indirectly by producing low self-esteem and self doubt, decrease of motivation, negative attitudes and beliefs, and poor language performance. Anxiety also decreases the processing capacity available for foreign language learning and use. Section 2.5.3 explores further the impact of anxiety on language learning success.

Horwitz (1990) suggested that anxiety can be helpful only in limited situations such as performing very simple tasks but it is not helpful for more complex learning settings such as language learning. In an interview with Young (1992), Krashen stated that there is no such thing as helpful anxiety in language acquisition, which requires that anxiety be zero. However, Krashen only referred to this problem from a theoretical point of view, since his ideas about anxiety in language acquisition lacked empirical substantiation.

Oxford (1999) points out that the language anxiety correlates can range from very personal factors, such as self-esteem, tolerance of ambiguity, beliefs and social anxiety, to procedural factors, such as classroom activities, methods and instructor-learner interactions. Self-esteem is a self-judgement of worth based on feelings of efficacy. It is a measure of how well / badly one interacts with one's environment. There also appears to be a correlation between self-esteem and language learning success. It is one of the aims of my study to analyse whether this interaction with the environment is affected by the use of technologies related to distance learning and in what manner it influences perception of success or satisfaction with progress. Tolerance of ambiguity refers to the acceptance of new socio-linguistic situations or contexts that can be difficult to disambiguate, hence causing confusion. Language learning has a great deal of ambiguity, which can generate high levels of anxiety. One aim of the present study is to investigate how technologies affect this ambiguity and consequently, how they affect levels of anxiety. This is closely related to Phelps and Ellis's discussion on attribution theory addressed in section 2.9 below. Beliefs and erroneous

preconceptions about language learning can lead to inadequate and inefficient learning behaviour which in turn can lead to language anxiety (Young 1991). Social anxiety takes place together with the presence (or the potential presence) of interpersonal evaluation. People who worry about other people's assessment of them tend to avoid or withdraw from social situations where they might be perceived negatively. This can lead to communication apprehension, which is the person's level of anxiety related to actual or anticipated communication with other individuals.

2.5.2 Role of affect in language learning

For Stevick (1999) affect is defined as "the purposive and emotional side of a person's reaction to what is going on". Learning is defined as "the process of changing a learner's inner resources so that they will become more useful". Stevick identifies five roles of affect in language learning: a-Affective data are not only stored in the same network data other type of data (non-affective data) are stored, but they are also the kind of data that organise those data networks; b-Affective data may retrieve from long term memory certain kinds of data that may interfere with the organisation of data in the short term memory; c-The affective side of feedback influences the shaping and reshaping of the networks of long term memory; d-Affect is significant in initiating voluntary playback of language, i.e. one's own use of the language; e-Affect may still interfere with one's ability to retrieve information from the long term memory, even when this information was well stored.

This interpretation of the role of affect brings about two main implications for language teaching. Firstly, language learning has to take place in a reassuring, relaxing and friendly environment where the learner can feel at ease and free of tension. Secondly, most of the learning process has to revolve around the learner's needs. As indicated in chapter one, one of the aims of this study is to explore in what ways the role of affect potentiates or inhibit ICT-related anxiety in distance language learning.

2.5.3 Motivation and success in language learning

Hauck and Hurd (2006) conducted two studies the results of which are shown in a paper that seeks to explore the interrelationship between some affective factors and self management and their impact on success. In particular, the paper focuses on the concept of language anxiety. The studies identify a number of causes of language

anxiety, the most recurrent being: fear to speak, difficulties with vocabulary and grammar, realising how much work it takes to learn a language and fear of critical reaction from others. Nearly all the students participating in the study (96%) expressed the view that they were made most anxious by the difficulty of assessing personal progress, in other words, awareness of achievement. The studies conclude that there is a strong link between affective factors and self-esteem and self-efficacy and achievement beliefs. Therefore, it can be argued that lowering anxiety levels has a positive impact on the learner's motivation because the level of self-esteem and satisfaction with progress from the learner's point of view is higher when the levels of anxiety are lower.

Dörnyei (2005) provides us with a thorough description of different approaches to the study of motivation. During the second half of the 20th century (1959-1990) language learner motivation research was dominated by the social-psychological concepts of integrative and instrumental orientation. Integrative orientation entails that students feel at ease with the people that speak the language they are studying, admire the culture associated to that language and have a desire to become familiar with or even integrate into the society that speaks the language. This type of motivation is characteristic of immigrants for whom learning the language is a necessity in order to operate socially in the community and become one of its members. By contrast, instrumental orientation is driven by the desire to obtain something practical or concrete from the study of a second language. In general this type of motivation is more utilitarian and involves little or no social interaction with the community of the target language.

A point can be made that these two forms of motivation are not necessarily mutually exclusive. A typical example of such a combination is the international student that learns a foreign language for academic purposes but at the same time seeks to attain some degree of social integration.

Both integrative and instrumental motivation can be perceived as facilitators of SLA achievement. In fact Gardner (1985), in his socio educational model, identified a number of factors that are interrelated when learning a second language. His research focuses on SLA in a structured classroom setting rather than a natural environment. The model addresses four features of SLA, including the social or cultural milieu, individual

learner differences, the setting or context where learning takes place and linguistic outcomes.

The social milieu determines the student's attitudes about language and culture. For example, in monolingual cultures the prevailing belief is that bilingualism is unnecessary and that assimilation of minority cultures and languages is desirable. In societies such as the UK, where the native language is of enormous international status, learning a foreign language is even considered unnecessary by an alarmingly large portion of the population. The learners' social and cultural milieu determines the extent to which they wish to identify with the target-language culture and also the extent to which they hold positive attitudes towards the learning situation.

The two most influential individual differences Gardner identifies are motivation and language aptitude. Within the model, motivation is said to entail three elements: effort, desire and affect. Effort relates to the time spent studying the language and the drive of the learner. Desire refers to how much the learner wants to learn the language, and affect involves the learner's emotional reactions regarding the learning process.

Other studies, however, suggest that students' achievement has a great impact on their motivation. This is known as resultative motivation. Hermann (1980) formulates this idea in the "Resultative Hypothesis", which claims that students who do well in their courses experience an increase in their motivation and vice versa. This hypothesis can be applicable to international students of postgraduate courses. Their initial instrumental motivation to study the target language is very high due to the need to pass an entrance examination. Once they have passed the examination and started their courses, their motivation might suffer some variation, depending on how successful they are in their programmes. It is possible that the relationship between achievement and motivation is interactive and that this interaction operates in either directions i.e. motivation could increase or decrease depending on awareness of achievement.

The 1990s were dominated by work drawing on cognitive theories such as the Self-Determination theory (Deci & Ryan, 1985, 2002), and Brown (1994), which focuses on various types of intrinsic and extrinsic motives; Attribution theory, Weiner, (1992) and Ushioda (1998, 2001) argues that the reasons to which we attribute previous successful and unsuccessful experiences have great impact on motivation for future

action; and Task Motivation, Dörnyei (2002), and Kormos and Dörnyei (2004), which takes the task as a unit of analysis to break down the complex learning process into discrete segments.

In recent years, research on motivation shifted the focus of attention to the dynamic character and temporal variation of motivation. An example of this line of research is the Dörnyei and Ottó (1998) Model of L2 Motivation. The model breaks down the motivational process into temporal segments that are called stages which attempt to account for initial wishes and desires, operationalised intentions and how they are enacted, and the final evaluation of the process.

2.5.4 Anxiety in DLL

As regards anxiety in DLL, the present study would like to draw attention to recent research conducted by Stella Hurd (2007). In her study, Hurd sets out to test the hypothesis that the isolated context and the physical absence of a tutor and peers suggest that FL anxiety might be intensified in a distance setting. The research consisted of a longitudinal study using questionnaires, think-aloud protocols and one-to-one telephone interviews with students enrolled on a distance lower-intermediate French course at The Open University (UK)

Based on Spielmann and Radnofsky (1999)'s contention that tension in language learning is linked to personal expectations and a priori beliefs about language, Hurd tries to find out why students choose a DLL course and whether they think this is more / less / equally stressful than class based language learning. 64.5% of the students chose a DLL course based on practical reasons but only 1.9% of the respondents felt that DLL was less stressful than class based language learning. As regards levels of anxiety and learning modes, the results were not conclusive for over half the students claimed that there was no difference between DLL and class based language learning as far as anxiety levels are concerned (i.e. they felt just as anxious in either mode of learning) and 27% felt that DLL made them less anxious than class based language learning. In spite of this apparent discrepancy, Hurd claims that the results of her study indicate that anxiety is an influential factor in language learning at a distance, and thus support findings from some contemporary classroom-based studies on language anxiety such as Bell (2007). Anxiety-related problems focused mainly on speaking, in particular when

called on to speak in front of others, and fear of not being understood and in general, inability to communicate to their satisfaction.

The following emerged from the study as "distance" factors related to anxiety:

- Lack of instant feedback
- Difficulty assessing personal progress
- Isolation
- Lack of confidence when working on your own
- Ambiguous task instructions

It is worth noticing that none of the reasons given were related to the technology involved in the course, since that was not the principal focus of the study.

However, one interviewee did mention a new anxiety-provoking element related to studying the course: all the technologies involved in the course. This noticeable gap in that paper encourages the present study to pursue some research along those lines and link ICT-related tension to satisfaction with progress. In the limitations and future directions section, Hurd states that:

> Given that there is considerable evidence of a negative correlation between anxiety and low achievement with face-to-face learners (Horwitz et al., 1986; MacIntyre and Gardner, 1989; Gardner and MacIntyre, 1993a,b; Matsuda and Gobel, 2004), the inclusion of achievement measures in future studies with distance language learners would be another fruitful extension of the research.

Since practical considerations make it impossible to include actual measures of linguistic progress, I have chosen to include items related to students' perceptions of their own progress, as opposed to institutional measurements of progress. Hurd's study did not undertake any kind of simple/factorial analysis of variance and covariance of the variables involved in the quantitative phase of her study. It is expected that such analysis would facilitate identifying, isolating and establishing correlations between anxiety and "distance" factors as distinct from "language learning" factors, and in the case of this study, "ICT-related" factors.

2.5.5 Computer anxiety & attribution theory

In the early 1990s, ICT-related anxiety received considerable attention in the psychologically-based literature and is defined as generalised emotional distress or the tendency of an individual to be uneasy, apprehensive and/or phobic towards current or future use of computers (Igbaria & Iivari, 1995). Computer anxiety may include worries about embarrassment, looking foolish or even damaging computer equipment (McInerney, McInerney & Sinclair, 1994). Computer anxiety is state-based; a transitory response to a specific situation. A number of studies (Mahmood & Medewitz, cited by McInerney, McInerney & Sinclair, 1994; Rosen, Sears & Weil, 1993) have found that for computer anxious individuals, increased experience tends to exacerbate rather than 'cure' the problem, with additional computer experiences strengthening negative affective reactions and promoting further computer avoidance. Continuing anxiety after training may be a function of an individual's prior computing experiences, attitude towards computing, perceptions of self-efficacy and expectations of success (McInerney, McInerney & Sinclair, 1994).

Phelps and Ellis (2002) conducted a study which successfully tested the hypothesis that assisting computer-based learners to engage in both cognitive self-appraisal and cognitive self-management in relation to their attributional characteristics can assist them to overcome computer anxiety and hence make more appropriate use of computers as learning tools. The main focus of their study is the role of an individual's expectations of success and the influences of these expectations on their approach to computer use.

Attribution is, at its simplest, an individual's explanation for their successes or lack of successes.

To better explain attribution theory it is important to differentiate between causal dimensions and causal explanations. In the above mentioned study, Phelps and Ellis explain that difference along the following lines: Causal explanations are the specific explanations people make concerning the causes of prior outcomes. Examples of commonly expressed explanations include luck, ability or effort. Underlying such explanations (attributions) are *causal dimensions* that represent the individual's cognitive structure. It is generally posited that it is the causal dimensions rather than the

specific attribution explanations that are believed to influence expectations. 'It is not the individual's belief in a lack of ability per se that is theorized to cause lower expectations, but rather it is the individual's belief that the cause is stable and cannot be changed that results in the lowered expectation' (Kent & Martinko, 1995b, p.26). Attributional theory thus provides a framework for understanding individuals' beliefs and motivations. For instance, individuals who tend to blame themselves for negative events, who think that the cause will occur in different contexts and who think that it will last into the future might be considered as having a 'pessimistic' attributional style. Those who rate the situation in the opposite fashion might be considered as having an 'optimistic' attribution style (Seligman, 1990).

It is in the light of this study that I have included in my study attributional style awareness measures as another element to test the relationship between ICT-related tension and degrees of satisfaction with progress.

In the nineties, some studies (Beauvois, 1998; Freiermuth, 1998; Kelm, 1992; Kern, 1995; Warschauer, 1996) indicated that computer-mediated communication (CMC) might reduce FL communication apprehension because it provides an unusual social and communicative space, where many FL learners feel less inhibited. However, in recent years, Arnold (2007) conducted a study to test this hypothesis, which resulted in inconclusive evidence. One of the aims of the present study is to contribute to this debate by considering this issue within a framework of DLL.

2.5.6 Neurological perspective on affect in SLA

Schumann (1999, 28) provides a neurological perspective on affect and methodology in SLA based on a model of learning that tries to link the neurobiology and psychology of stimulus appraisal with variable success in second language acquisition. In other words, this is the evaluation the brain makes of stimuli received from the language learning situation, and this appraisal leads to emotional response.

Several dimensions along which stimulus appraisals are made have been identified: novelty and familiarity, pleasantness, goal and need significance, coping potential, and self and social image. Novelty appraisal refers to unexpected or familiar patterns in internal or external stimulation. Pleasantness examines whether an agent, an

action or an object is appealing or unappealing thus promoting approach or avoidance. Goal/need assessment reveals whether a particular stimulus event fosters the satisfaction of the individual's needs or goal achievement. The coping potential assessment shows the individual's ability to cope with an event. Self and social image assessment checks how compatible an event is with social and cultural norms and how compatible an event is with the individual self concept or ideal self (Scherer 1984)

These dimensions have been extensively taken into consideration in questionnaires that are used to investigate motivation in second language learning. Examples are provided from; Gardner (1985), Schimidt and Savage (1992), Schimidt, Boraie and Kassabgy (1996) and Clément, Dörnyei and Noels (1994)

The present study takes into account these dimensions for the design of the questionnaire used to collect data. The objective of this inclusion is to observe how novelty and familiarity, pleasantness, goal and need significance, coping potential, and self and social image correlate with ICT related levels of anxiety and levels of satisfaction with progress.

2.6 Socio-cultural accounts of second language acquisition

This tradition advocates that the (target) language is a tool for thought and that language learning is a socially mediated process. Lantolf (2000a, p 80) explains that for sociocultural theory, language is a culturally created artefact that mediates and organises human social and mental activity. Language is presented as an instrument for the transmission of messages and meanings. "Dialogic communication is essential for the joint construction of knowledge (including language forms) which is first developed inter-mentally, and then appropriated and internalised by individuals." Mitchell and Myles (2004, page 200).

The socio-cultural elements that intervene in the acquisition of a second / additional language are closely intertwined with affective factors and there is a mutually complementary interplay between socio cultural and affective factors. One of the objectives of this study is to explore the link between the appreciation of the target community culture and evaluate how this appreciation impacts on levels of language anxiety in a DLL context.

2.7 Summary

This literature review has outlined the main approaches in SLA research. Particular emphasis has been placed on the role of affective factors in language learning. Among those affective factors, language anxiety and motivation have been examined in detail. It has been argued that language anxiety reduces the effectiveness of language learning and that satisfaction with progress can act as a motivator to enhance that effectiveness. A link has also been established between those affective factors and DLL. However, with the constant development of ICT applications for DLL, there appears to be a research gap about how those affective factors interact with the role of ICT in DLL. This gap points to the need to answer research questions such as those selected for this study, ie:

- Are there are any correlations between attitudes towards the role of information and communication technologies (ICT) and the degree of satisfaction and sense of progress a student experiences in Distance Language Learning (DLL)?
- Do these attitudes correlate to levels of language learning anxiety?
- How do these levels of anxiety correlate to levels of satisfaction with progress?

CHAPTER 3: METHODS OF DATA COLLECTION

3.1 Introduction

The first step researchers must take when deciding what methods of data collection to choose for their research study is to look at the questions they want to answer. As stated in previous chapters, the questions this study tries to answer are whether there are any correlations between attitudes towards the role of information and communication technologies (ICT) and the degree of satisfaction and sense of progress a student experiences in Distance Language Learning (DLL) and to quantify those correlations. The study also seeks to answer how these attitudes correlate to levels of anxiety and how these levels of anxiety correlate to levels of satisfaction with progress.

3.2 Types of research

The aims and objectives of a research study vary from one the type of study to another. Sampieri et al (1998) classify research studies in social science into four categories: exploratory, descriptive, correlational and explanatory. The type of study is important in that it determines the strategy of the research, the design, data collection and analysis methods and other elements of the research process. In practice, a study can include elements of more than one type of research. A study can start out as exploratory, then become descriptive and correlational and finish as an explanatory study.

Two main elements determine which category a study belongs to: the gaps in previous research identified via the literature review, which is discussed in chapter 2, and the approach adopted by the researchers. The approach of the present study is mainly correlational. However, in the section related to the findings there will be an attempt to use an explanatory approach for reasons outlined below.

3.3 Correlational studies

The main aim of this type of study is to establish whether there is a relationship between two or more concepts or variables in a particular context and to measure the extent of that relationship. The principal use of this type of study is to see whether it is possible to get to know the behaviour of a concept or variable based on the knowledge of the behaviour of another variable that is correlated to the first variable. In other words,

a study would try to predict the approximate value that a group of individuals will have for a variable, based on the value they have for a correlated variable.

However, correlation does not mean causation. Hence the partial explanatory value of a correlational study. This is the reason why towards the end of this study a more explanatory approach will be adopted.

3.4 Quantitative approaches and research methods in applied linguistics

This study adopts a quantitative research methodology because its principal characteristics are compatible with and suitable for the achievement of the objectives of the study. In order to establish the methodological rationale behind this study this section will discuss, briefly, the merits and shortcomings of the research approach selected for this study.

Quantitative research approaches for applied linguistics take their methodological model from the physical sciences emphasising the importance of the logics of the experiment. These experiments involve the manipulation of quantitatively measurable variables in order to determine relationships such as cause and effect relationships between variables. Positivism uses the "covering law" model to draw explanations for its findings. The deductive method is used to refer to universal laws that establish patterns of regularity amongst variables. It also appeals to statistical laws by which relevant circumstances influence the high probability of the occurrence of relationships among variables. Sampling procedures and statistical analyses are of great importance and the generalisability of findings is a great concern. Quantitative approaches place great importance on phenomena that can be directly observed or that can be logically inferred from observation. Data should be collected following strictly standardised procedures that eliminate any kind of human interference within the process and that ensure the possibility of replication. This approach to data collection is sometimes known as procedural objectivity. In second language research, this approach often takes place in the form of a survey (Brown and Rodgers, 2002)

Another characteristic of this approach is objectivity. To be objective or to conduct an objective study means to place our focus of attention and emphasis on the object of study itself, trying to avoid any influence from the subject that conducts the

study. To be able to isolate the object of study from the researcher and other various external forces that might be present (subjective influence) is imperative to access the kind of knowledge about the object that can reflect its true essence without distortions of any nature, in other words, to get to know the world as it is in its purest state. This particular notion of knowledge goes hand in hand with the methodology used to build it. This methodology and set of procedures should be implemented in such a way that the whole process of data collection, analysis as well as the conclusions that are arrived at in any given experiment by following the same set of procedures, should be independent from external factors such as researchers' personality, nationality, gender, personal beliefs, upbringing and the like.

Another characteristic of this approach to research is that the scientific method employed in research is followed in a rather rigid and rigorous manner, which contributes to the assurance of the validity and the veracity of the whole process, since they are open for cross-check, testing and criticism by other inquirers. The phenomena under study are usually categorised in measurable data and quantitative methods are preferred over qualitative ones. The former are perceived as objective due to the fact that they are easily replicable, the latter are thought of as lending themselves to subjectivity or bias. However, validity and reliability are not exclusive to quantitative methods, since there are other research approaches, such as the qualitative approach, that offer rigorous and valid methodologies.

The main criticism voiced by advocates of the qualitative approach is that the numerical data provided by quantitative research, and its conclusions, may not represent accurately what they claimed to represent. This line of criticism suggests that quantitative research fails to capture and account for the very essence of human social life, which is assumed to be cause-effect based, leaving aside the intricacies and complexities of processes of interpretation and negotiation. In fact, people's perspectives on the world around them have a dramatic incidence on their actions and on the diversity of their beliefs. In this light, researchers might need to abandon pre-conceived hypotheses and adopt an exploratory approach to the forces at play in the construction of a particular phenomenon. Furthermore, quantitative methodology averages out responses of all the participants and working with averages excludes the rich variety that can be found in different individualities. The results produced by

quantitative methods can derive from different processes underlying the phenomena under observation, and these potential differences are not usually detected by quantitative methods. This is the reason why the explanatory capabilities of quantitative research are rather limited. To counterbalance these shortcomings, a qualitative approach could have been adopted in this study, but this was ruled out due to practical reasons such as problems of time and access to participants. In addition, a qualitative approach would not have produced the numerical data, which is central to this study.

3.5 The questionnaire as a data collection instrument

There is a variety of data collection instruments that can be used in quantitative research in applied linguistics, (Bell, 2005) (Blaxter et al, 2006). Dörnyei (2007) identifies three main quantitative data collection instruments in language research: tests, objective measurements, and surveys. A first form of producing quantitative data is by means of language tests, which tend to be complex and highly specialised. Several disciplines such as discourse analysis, conversational analysis and corpus linguistics have been developed to carry out the collection and analysis of language data. Secondly, there are objective measurements, which consist of measuring phenomena objectively by controlled means such as assessment of response time or behavioural frequency. These two types of analysis, however, are not the focus of this study. A third method of generating data is by conducting a survey using a questionnaire. This method produces numerical data that is relatively easy to codify and analyse by statistical software. Since this study will attempt to provide a series of statistical analysis of the data collected, a questionnaire has been chosen as the most suitable data collection instrument because it would facilitate that type of analysis, since responses showing the respondents'' attitudes and perceptions on the topics related to the research questions of this study can be easily codified to be analysed by statistical software such as SPSS.

Questionnaires, as well as other data collection instruments, have their strong points and their weaknesses. Dörnyei (2003, ch 1) indicates that they are very effective in the areas of the researcher's time, effort and financial resources. This is particularly true of the data collection process of this study. The administration of a questionnaire to a group of students has gathered a significant amount of information. This process has taken considerably less time and effort than other data collection methods, such as interviews, would have taken. In addition, the cost of the process has remained

relatively low. Questionnaires are also versatile, in that they can be used with different types of people, in different types of situations and they can target different types of topics.

The main shortcoming of questionnaires is that, if they are not constructed carefully, they could produce unreliable and invalid data, which may result in inaccurate explanations and conclusions. For a questionnaire to be effective, reliable and valid it needs to avoid common errors in the wording of the questions. The following is a list of potential sources of problems, and examples of how they were addressed in the questionnaire of the study:

- Ambiguity and imprecision: words that have a particular meaning for the researcher may have a different meaning for the respondent or may even be meaningless. For example, the phase "autonomous learning" was replaced by "learn without needing too much help from other people" to disambiguate the question.
- Assumptions should be avoided by limiting the questions to known facts. If in doubt, make further questions to confirm or disconfirm assumptions. For example, instead of asking whether previous language learning was a positive experience, it is necessary to verify if there really was such previous experience. Therefore, this question was asked first.
- Memory: sometimes respondents' memory is not so reliable. To avoid important omissions it is advisable to include a list to choose from, e.g. in this survey I included a list of elements that may cause anxiety when learning a language.
- Double questions. Questions should target only one item. Researchers may feel tempted to group items into categories and ask a question about the category without discriminating between the items within the category, missing out on subtle (and sometimes obvious) differences between the items in a category. For example, instead of including a question on ICT, I included separate questions to ask about the different items in that category such as electronic communications, Lyceum software or the on-line recording system.
- Leading questions: The use of emotive language or certain ways to ask questions can lead respondents to give a particular answer. This was avoided by formulating statements in a neutral register with a scale type choice of answers.

- Hypothetical questions: If the condition is unlikely to happen then this type of question is useless. If interested in a possible future course of action, researchers should make sure that the conditions are reasonably likely to occur. For example, in this study, asking about the likelihood of taking a similar distance language course in the future does not presuppose the fulfilment of unreasonable conditions.

3.6 A note on Ethics

As Hammersley and Atkinson (2007) point out, the assumption that the goal of research is the production of knowledge does not imply that this goal should be pursued at all costs. Careful attention should be paid to the ethical issues surrounding educational research. In this study the five areas suggested by Hammersley and Atkinson have been considered: informed consent, privacy, harm, exploitation, and consequences for future research.

Informed consent: People should be able to decide on being researched based on comprehensive and accurate information. They should also be able to decline or withdraw from participation at any time. Researchers should endeavour to provide sufficient information about all aspects of the research that might reasonably be expected to affect informants' willingness to participate. The information given at the outset of a project should cover the objectives of the research, its possible consequences, and issues of confidentiality and data security. All participants in this study were sent an invitation to participate in the study (See appendix 1). This invitation explained the nature and aims of the study, and potential participants were told they were free to decline participation and their participation would be taken as their consent to the study.

Privacy: Informants have the right to remain anonymous. Their confidentiality should be respected, and an attempt made to anticipate potential threats to both anonymity and confidentiality. The survey addresses some issues of private nature such as feeling of anxiety and discomfort derived from particular aspects of the participants' educational experience being researched. The concept of privacy, however, was preserved throughout the study by a strong commitment to anonymity. The identities of all participants are confidential and all results refer to the group as a whole and no reference to particular individuals is made in the study.

Harm: In this study it was made sure that no participant was harmed in any way. All questions in the survey were carefully considered to avoid sensitive areas, and when sensitive areas were addressed, the wording of the questions was carefully considered. Both supervisors and the Student Research Project Panel (SRPP) gave their consent to the questionnaire used in this study.

Exploitation: No issues of exploitation were identified in this study. It was explained to the participants only had to invest 15 minutes of their time and that the results of this study would be used to suggest ways of improving the quality of DLL in future OU courses.

Consequences for future research: Social research relies on being allowed access to the settings where that research takes place. This observation might seem trivial. However, if institutions or / and individuals find subsequent research objectionable, and refuse access to those settings for further research in the future, social research, as it is practised today, will not be viable, should this refusal happen on a large scale. With this principle in sight the OU has a department (Student Statistics & Survey) that chooses very carefully the sample of students to be contacted for surveys and studies, trying not to saturate them and they have put in place mechanisms to verify the students' willingness to be contacted and to participate in such research activities.

In addition, this study has followed the "Recommendations on Good Practice in Applied Linguistics" of the British Association for Applied Linguistics (BAAL) and the "Revised ethical guidelines for educational research" of the British Educational Research Association (BERA). Emphasis has been placed on three areas of responsibility: to informants, to colleagues and to Applied Linguistics as a discipline.

- General responsibility to informants. Applied linguists should respect the rights, interests, sensitivities, and privacy of their informants. As explained in the previous paragraphs, this area has been covered since the onset of the study.
- Responsibilities to colleagues: Referring to the work of others: Applied linguists should not knowingly misrepresent the work of others. They should never present other people's work as their own; they should acknowledge in full all those who contributed to their research and publications; and they should clearly identify and reference any material which comes from other authors'

publications or from personal communications. This study acknowledges the work of other researchers and intends no misinterpretation of such work.

- Responsibilities to Applied Linguistics: The integrity and reputation of applied linguistics partly depends on the way in which knowledge is produced and circulated inside the profession. It is essential to avoid the fabrication, falsification or misrepresentation of evidence, data, findings or conclusions. All aspects of research should be reported in enough detail to allow other applied linguists to understand and interpret them. Within the conditions of any research project, it is also worth considering ways in which the data collected could be made available to others working in the area. To the best of the author of this study's knowledge there has been no fabrication, falsification or misrepresentation of evidence, data, findings or conclusions.

3.7 Rationale behind the questionnaire

The questionnaire devised for this study (see appendix 1) uses thirty closed-ended items, mainly Likert style scale questions, since this type of scale is very effective for managing strength of feelings and attitudes (Bell, 2005, ch12). The Likert style questions use the traditional five response options. Although some researchers feel that an odd number of options may provide respondents with the opportunity to avoid making a real choice, the absence or presence of a middle category appears not to modify the results of the survey significantly, according to Nunnally (1978) and Robson (1993). Only one category question was included in the study to establish the number of hours respondents devote to their language studies.

Here follows a summary of the rationale behind the individual questionnaire items:

- Question 1 establishes whether there was any pre-course preference for DLL over face-to-face tuition. This will also help pin-point any change in attitude towards DLL.
- Question 2 establishes to what extent the need to learn a language plays a role as motivator.
- Questions 3 and 4 enquire about the respondent's general attitude towards language learning and the existence and quality of previous language learning experience.

- Questions 5 and 6 explore general attitudes towards computers and how effective/ non-effective the role of ICT in DLL is perceived by the respondent.
- Questions 7 to 13 try to throw light on how respondents relate various items of ICT to a sense of satisfaction and progress and to the presence / absence of anxiety.
- Question 14 correlates the use of ICT and motivation, and question 15 the use of ICT with a perception of progress.
- Questions 16 and 17 relate the course materials to a sense of progress / lack of progress.
- Question 18 enquires about the amount of time invested in the course and will be used to correlate effort to anxiety and sense of progress.
- Question 19 identifies non-ICT related possible causes for anxiety and will be used to isolate the variable ICT – related anxiety when correlating it to a sense of progress and satisfaction with progress.
- Questions 20 and 21 refer to self-assessment and will be correlated to ICT comfort / discomfort and levels of anxiety.
- Question 22 measures any change in the level of motivation.
- Question 23 explores the relationship between the use of ICT and being an independent learner.
- Questions 24 and 25 refer to the materials and contents of the course and will be correlated to levels of anxiety and levels of satisfaction.
- Question 26 tries to look at the link between perceptions of the culture associated to the language studied and levels of anxiety and levels of satisfaction.
- Questions 27 and 30 check on perception of progress.
- Question 28 explores the possibility of taking a similar course in the future and will be correlated to levels of ICT-related anxiety and perception of progress and levels of satisfaction.
- Question 29 tests whether there is any variation of perception of DLL as compared with answers to question 1.

CHAPTER 4: DATA COLLECTION AND DATA ANALYSIS

4.1 Data collection process

4.1.1 Design

The data collection process started with the design of the data collection instrument, i.e. the questionnaire. The design followed guidelines from Bell (2005), Potter (2006), Sapsford (2007) and Dörnyei (2003). The first draft of the questionnaire was reviewed by the supervisors and some modifications related to lay-out were introduced.

4.1.2 Approval

Since the survey was to be conducted by the Students Statistics and Survey Team of the Institute of Educational Technology of The Open University, approval from various committees and departments had to be obtained. The first approval came from the data-protection department, who did not find any ethical issues with the questionnaire and the survey. Then the Human Participants and Material Ethics Committee (HPMEC) gave their approval on condition the Student Research Project Panel (SRPP) gave their approval as well.

At first the SRPP raised some objections to the questionnaire. They asked to remove the word "anxiety" from the title, which was done, and from all the questions, on the grounds that this was a sensitive area. The answer to this objection was that the study was in fact about ICT-related anxiety and not to use this word would equate to concealing this fact from the participants. In addition, a paraphrase of the word "anxiety" would not capture accurately the response to the phenomenon under study. This explanation was accepted. Then, they requested that the questionnaire be redeveloped in terms of the rating scales used, and that other surveys produced by the University Students Statistics and Survey team that are published on the Survey Intranet of the university be used as a model. They also requested the written consent of the Course Team Chair responsible for the groups of students that were going to take part in the survey. This consent was first given verbally, and it was confirmed afterwards via e-mail. The SRPP also requested some proof of the educational benefit to the University this study would provide. This was explained simply in terms of the need to understand how two areas which often cause students concerns: i.e. use of ICT and learning a

language interact, and the implications for distance language learning. This will be beneficial as shortly all OU language courses will include ICT elements and online learning is expanding in this subject area. In addition, the SRPP wanted to be assured that all potential ethical issues of the study were given careful consideration. Ethical aspects of this study were discussed by the researcher and his supervisors, and it was agreed that there were no ethical issues and that there was no need to apply for ethical approval other than from the HPMEC. For further details on ethical issues see section 3.6 in the previous chapter. Finally, the invitation to participate in the survey needed to be more encouraging and needed to indicate the estimated time to take part. For the final version of the invitation letter see appendix 1.

4.1.3 Sampling

The sampling strategy used in the study is known as non-probability sampling, a group of strategies that try to achieve a reasonably representative sample using resources that are usually available to ordinary researchers. See Dörnyei (2005). Among the different types of non-probability sampling, this study uses convenience or opportunity sampling. In this strategy the main criterion for sample selection is the convenience of the researcher, in this case, time availability, accessibility and willingness to participate. The main drawback of this method is that the sample representativeness can be called into question, in quantitative research. However, convenience sampling is seldom 100% convenience-based, since participants usually share certain characteristics that are relevant to the aims and objectives of the investigation, in this particular case, all participants are members of the distance language course LZX192 2007-2008 at the Open University, of which 385 had previously given their permission to be approached for participation in surveys.

4.1.4 Piloting

Piloting a questionnaire before its actual administration is essential in quantitative research to ensure the process's reliability and validity. Piloting samples should share similar characteristics of the target sample. The aim of the piloting phase in this study was to ensure that the questionnaire items were clearly and unambiguously worded and to estimate the time need to participate in the survey. The piloting sample was relatively small; it consisted of six language graduates who were familiar with ICT

applications for language teaching. The piloting resulted in the modification of 3 items, and the estimated time for completion was between 15 and 20 minutes.

4.1.5 Administration

Once all the approvals were obtained and the piloting completed, the final version of the questionnaire was ready to be administered to the target sample. The actual administration of the survey was conducted by the Students Statistics and Survey Team of the university. 385 students of the LZX192 2007-2008 were sent via e-mail the invitation letter, which contained a link to access the questionnaire. After a week, those who had not participated in the survey were sent a remainder. By the end of the second week, the survey was closed and the data collected from 81 participants was sent to the researcher in excel and SPSS files for its analysis. This seems to be a rather low response rate. However, it is consistent with the SSST response rates for that period of the academic year.

4.2 Data analysis

4.2.1 Preliminary percentual overview of the data

The following is a description of the histograms included in appendix 2. These histograms represent the absolute numbers of the respondents' choices for each item in the questionnaire. The percentage scores were derived taking into account the total number of answers provided for each question.

Preference for online / face-to-face tuition: Although 78.48% of the participants expressed they had a choice of the learning mode, and 66.67% said the mode of learning made a difference to them, only 45.57% claimed that online tuition provided them with a more comfortable and safer learning environment. (See appendix 2, graphs 1-3)

Importance of learning a language: 82.73% of the participants indicated that it was important to them to learn a foreign language, whereas 4.94% showed disagreement with this statement. (See appendix 2, graph 4)

Previous experience in language learning (LL): 16.25% of the participants had not had a previous language learning experience, whereas 71.25% had, for 65.34% of whom the

experience was positive, and for 13.33% of whom the experience was negative. (See appendix 2, graphs 5-6)

Difficulty of learning a language: 43.75% of the participants share the view that learning a language is difficult, whereas 27.33% disagreed with that statement. (See appendix 2, graph 7)

Impact of ICT in LL: 51.85% of the participants expressed the view that they have learnt to study a language effectively using ICT. On the other hand, 20.99% disagreed with this statement. (See appendix 2, graph 8)

Attitudes towards computers: 82.72% of the participants expressed that they felt comfortable working with computers, whereas 7.41% disagreed with that statement. (See appendix 2, graph 9)

Lyceum and anxiety: 53.09% of the participants indicated that they felt at ease when working with Lyceum, while 28.40% disagreed with this statement. (See appendix 2, graph 10)

Lyceum and progress: 60.49% of the participants thought that Lyceum tutorials were useful for their progress, while 17.28% disagreed with this statement. (See appendix 2, graph 11)

Problems related to Lyceum: Among the type of problems encountered when using the Lyceum software, "technical problems" ranked at the top of the list with 46.15%, followed by "it's difficult to use" with 22.54%, "cannot use it in my computer" with 12.24%, "it is difficult to install" with 11.11% and "I don't like interacting with other student" with 10.20%.(See appendix 2, graph 12-17)

Anxiety and the course website: 89.88% of the participants were at ease when accessing materials in the course website, while 3.80% did not share this view. (See appendix 2, graph 18)

Anxiety and the eTMA system: 87.50% of the respondents sent their assignments via eTMA. Of this number, 77.92% felt at ease doing so, while 14.29% didn't. (See appendix 2, graph 19-20)

Anxiety and online recording: 72.73% of the participants felt at ease recording their assignments online, while 11.69% didn't. (See appendix 2, graph 21)

Electronic communications effectiveness: 75.95% of the participants felt this method of communication with their tutor was effective, whereas 16.46% disagreed with this statement. (See appendix 2, graph 22)

The use of ICT as a motivator: 44.88% of the participants expressed that the use of ICT increased their motivation to learn a language, while 29.49% disagreed with this statement. (See appendix 2, graph 23)

The use of ICT and a sense of progress: 62.03% of the respondents indicated that the use of ICT helped them progress in their language studies, while 20.25% disagreed with this statement. (See appendix 2, graph 24)

Course materials and progress: 82.50% of the participants thought the materials helped them process, while 5% disagreed with this statement. (See appendix 2, graph 25)

Course materials are easy to use: 83.75% of the participants shared the view that the course materials were easy to use, whereas 7.50% disagreed with the statement. (See appendix 2, graph 26)

Time devoted to studying: 34.57% of the participants devoted between 6 and 4 hours to their study per week, 27.16% between 9 and 7 hours, 22.22% 3 hours or less, 11.11% between 12 and 10 hours and 4.94% more than 12 hours. (See appendix 2, graph 27)

Sources of anxiety in language learning: Here follows a list of sources of anxiety as indicated by the participant

- Remembering vocabulary 51.85%
- I feel less in control than in my own language 50%
- Learning grammar 49.38%
- Pronunciation 41.25%
- Fear of making mistakes 31.25%
- Knowing that my speaking will be heard by other people 26.58%
- Too much time needed 25.31%

- Too much work 19.75%
- Slow progress 19.75%
- I can't translate word by word 13.75%
- Too different from English 7.50%

(See appendix 2, graph 28-38)

Assessment of own progress: 45% of the participants indicated that it was easy for them to self-assess their progress, while 26.25% disagreed with this statement. (See appendix 2, graph 39)

Sense of progress: 56.25% of the participants felt that they had progressed in their language studies, while 15% disagreed with this statement. (See appendix 2, graph 40)

Change of motivation: At the beginning of the course, 98.75% of the participants were motivated, but after six months of having started the course, 63.75% were still motivated, while 20% disagreed with this statement. (See appendix 2, graph 41-42)

ICT and autonomous learning: 53.75% of the participants felt that the use of ICT had helped their autonomous learning, while 18.75% disagreed with this statement. (See appendix 2, graph 43)

Perception of materials and teaching techniques:

	Agree	Disagree
Innovative	61.73%	13.58%
Up-to-date	72.50%	8.75%
adequate	60%	10%

(See appendix 2, graph 44-46)

Contents were interesting: 76.54% of the participants found the contents interesting, while 8.64% did not share this view. (See appendix 2, graph 47)

Attitude towards the culture associated to the language: 90% of the participants expressed that they liked the culture of the language they were studying. (See appendix 2, graph 48)

Perception of progress: 60.50% of the participants felt that they had progressed in their language studies, while 16.05% disagreed with this statement. (See appendix 2, graph 49)

Likelihood of taking a similar course: 67.90% of the participants agreed that they were likely to take a similar distance language course, whereas 17.29% disagreed with this statement. (See appendix 2, graph 50)

Variation of preference for online / face-to-face course modes: 30.86% of the participants indicated their preference for online tuition over face-to-face tuition, while 38.27 disagreed with this statement. (See appendix 2, graph 51)

Satisfaction with progress: 55.56% of the participants were satisfied with the progress made in the course; on the other hand, 24.69% expressed disagreement with this statement. (See appendix 2, graph 52)

An average of 18.43% of the total number of questions was not given a definite answer.

4.2.2 Analysis of correlations

The following analysis of correlations has been performed using SPSS 2004 software and following the statistical analysis guidelines in Sapsford (2007), Howell (2007) and Field (2005). The Pearson correlation test has been used to determine whether the relationships are statistically significant. By statistically significant it is meant that the likelihood that a relationship between two variables is the result of chance is remote.

To derive the following correlations, questions 6, 15 and 30 were given superordinate status. They represent the three main variables of the study and were used to establish correlations between themselves and between the other sub-variables in the study. In addition, some questions were omitted from the analysis because they represent the same variables as other questions do. Those "repeated" questions were used to check consistency in the answers.

There was a significant positive relationship between the levels of satisfaction with progress (SP) and Attitudes towards the role of ICT in DLL (AT-ICT), r = .538, p (one-tailed) < .01. (See appendix 3, table 1)

There was no significant relationship between (SP) and levels of ICT-related anxiety (AX-ICT). (See appendix 3, table 1)

There was no significant relationship between (SP) and (AX-ICT). (See appendix 3, table 1)

There was a significant positive relationship between the levels of satisfaction with progress (SP) and previous language experience, r = .253, p (one-tailed) < .05. (See appendix 3, table 2)

There was no significant relationship between (AT-ICT) and previous language experience. (See appendix 3, table 3)

There was no significant relationship between (AX-ICT) and previous language experience. (See appendix 3, table 4)

There was a significant negative relationship between the levels of satisfaction with progress (SP) and how difficult learning a language is perceived to be, r = -.188, p (one-tailed) < .05. (See appendix 3, table 5)

There was no significant relationship between (AX-ICT) and how difficult learning a language is perceived to be. (See appendix 3, table 6)

There was no significant relationship between (AT-ICT) and how difficult learning a language is perceived to be. (See appendix 3, table 7)

There was no significant relationship between the importance attributed to learning a language and (SP), (AX-ICT), or (AT-ICT) (See appendix 3, tables 8, 9, and 10)

There was no significant relationship between the amount of time devoted to study the language and (SP), (AX-ICT), or (AT-ICT). (See appendix 3, table 11, 12 and 13)

There was a significant negative relationship between the (SP) and levels of Lyceum-related anxiety, r = -.479, p (one-tailed) < .01. (See appendix 3, table 14)

There was a significant negative relationship between (AT-ICT) and levels of Lyceum-related anxiety, r = -.464, p (one-tailed) < .01. (See appendix 3, table 15)

There was a significant negative relationship between (AX-ICT) and levels of Lyceum-related anxiety, r = -.390, p (one-tailed) < .01. (See appendix 3, table 16)

There was a significant positive relationship between (SP) and the perception of the course website, r = .260, p (one-tailed) < .05. (See appendix 3, table 17)

There was a significant positive relationship between (AT-ICT) and the perception of the course website, r = .275, p (one-tailed) < .01. (See appendix 3, table 18)

There was no significant relationship between (AX-ICT) and the perception of the course website. (See appendix 3, table 19)

There was a significant negative relationship between the (SP) and the levels of anxiety related to recording assessments on-line, r = -.401, p (one-tailed) < .01. (See appendix 3, table 20)

There was a significant negative relationship between the (AT-ICT) and the levels of anxiety related to recording assessments on-line, r = -.511, p (one-tailed) < .01. (See appendix 3, table 21)

There was a significant positive relationship between the (AX-ICT) and the levels of anxiety related to recording assessments on-line, r = .289, p (one-tailed) < .01. (See appendix 3, table 22)

There was a significant positive relationship between (SP) and Attitudes towards the effectiveness of electronic communication with tutors, r = .367, p (one-tailed) < .01. (See appendix 3, table 23)

There was a significant positive relationship between (AT-ICT) and Attitudes towards the effectiveness of electronic communication with tutors, r = .496, p (one-tailed) < .01. (See appendix 3, table 24)

There was no significant relationship between (AX-ICT) and Attitudes towards the effectiveness of electronic communication with tutors. (See appendix 3, table 25)

There was a significant positive relationship between the (SP) and how interesting course materials were perceived to be, $r = .339$, p (one-tailed) $< .01$. (See appendix 3, table 26)

There was a significant positive relationship between the (AT-ICT) and how interesting course materials were perceived to be, $r = .253$, p (one-tailed) $< .05$. (See appendix 3, table 27)

There was no significant relationship between (AX-ICT) and how interesting course materials were perceived to be. (See appendix 3, table 28)

There was a significant positive relationship between the (SP) and how easy to use course materials were perceived to be, $r = .396$, p (one-tailed) $< .01$. (See appendix 3, table 29)

There was a significant positive relationship between the (AT-ICT) and how easy to use course materials were perceived to be, $r = .374$, p (one-tailed) $< .01$. (See appendix 3, table 30)

There was no significant relationship between (AX-ICT) and how easy to use course materials were perceived to be. (See appendix 3, table 31)

There was a significant positive relationship between (SP) and levels of motivation, $r = .565$, p (one-tailed) $< .01$. (See appendix 3, table 32)

There was a significant positive relationship between (AT-ICT) and levels of motivation, $r = .506$, p (one-tailed) $< .01$. (See appendix 3, table 33)

There was no significant relationship between (AX-ICT) and levels of motivation. (See appendix 3, table 34)

There was a significant positive relationship between (SP) and levels of self-assessment, $r = .369$, p (one-tailed) $< .01$. (See appendix 3, table 35)

There was a significant positive relationship between (AT-ICT) and levels of self-assessment, $r = .249$, p (one-tailed) $< .05$. (See appendix 3, table 36)

There was no significant relationship between (AX-ICT) and levels of self-assessment. (See appendix 3, table 37)

CHAPTER 5: INTERPRETING THE DATA

The data analysis shows that there is a significant positive relationship between the levels of satisfaction with progress (SP) and Attitudes towards the role of ICT in DLL (AT-ICT), i.e. there is a positive correlation. However, caution should be taken when interpreting correlation coefficients since they give indication of neither directionality nor causality. There are two main reasons why the interpretation of correlations should not be taken lightly.

The first reason is known as the third variable problem, or the tertium quid. Bivariate correlation causality between two variables can be influenced by additional variables that might not have been measured by the researcher or were measured, but were not included in the bivariate correlation analysis. In the case of this particular correlation, the variable "ICT-related anxiety" has also been measured but the analysis shows that it is not correlated with the two variables of the correlation under discussion. This problem can be attenuated by running a partial correlation analysis, which is the same as a correlation analysis but, in addition, it includes a control variable. The objective of this type of analysis is to isolate the control variable, hence preventing it from influencing the variables involved in the correlation under scrutiny. In this study, seven of such analyses were conducted. The following control variables were used: a-Levels of Lyceum related anxiety; b-Attitude towards course website; c-Recording online-related anxiety; d-Attitude towards electronic communication; e-Levels of interest in materials; f-Motivation, and g-Self-assessment. The results of all seven analyses confirmed the correlation between (SP) and (AT-ICT). (See appendix 3, tables 38-44)

The second reason why caution should be used when interpreting correlation coefficients is related to the direction of causality. Correlation coefficients do not indicate which variable causes the other to change. Although it could be argued, intuitively, that (SP) changes as a result of changes in (AT-ICT), there is no statistical reason why the inverse direction of causality shouldn't be true. However, this last alternative is highly unlikely because (SP) was measured after the respondents experience ICT in language learning and developed attitudes related to its effectiveness. Therefore, it is logically sound to conclude that the variable (AT-ICT) causes changes in the values of the variable (SP). It can also be argued that high positive values of (AT-

ICT) can act as a motivator that enhances progress and hence, results in high values of (SP). To support this idea, the data analysis shows that motivation is in fact positively correlated to the perception of progress. (See appendix 3, table 33). This argument is also in line with the concepts of instrumental orientation and the "Resultative Hypothesis" discussed in section 2.5.3, in chapter 2.

The analysis of the data also shows that, contrary to the original hypothesis of this study, there is no correlation between levels of ICT-related anxiety, attitudes towards the role of information and communication technologies (ICT) and the degree of satisfaction and sense of progress a student experiences in Distance Language Learning (DLL). A preliminary interpretation of this fact is that the effect language anxiety has on the language learning process is not replicated by ICT-related anxiety in a virtual or distance learning context. However, such an interpretation is not entirely accurate. Section 2.5.1 of the literature review discussed the effect language anxiety has on progress and achievement, in particular Oxford (1999). Section 2.5.4 extended this discussion to the distance learning context, in particular. Hurd (2007) suggests that language anxiety might be intensified in a distance setting. Section 2.5.5 brought into the discussion the ICT-element. The constant development of more sophisticated and user-friendly ICT applications to language learning in a distance context opened the door for research in that area, and it was anticipated that the characteristics and effects of language anxiety could be paralleled by those of ICT-related anxiety. A further analysis of the data seems to indicate that this is the case: If the category "ICT-related anxiety" is subdivided into smaller elements, a negative correlation can be established between these smaller ICT-related anxiety elements and levels of satisfaction with progress and Attitudes towards the role of information and communication technologies (ICT) in distance language learning (DLL).

As it was just pointed out, the obvious first interpretation of this fact is that there is no observable statistical relationship between the variables above mentioned. A second possible interpretation is that there are flaws in the data collection and analysis. Nevertheless, the descriptions of those processes show that enough care was taken, and consequently, such interpretation could be ruled out. A third interpretation, however, is that the concept of ICT-related anxiety is too big a category to allow for an unambiguous, clear-cut concept of anxiety to be grasped. The data analysis shows that if

every ICT-related item is considered in its own right, then, the levels of every single one of the specific-ICT-items-related anxiety do in fact correlate with the variables involved in the research question. Therefore, it is concluded that using a broad category such as "ICT-related anxiety" prevents the researcher from capturing the differences between the various ICT items included in this study. Furthermore, it is claimed that the levels of itemised ICT-related anxiety do in fact correlate with attitudes towards the role of information and communication technologies (ICT) and the degree of satisfaction and sense of progress a student experiences in Distance Language Learning (DLL).

As regards preferences learners may have for online / face-to-face language tuition, the data shows that, for over two thirds of the respondents the distinction between these two modes of learning influenced their choice of course. Moreover, nearly half the respondents shared the view that online tuition provides a more comfortable and safe learning environment. However, towards the end of the course, only about one third of the respondents thought online tuition was a superior mode of language learning, one third held the opposite view, and one third remained indecisive on the matter. The interpretation of this apparent change in preference cannot be explained in terms of levels of motivation or levels of satisfaction with progress, since the analysis shows that there are no correlations between these variables. In fact, nearly half of the respondents see the use of ICT as a booster of their motivation to study a language and over two thirds would take a similar course in the future. It is concluded then, that face-to-face language tuition has some characteristics that make it as appealing as DLL. The nature of those characteristics is beyond the scope of this study.

The data analysis shows that there is no statistical relationship between the variables of the research hypotheses and attitudes towards language learning, based on previous language learning experience, effort demanded and effort devoted, difficulty and importance attributed to the language learning process. There seems to be some discrepancy between the data and some of the theories discussed in the literature review, such as the instrumental and integrative orientation, as presented by Gardner, Hermann's "Resultative Hypothesis" or the attribution theory. However, Dörnyei and Ottó Model of L2 Motivation comes to the rescue because the model breaks down the motivational process into temporal segments. These segments may have different characteristics that impact on motivation in different ways. This in fact is confirmed by

the data that shows a decreasing shift in motivation patterns even when perception of progress remains high. At the start of the course, 99% of the participants were motivated, whereas by the sixth month of the course the levels of motivation had dropped to 63%.

CHAPTER 6: FINDINGS

6.1 Summary

- There is a positive correlation between the levels of satisfaction with progress and Attitudes towards the role of information and communication technologies (ICT) in distance language learning (DLL)
- There is no correlation between levels of ICT related anxiety and levels of satisfaction with progress and Attitudes towards the role of information and communication technologies (ICT) in distance language learning (DLL). This lack of correlation may be due to the fact that the category "ICT-related anxiety" is too broad to allow taking accurate measurements that can yield accurate conclusions.
- If the category "ICT-related anxiety" is parsed into smaller elements, a negative correlation can be established between these itemised ICT-related anxiety elements and levels of satisfaction with progress and Attitudes towards the role of information and communication technologies (ICT) in distance language learning (DLL). These items are:
    1. Lyceum software – related anxiety
    2. Course website – related anxiety
    3. Online assessment recording – related anxiety
    4. Electronic communication - -related anxiety

These items have not been explored in depth in the present study due to time constraints. However, they will be investigated further in a research study I am planning to conduct in the near future.

- Although DLL is perceived very favourably by students, face-to-face language tuition still retains some characteristics that make it as appealing as online tuition for DLL.

6.2 Validity and limitations

As pointed out in chapter 4, the fact that a non – probability sampling technique was used in the study could raise questions about the validity and representativeness of the sample, but it was explained that convenience sampling is seldom 100%

convenience-based, since participants usually share certain characteristics that are relevant to the aims and objectives of the investigation. However, there are some limitations as regards the generalisability of the findings of the study, since the study only surveyed learners at the initial stage of the distance language learning process. Indeed, to corroborate the findings of the study, similar studies should be conducted at more advanced stages of the distance language learning process. Having said that, it can still be speculated that learners at more advanced stages would still share characteristics that are relevant to the aims and objectives of the investigation, and, therefore, the findings of the present study can be generalised.

Another limitation of the study is related to the nature of the quantitative research method it uses. The questionnaire utilises categories, viewpoints and models previously defined by the researcher, and collects numerical data that is used to analyse the relationships between these categories and to confirm or disconfirm research hypotheses. Unfortunately, this method usually engages respondents with the topics investigated, in a brief and rather superficial manner, and fails to capture richer and more sensitive descriptions of the phenomena under scrutiny and the participants' perspectives on them, which is very helpful for the interpretation of the data, and which were not included in this study.

6.3 Thoughts for future research

The continuous creation, innovation and development of information and communication technologies (ICT) applications for educational purposes makes distance language learning a fertile terrain for research, in particular, research related to affective factors. It is of interest to the educational community to gain a deeper understanding of how people react to these new ICT interfaces and how these reactions impact on learning processes. There is a need for more quantitative research that investigates a wider variety and range of ICT items related to distance language learning. This type of research should aim at a wider target population and should enquire in various strata of the language learning process, i.e. not only at initial level, but also at intermediate and advanced levels. Such quantitative research should be complemented and enriched by qualitative research, since it could throw light, in a more detailed and personalised manner, on how people perceive DLL processes, how they perceive their

interactions via these virtual interfaces and how meaningful these perceptions are for them in their own contexts.

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APPENDIX 1: LETTER OF INVITATION AND QUESTIONNAIRE

1. Letter of invitation

Milton Keynes, July 2008

Dear student,

I am writing to request your help with a research study to find out how different uses of information technology in distance language learning impact on the way you feel about your learning and on satisfaction with progress in your language studies.

This is an opportunity to express your opinion on various aspects of your distance language course. The information you give us will be carefully analysed and will be used to improve the quality of distance language learning courses in the future.

The study is completely voluntary and anonymity will be preserved throughout the research process. We only include the personal identifier on the questionnaire so that we can analyse the data by grouped student characteristics such as gender or age bands. This information also enables us to avoid sending reminders to those who have already replied.

Data will be treated with strict confidentiality, stored on the researcher's computer and password protected, and will be disposed of by December 2008. No individual respondent will be identified in any report of the findings of this survey. Completion of the questionnaire will be taken as an indication of your consent.

To participate, please go to the link below where you will find a questionnaire. We estimate that this will take no more than 15 minutes.

Thank you for your time and help with this matter: your responses will help us improve the experience of students on our courses.

Yours sincerely,

Roxton Bell

Research student, The Open University

(The link to questionnaire)

2. Questionnaire

Satisfaction in Distance Language Learning

The questionnaire contains 30 statements. Please select only one beside each statement to indicate how much you agree with it.

5 means that you definitely agree
4 means that you agree, but with reservations
3 means that you really find it impossible to give a definite answer
2 means that you disagree, but with reservations
1 means that you definitely disagree

If a statement is **always** true for you or your programme, you should choose 5 ('definitely agree').

If a statement is **never** true for you or your programme, you should choose 1 ('definitely disagree'). If you really find it impossible to give a definite answer, you should choose '3' rather than leave a blank. If you leave every button blank it will difficult to use any of your responses, so please check that for each statement there is a single clear response.

1. **I chose a language course with online tuition as opposed to face-to-face tuition because...**

... it was the only course available.
(Please select one only)

Definitely agree ○ **5** ○ **4** ○ **3** ○ **2** ○ **1** Definitely disagree

... it made no difference to me.
(Please select one only)

Definitely agree ○ **5** ○ **4** ○ **3** ○ **2** ○ **1** Definitely disagree

... online tuition provides me with a more comfortable and safer learning environment.
(Please select one only)

Definitely agree ○ **5** ○ **4** ○ **3** ○ **2** ○ **1** Definitely disagree

2. **It is important for me to learn a foreign language.**
(Please select one only)

Definitely agree ○ **5** ○ **4** ○ **3** ○ **2** ○ **1** Definitely disagree

3. **I have had previous experience of learning another language.**
(Please select one only)

Definitely agree ○ **5** ○ **4** ○ **3** ○ **2** ○ **1** Definitely disagree

(If applicable) It was a positive experience.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

4. **I find it difficult to learn a language.**
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

5. **I have learnt to study a language effectively using information and communication technology (ICT) on this course.**
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

6. **I feel comfortable working with computers.**
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

7. **(If applicable) I feel at ease whenever I work with the Lyceum programme.**
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

8. **(If applicable) I think the Lyceum tutorials are very useful for my progress.**
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

9. **(If applicable) I have NOT used the Lyceum programme because...**

... it is difficult to install.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

... it is difficult to use.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

... I don't like interacting with other students.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

... I cannot find the software within the material provided.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

... I cannot use it on my computer.

(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

... I experienced technical problems.

(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

10. I feel at ease getting listening materials for my assignments from my course website.

(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

11. I send my assignments via the eTMA system.

(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

(If applicable) I feel at ease sending my assignments via the eTMA system.

(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

12. (If applicable) I feel at ease when I record my speaking assigments on my computer.

(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

13. **Feedback via electronic communication with my tutor is effective.**
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

14. **The use of ICT has increased my motivation to learn a language.**
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

15. **The use of ICT has helped me progress in my language studies on LZX192 Bon départ.**
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

16. **The course materials have helped me progress a great deal.**
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

17. **The course materials are easy to use.**
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

18. **I usually devote the following number of hours per week to my language studies:**
(Please select one only)

- ○ More than 12 hours
- ○ Between 12 and 10 hours
- ○ Between 9 and 7 hours
- ○ Between 6 and 4 hours
- ○ 3 hours or less

19. The following elements cause me anxiety when learning French on my LZX192 course:

Learning grammar.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

Pronunciation.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

Too much work.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

Remembering vocabulary.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

Fear of making mistakes.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

Too different from English.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

Slow progress.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

Too much time needed.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

I can't translate word by word.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

I feel less in control than in my own language.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

Knowing that my speaking will be heard by other people.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

20. It is easy for me to assess my own progress.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

21. I have progressed a great deal in my language studies on LZX192 French.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

22. When I first started my language studies on LZX192 French I was motivated.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

At this point in the course I am motivated.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

23. I feel ICT has helped me learn French without needing too much help from other people.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

24. The materials and teaching techniques of my current Language studies on LZX192 French are...

... innovative.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

... up-to-date.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

... adequate.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

25. The contents of my LZX192 French OU course are interesting.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

26. I like the culture of the language I am studying.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

27. At this point in my language course I have made a lot of progress.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

28. I am likely to take another similar distance language course at some point in the future.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

29. A distance language course is much more effective than a classroom-based language course.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

30. I am satisfied with the progress I have made in my language course.
(Please select one only)

Definitely agree ○ 5 ○ 4 ○ 3 ○ 2 ○ 1 Definitely disagree

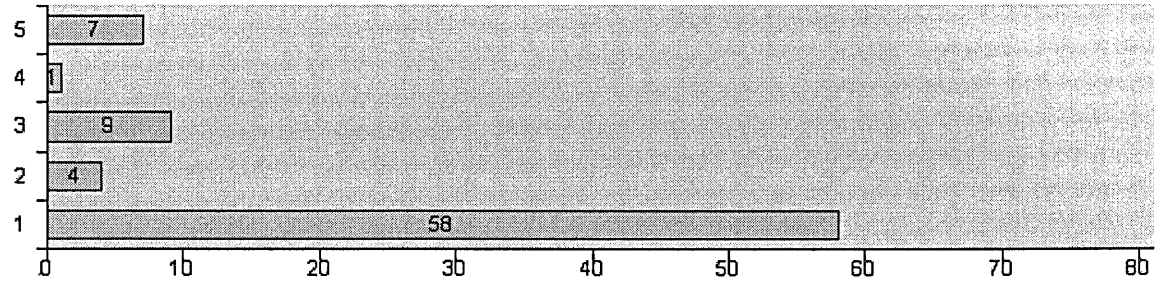
Thank you for taking the time to complete this questionnaire.

Please submit your responses by clicking on the button below.

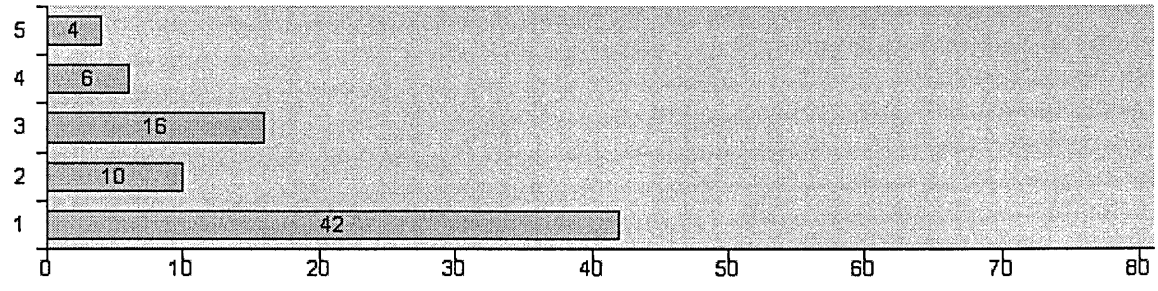
Submit

APPENDIX 2: HISTOGRAMS

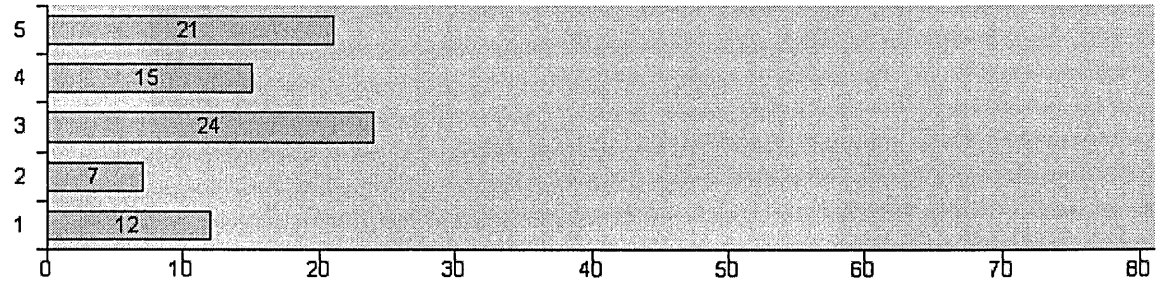
Graph 1: Preference for online / face-to-face tuition; q1_1



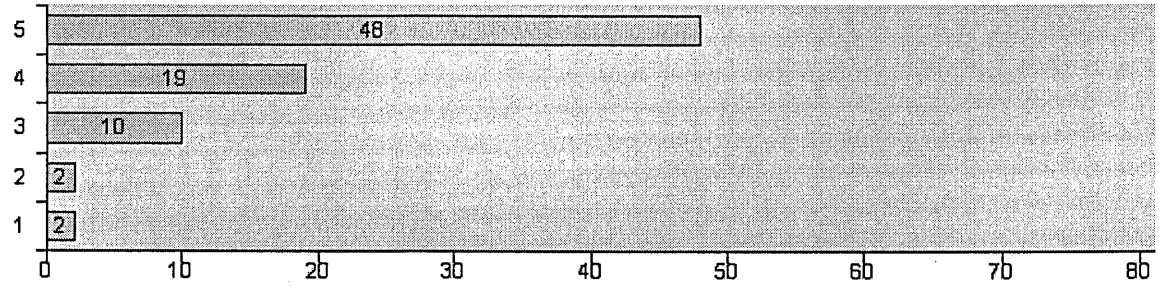
Graph 2: Preference for online / face-to-face tuition; q1_2



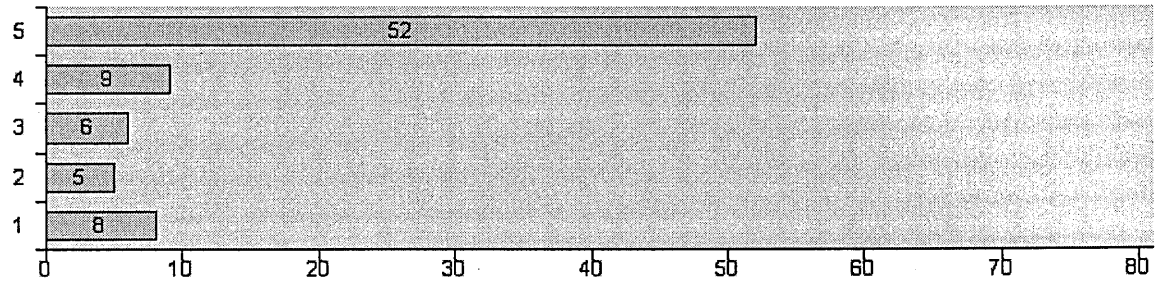
Graph 3: Preference for online / face-to-face tuition; q1_3



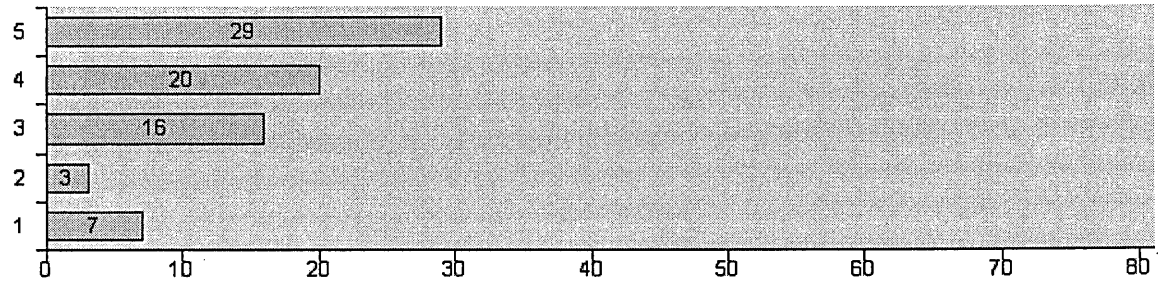
Graph 4: Importance of learning a language; q2



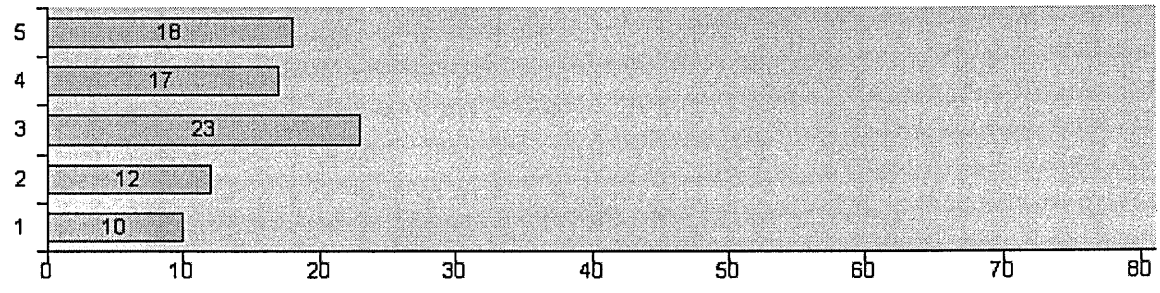
Graph 5: Previous experience in language learning (LL); q3_1



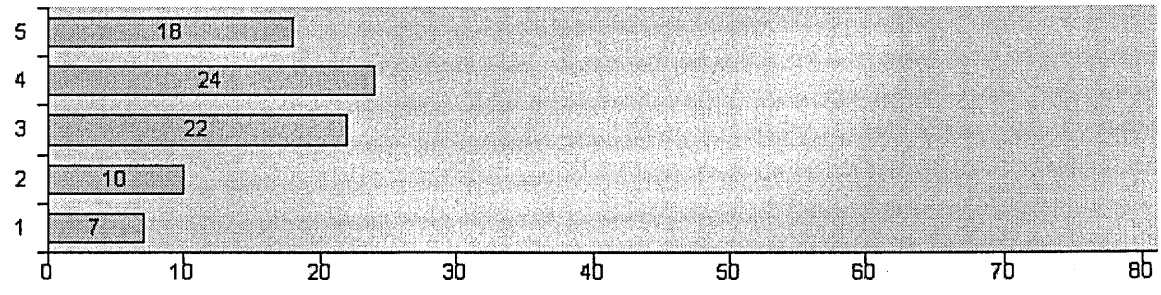
Graph 6: Previous experience in language learning (LL); q3_2



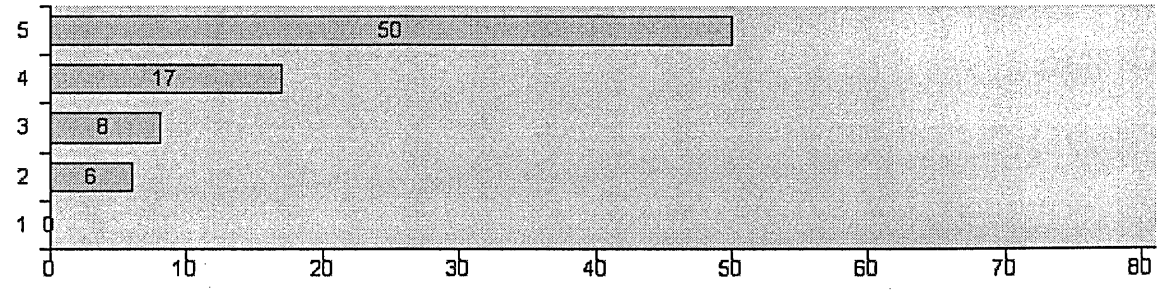
Graph 7: Difficulty of learning a language; q4



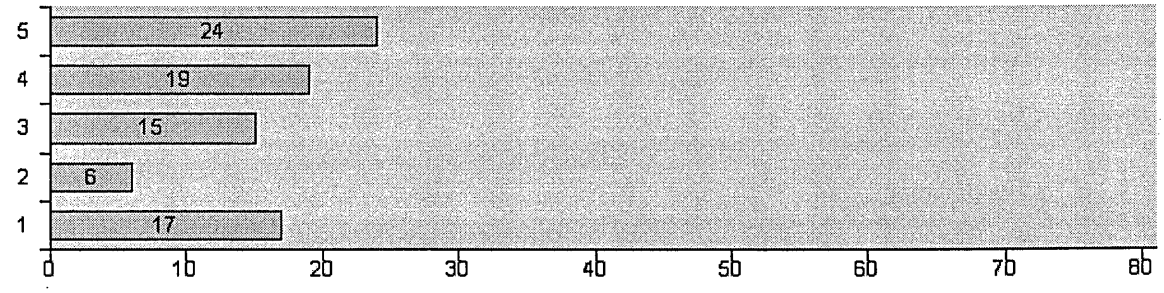
Graph 8: Impact of ICT in LL; q5



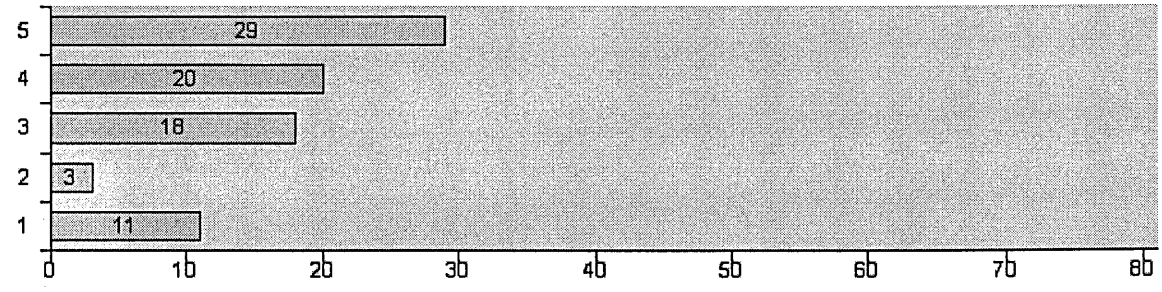
Graph 9: Attitudes towards computers; q6



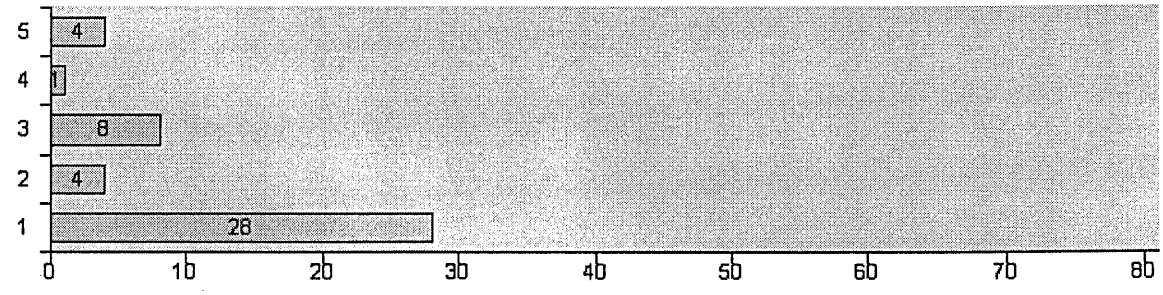
Graph 10: Lyceum and anxiety; q7



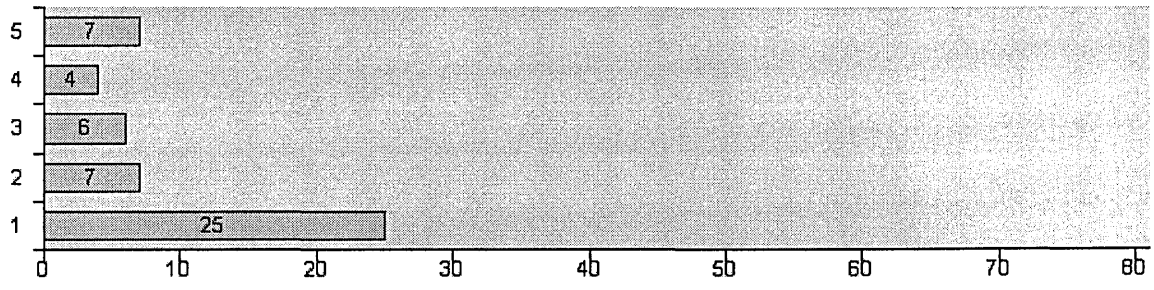
Graph 11: Lyceum and progress; q8



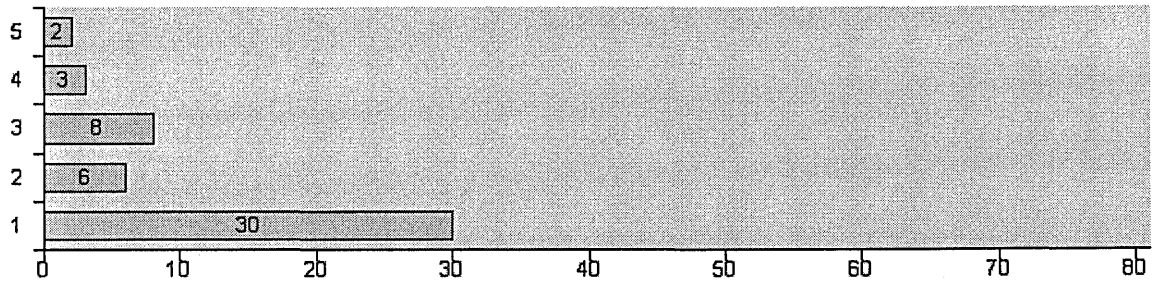
Graph 12: Problems related to Lyceum; q9_1



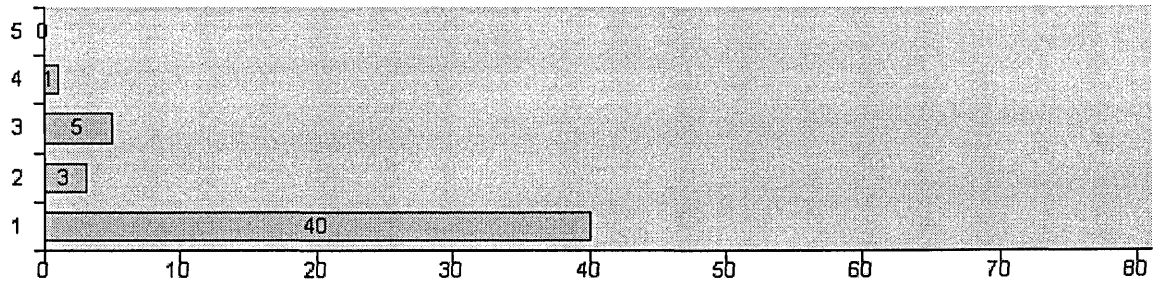
Graph 13: Problems related to Lyceum; q9_2



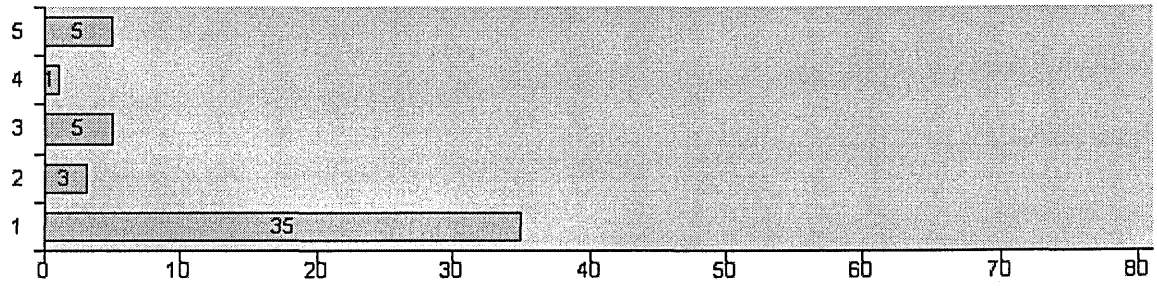
Graph 14: Problems related to Lyceum; q9_3



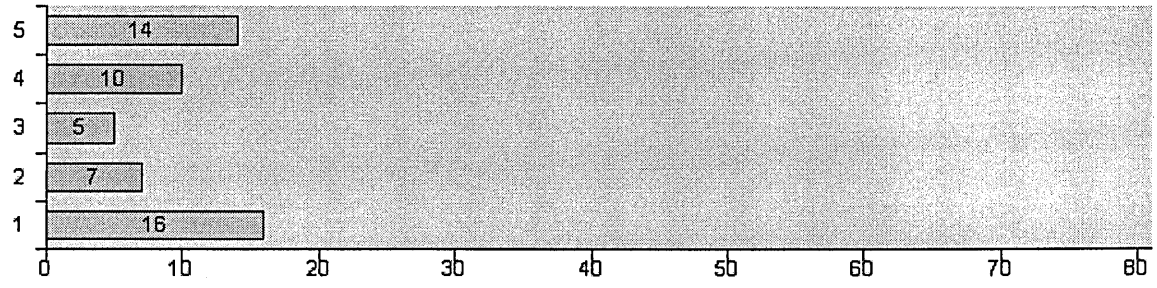
Graph 15: Problems related to Lyceum; q9_4



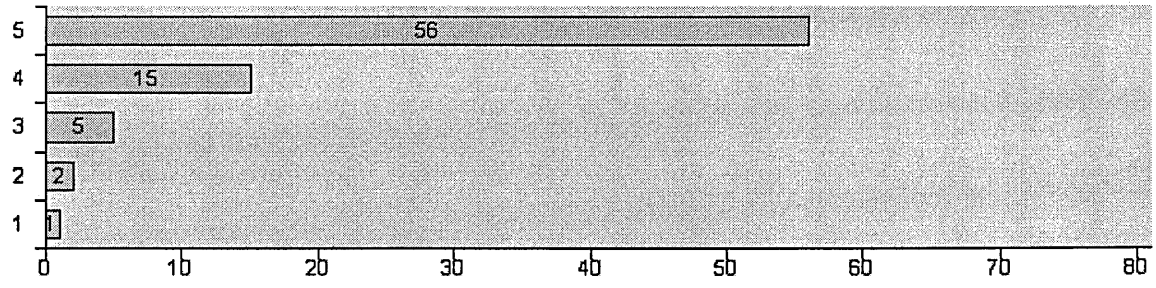
Graph 16: Problems related to Lyceum; q9_5



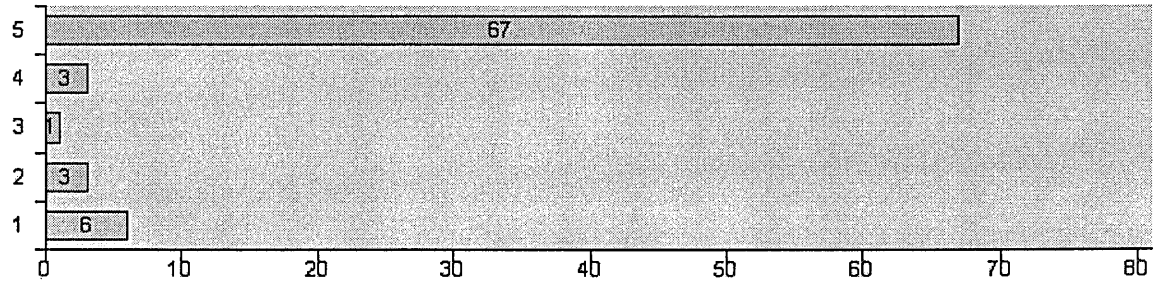
Graph 17: Problems related to Lyceum; q9_6



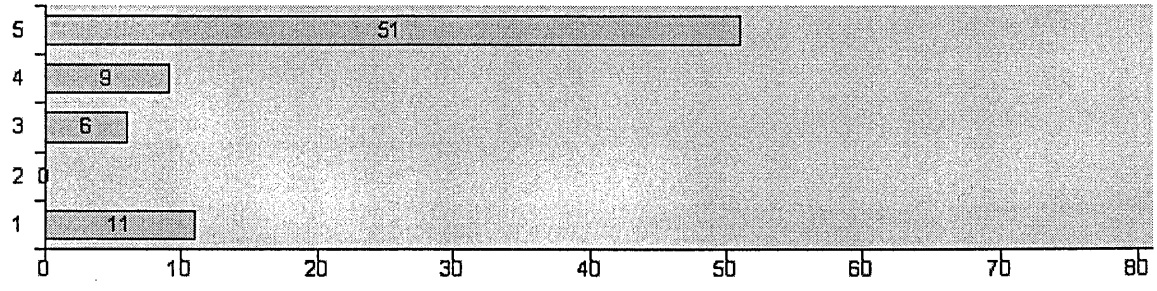
Graph 18: Anxiety and the course website; q10



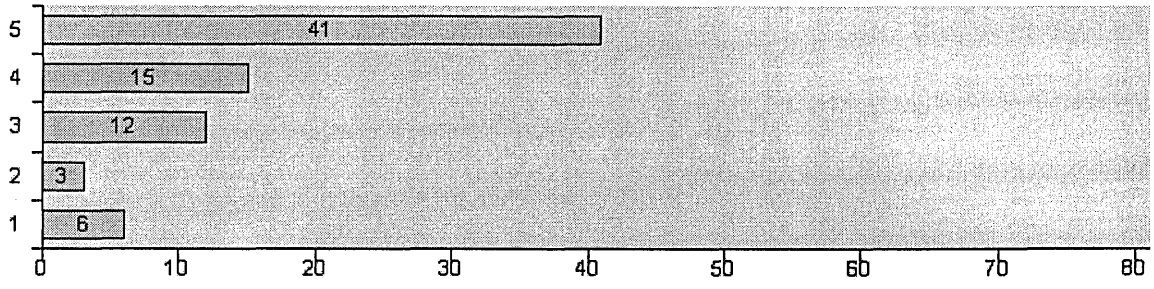
Graph 19: Anxiety and the e-TMA system 11_1



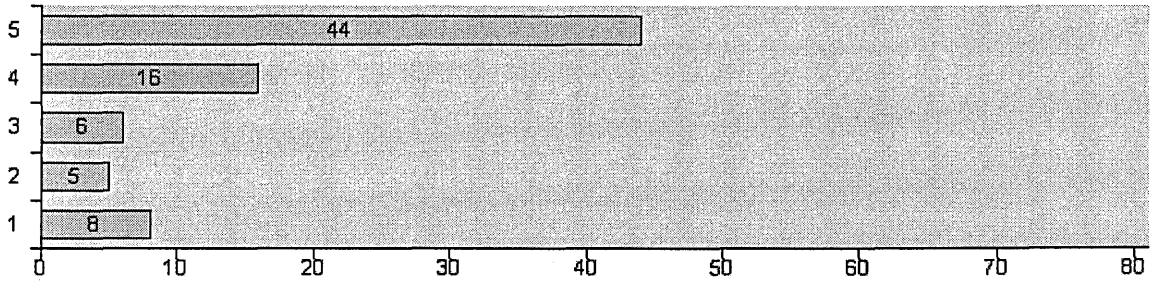
Graph 20: Anxiety and the e-TMA system 11_2



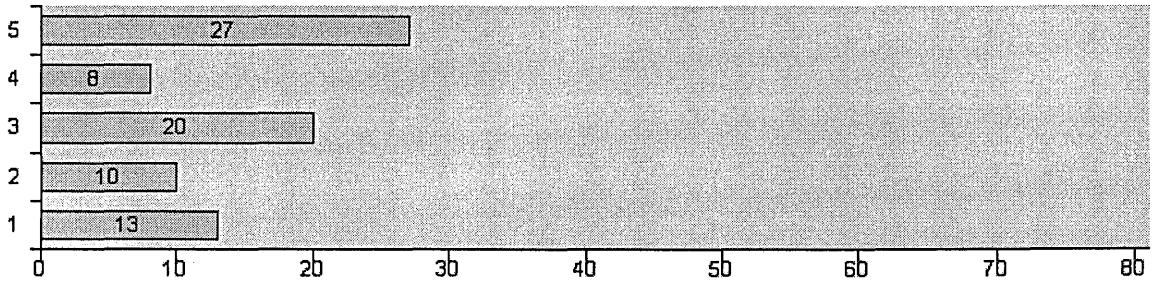
Graph 21: Anxiety and online recording; q12



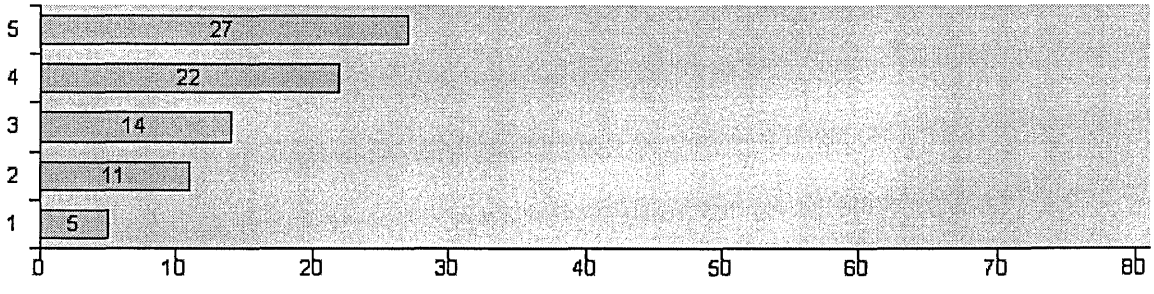
Graph 22: Electronic communications effectiveness; q13



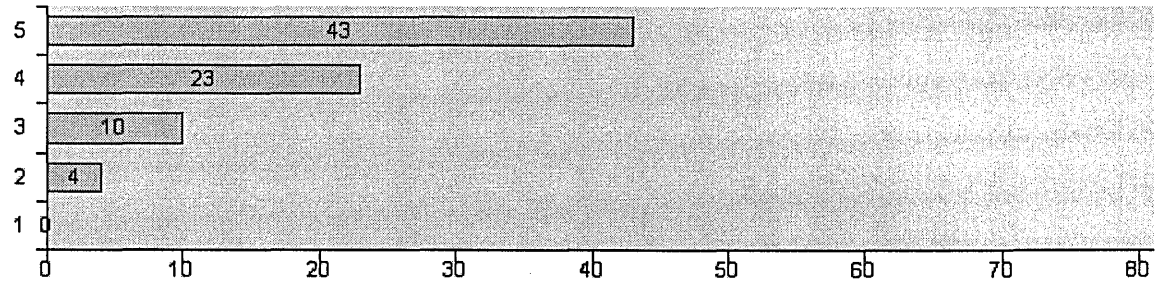
Graph 23: The use of ICT as a motivator; q14



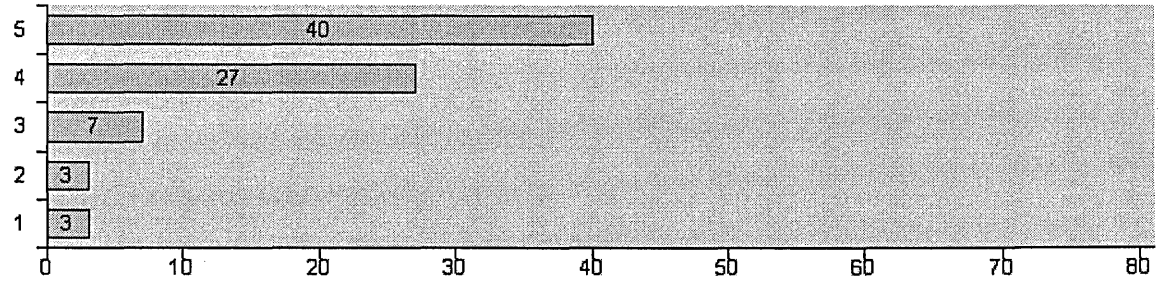
Graph 24: The use of ICT and a sense of progress; q15



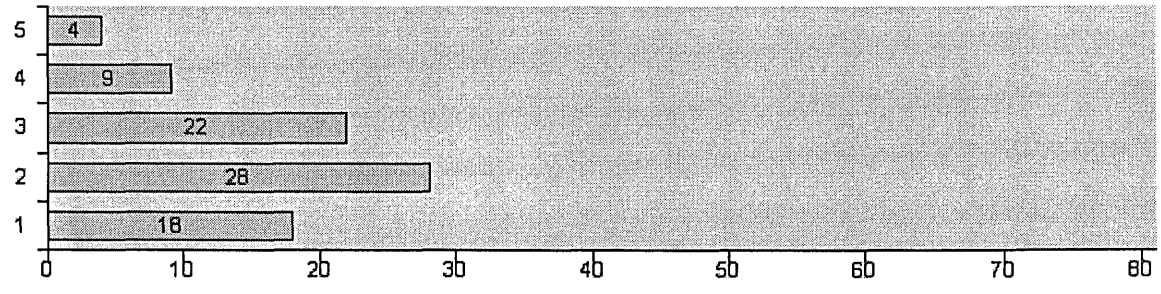
Graph 25: Course materials and progress; q16



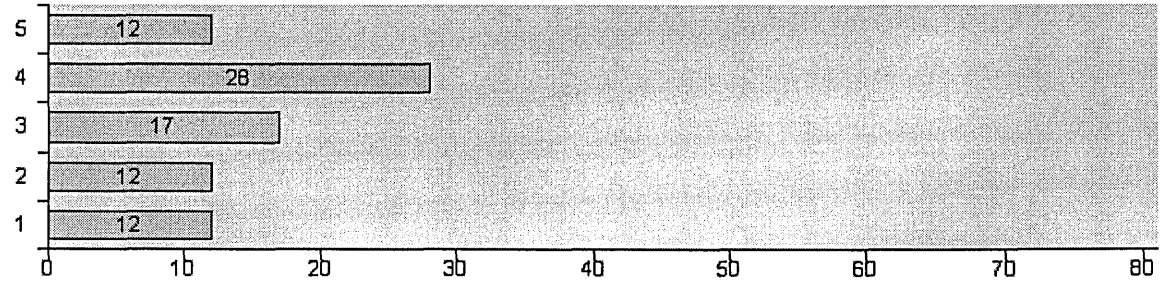
Graph 26: Course materials are easy to use; q17



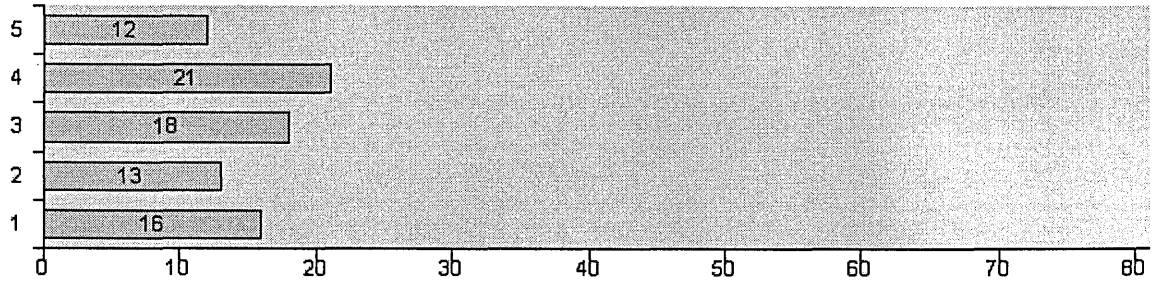
Graph 27: Time devoted to studying; q18



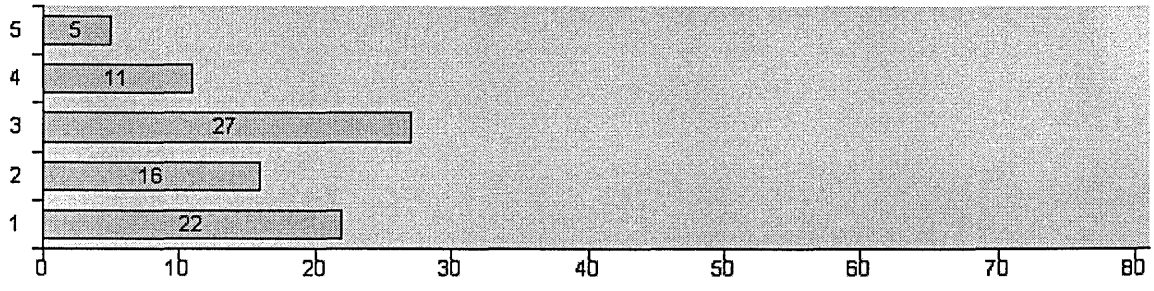
Graph 28: Sources of anxiety in language learning; q19_1



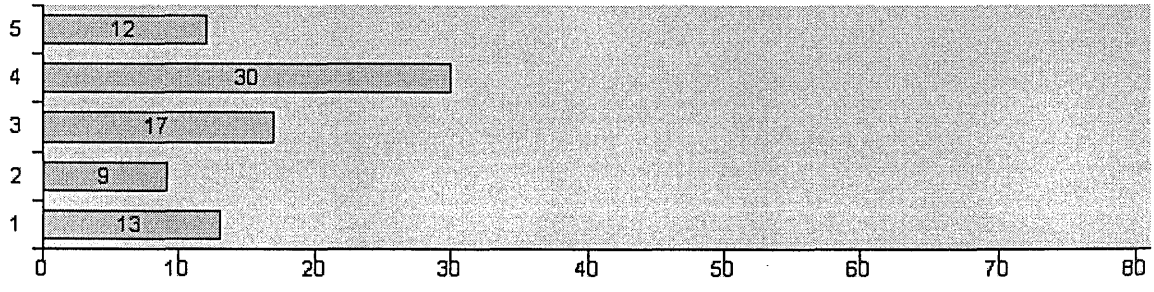
Graph 29: Sources of anxiety in language learning; q19_2



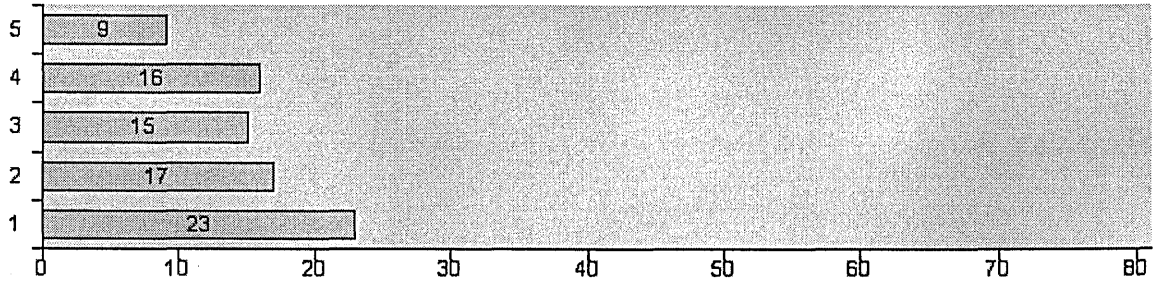
Graph 30: Sources of anxiety in language learning; q19_3



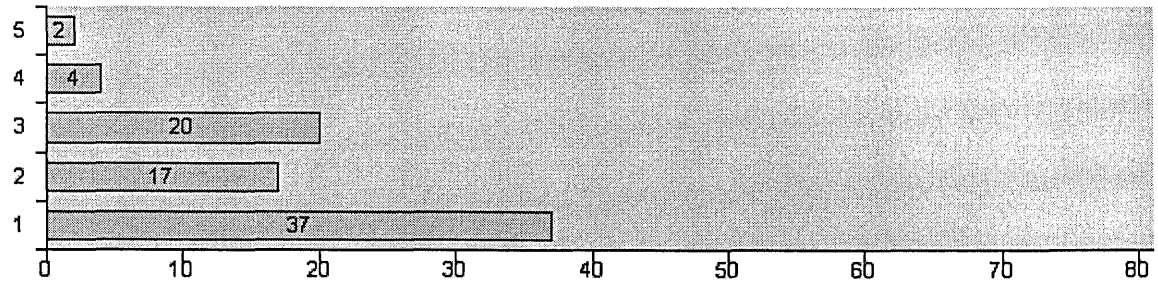
Graph 31: Sources of anxiety in language learning; q19_4



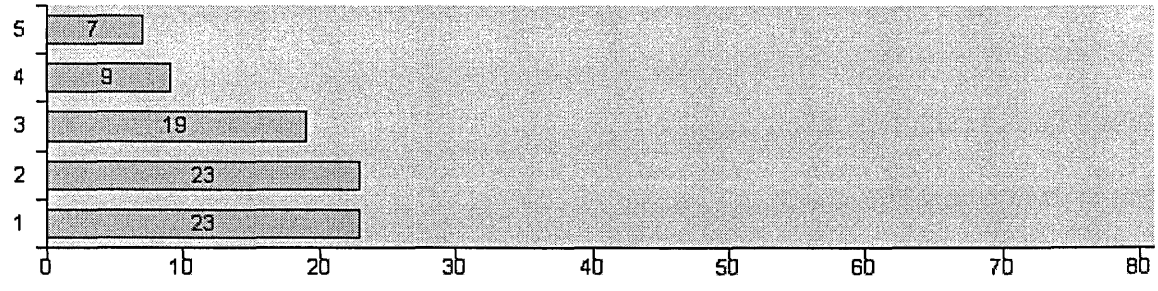
Graph 32: Sources of anxiety in language learning; q19_5



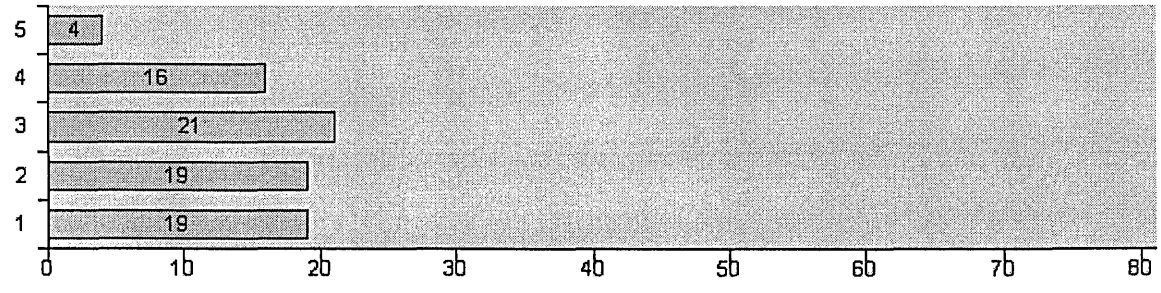
Graph 33: Sources of anxiety in language learning; q19_6



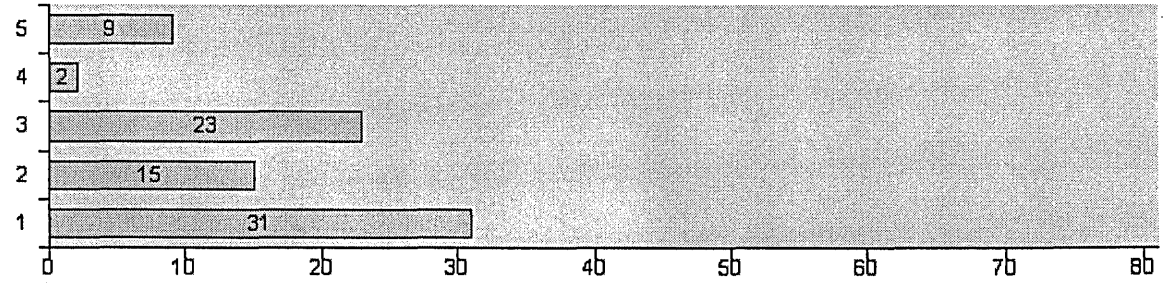
Graph 34: Sources of anxiety in language learning; q19_7



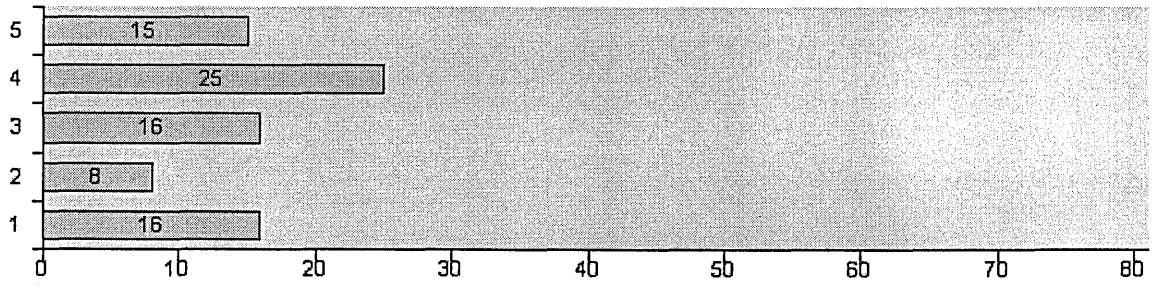
Graph 35: Sources of anxiety in language learning; q19_8



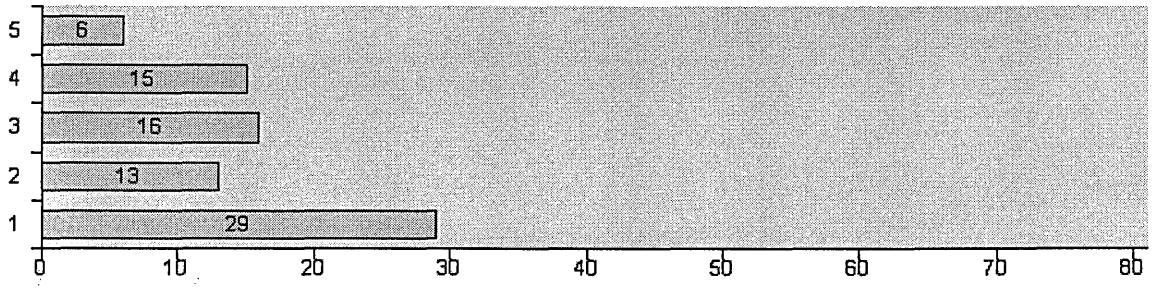
Graph 36: Sources of anxiety in language learning; q19_9



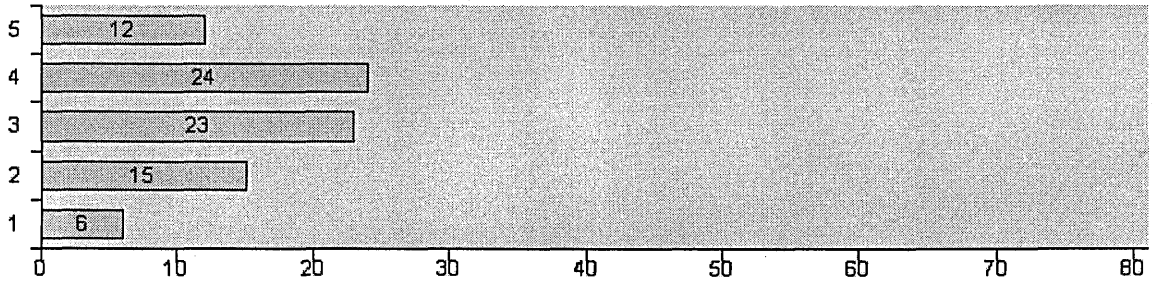
Graph 37: Sources of anxiety in language learning; q19_10



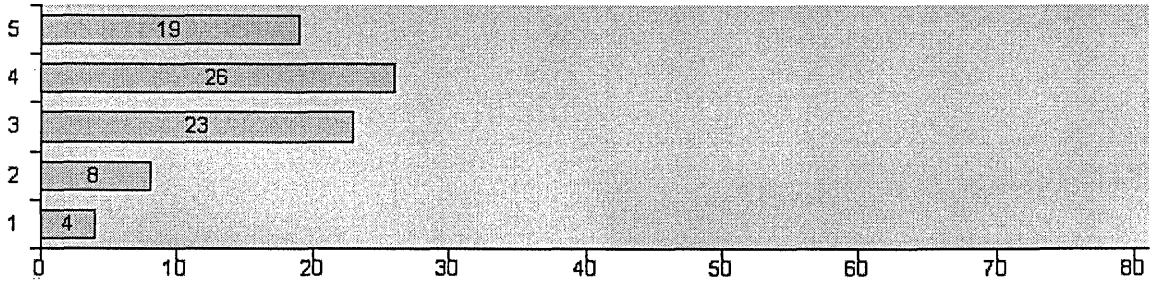
Graph 38: Sources of anxiety in language learning; q19_11



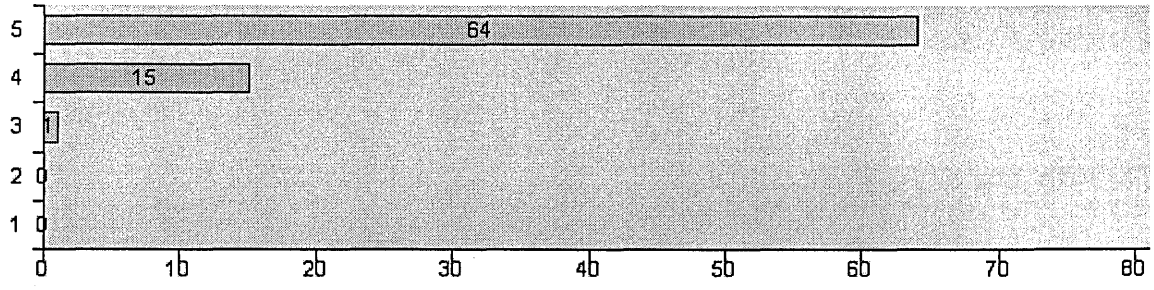
Graph 39: Assessment of own progress; q20



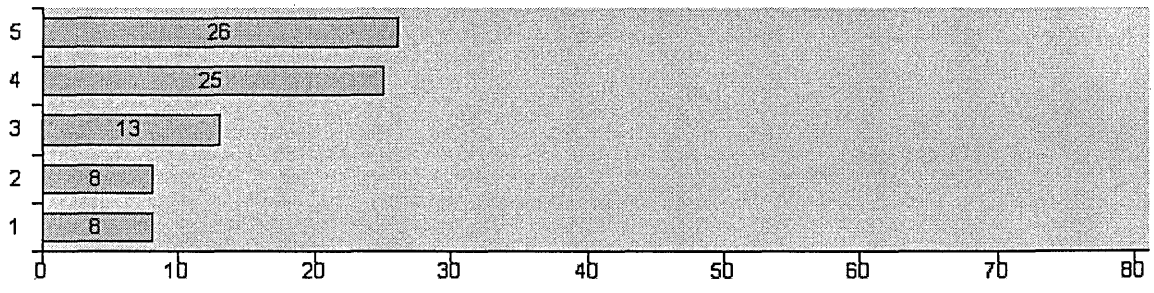
Graph 40: Sense of progress; q21



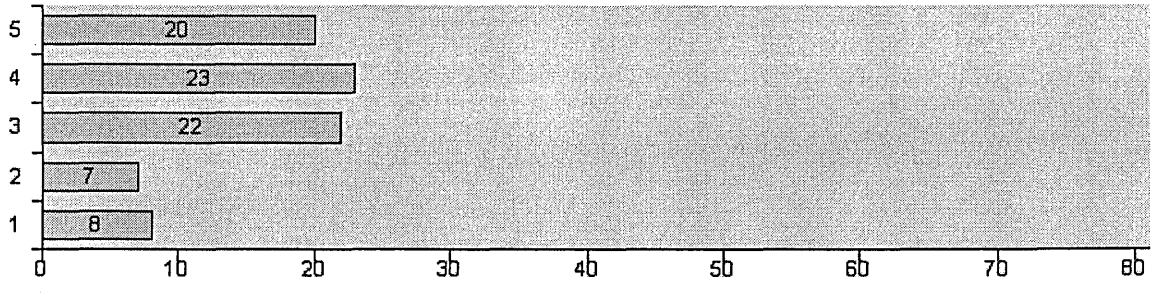
Graph 41: Change of motivation; q22_1



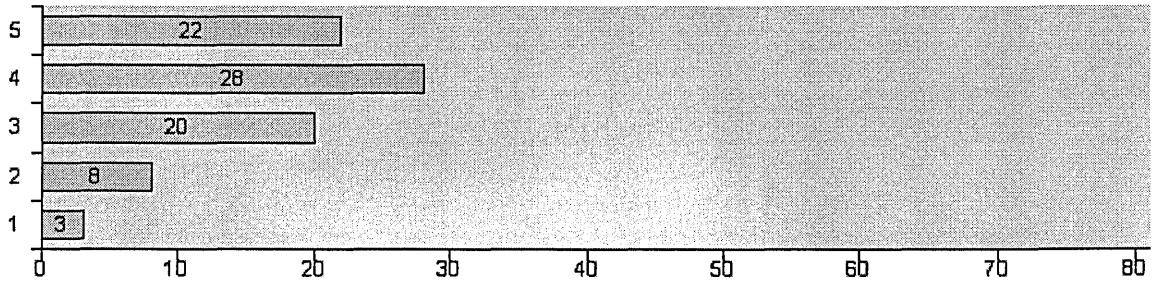
Graph 42: Change of motivation; q22_2



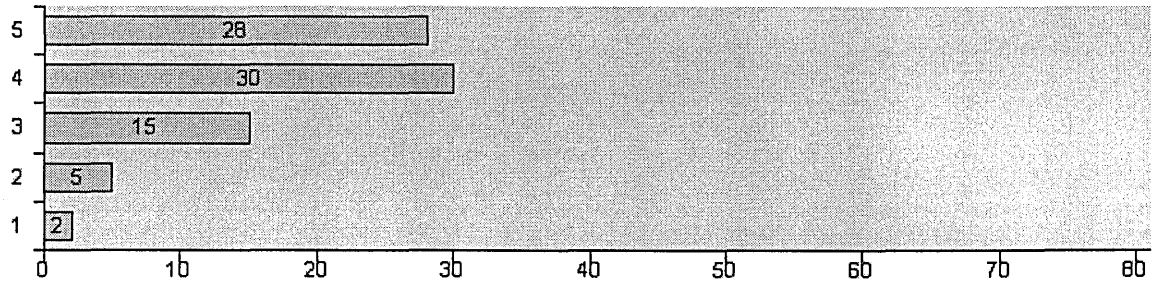
Graph 43: ICT and autonomous learning; q23



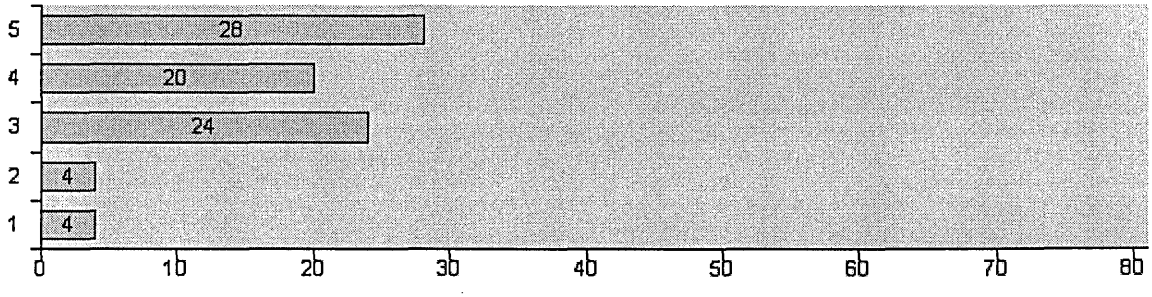
Graph 44: Perception of materials and teaching techniques; q24_1



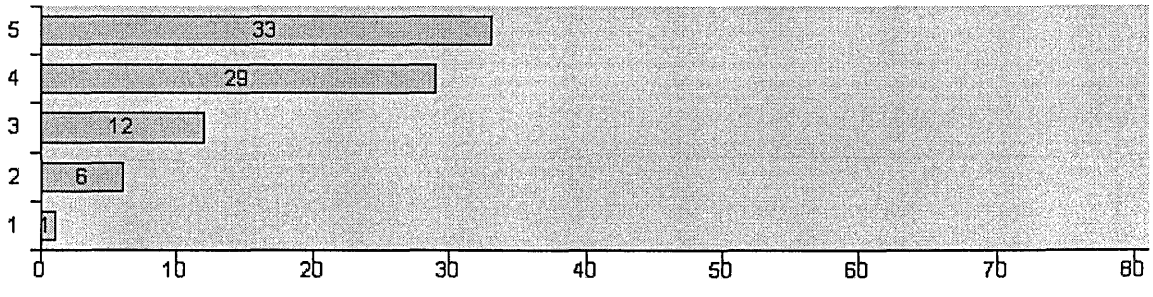
Graph 45: Perception of materials and teaching techniques; q24_2



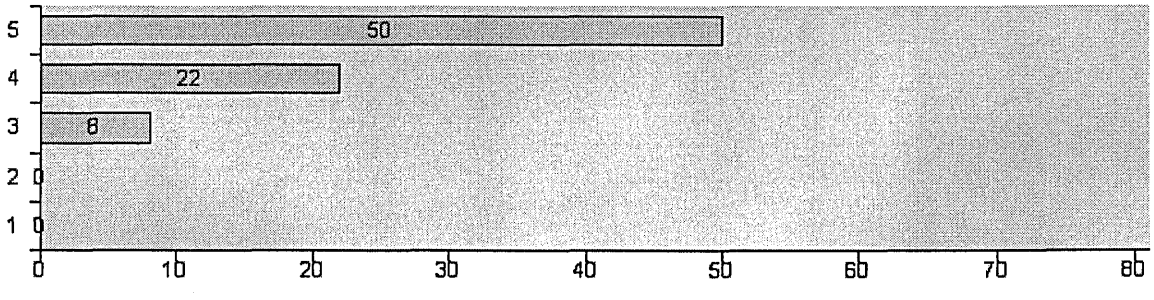
Graph 46: Perception of materials and teaching techniques; q24_3



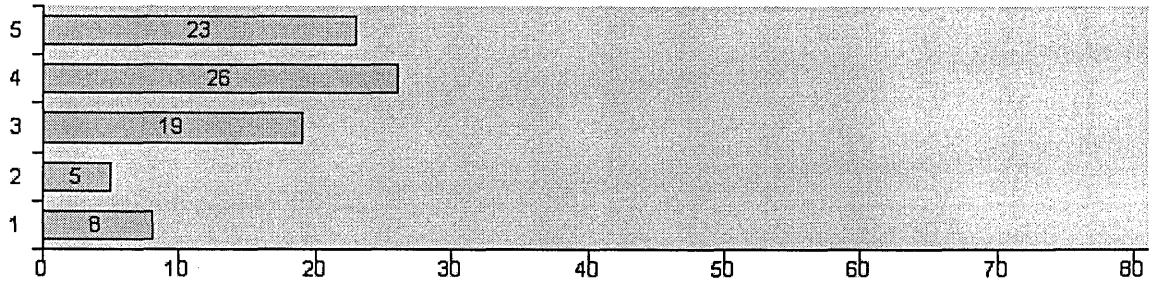
Graph 47: Contents were interesting; q25



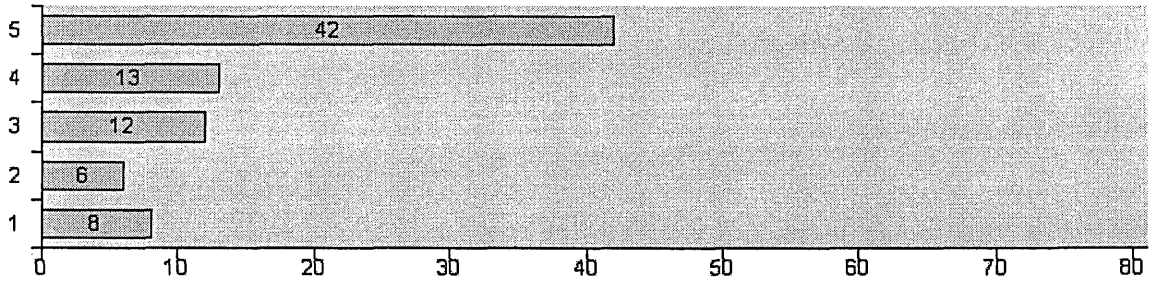
Graph 48: Attitude towards the culture associated to the language; q26



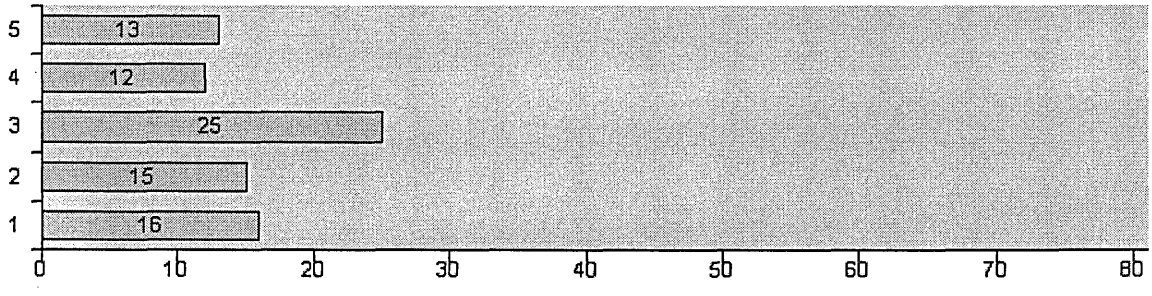
Graph 49: Perception of progress; q27



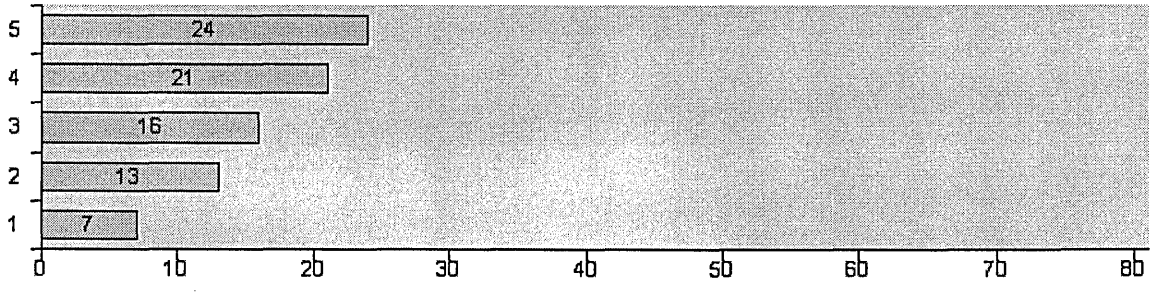
Graph50: Likelihood of taking a similar course; q28



Graph 51: Variation of preference for online / face-to-face course modes; q29



Graph 52: Satisfaction with progress; q30



APPENDIX 3: TABLES OF CORRELATION

Table 1: Correlation between levels of satisfaction with progress (q30), attitudes towards the role of ICT in DLL (q15) and levels of ICT-related anxiety (q6).

		q30	q15	q6
q30	Pearson Correlation	1	.538(**)	.005
	Sig. (1-tailed)		.000	.484
	N	81	79	81
q15	Pearson Correlation	.538(**)	1	.139
	Sig. (1-tailed)	.000		.111
	N	79	79	79
q6	Pearson Correlation	.005	.139	1
	Sig. (1-tailed)	.484	.111	
	N	81	79	81

** Correlation is significant at the 0.01 level (1-tailed).

Table 2: Correlation between the levels of satisfaction with progress (q30) and previous language experience (q3_2)

		q3_2	q30
q3_2	Pearson Correlation	1	.253(*)
	Sig. (1-tailed)		.014
	N	75	75
q30	Pearson Correlation	.253(*)	1
	Sig. (1-tailed)	.014	
	N	75	81

* Correlation is significant at the 0.05 level (1-tailed).

Table 3: Correlation between attitudes towards the role of ICT in DLL (q15) and previous language experience (q3_2)

		q3_2	q15
q3_2	Pearson Correlation	1	.180
	Sig. (1-tailed)		.063
	N	75	73
q15	Pearson Correlation	.180	1
	Sig. (1-tailed)	.063	
	N	73	79

Table 4: Correlation between levels of ICT-related anxiety (q6) and previous language experience (q3_2)

		q3_2	q6
q3_2	Pearson Correlation	1	.138
	Sig. (1-tailed)		.119
	N	75	75
q6	Pearson Correlation	.138	1
	Sig. (1-tailed)	.119	

	N	75	81

Table 5: Correlation between levels of satisfaction with progress (q30) and how difficult learning a language is perceived to be (q4)

		q4	q30
q4	Pearson Correlation	1	-.188(*)
	Sig. (1-tailed)		.048
	N	80	80
q30	Pearson Correlation	-.188(*)	1
	Sig. (1-tailed)	.048	
	N	80	81

* Correlation is significant at the 0.05 level (1-tailed).

Table 6: Correlation between levels of ICT-related anxiety (q6) and how difficult learning a language is perceived to be (q4)

		q6	q4
q6	Pearson Correlation	1	-.170
	Sig. (1-tailed)		.066
	N	81	80
q4	Pearson Correlation	-.170	1
	Sig. (1-tailed)	.066	
	N	80	80

Table 7: Correlation between attitudes towards the role of ICT in DLL (q15) and how difficult learning a language is perceived to be (q4)

		q4	q15
q4	Pearson Correlation	1	-.074
	Sig. (1-tailed)		.259
	N	80	78
q15	Pearson Correlation	-.074	1
	Sig. (1-tailed)	.259	
	N	78	79

Table 8: Correlation between levels of satisfaction with progress (q30) and the importance attributed to learning a language (q2)

		q30	q2
q30	Pearson Correlation	1	.124
	Sig. (1-tailed)		.135
	N	81	81
q2	Pearson Correlation	.124	1
	Sig. (1-tailed)	.135	
	N	81	81

Table 9: Correlation between attitudes towards the role of ICT in DLL (q15) and the importance attributed to learning a language (q2)

		q2	q15
q2	Pearson Correlation	1	.086
	Sig. (1-tailed)		.225
	N	81	79
q15	Pearson Correlation	.086	1
	Sig. (1-tailed)	.225	
	N	79	79

Table 10: Correlation between levels of ICT-related anxiety (q6) and the importance attributed to learning a language (q2)

		q2	q6
q2	Pearson Correlation	1	-.115
	Sig. (1-tailed)		.153
	N	81	81
q6	Pearson Correlation	-.115	1
	Sig. (1-tailed)	.153	
	N	81	81

Table 11: Correlation between levels of ICT-related anxiety (q6) and the amount of time devoted to study the language (q18)

		q6	q18
q6	Pearson Correlation	1	-.019
	Sig. (1-tailed)		.433
	N	81	81
q18	Pearson Correlation	-.019	1
	Sig. (1-tailed)	.433	
	N	81	81

Table 12: Correlation between attitudes towards the role of ICT in DLL (q15) and the amount of time devoted to study the language (q18)

		q18	q15
q18	Pearson Correlation	1	-.110
	Sig. (1-tailed)		.168
	N	81	79
q15	Pearson Correlation	-.110	1
	Sig. (1-tailed)	.168	
	N	79	79

Table 13: Correlation between levels of satisfaction with progress (q30) and the amount of time devoted to study the language (q18)

		q18	q30
q18	Pearson Correlation	1	.168
	Sig. (1-tailed)		.067
	N	81	81

q30	Pearson Correlation	.168	1
	Sig. (1-tailed)	.067	
	N	81	81

Table 14: Correlation between levels of satisfaction with progress (q30) and levels of Lyceum-related anxiety (q7)

		q7	q30
q7	Pearson Correlation	1	.479(**)
	Sig. (1-tailed)		.000
	N	81	81
q30	Pearson Correlation	.479(**)	1
	Sig. (1-tailed)	.000	
	N	81	81

** Correlation is significant at the 0.01 level (1-tailed).

Table 15: Correlation between attitudes towards the role of ICT in DLL (q15) and levels of Lyceum-related anxiety (q7)

		q7	q15
q7	Pearson Correlation	1	.464(**)
	Sig. (1-tailed)		.000
	N	81	79
q15	Pearson Correlation	.464(**)	1
	Sig. (1-tailed)	.000	
	N	79	79

** Correlation is significant at the 0.01 level (1-tailed).

Table 16: Correlation between levels of ICT-related anxiety (q6) and levels of Lyceum-related anxiety (q7)

		q7	q6
q7	Pearson Correlation	1	.390(**)
	Sig. (1-tailed)		.000
	N	81	81
q6	Pearson Correlation	.390(**)	1
	Sig. (1-tailed)	.000	
	N	81	81

** Correlation is significant at the 0.01 level (1-tailed).

Table 17: Correlation between levels of satisfaction with progress (q30) and the perception of the course website (q10)

		q10	q30
q10	Pearson Correlation	1	.260(*)
	Sig. (1-tailed)		.010
	N	79	79
q30	Pearson Correlation	.260(*)	1
	Sig. (1-tailed)	.010	
	N	79	81

* Correlation is significant at the 0.05 level (1-tailed).

Table 18: Correlation between attitudes towards the role of ICT in DLL (q15) and the perception of the course website (q10)

		q10	q15
q10	Pearson Correlation	1	.275(**)
	Sig. (1-tailed)		.007
	N	79	78
q15	Pearson Correlation	.275(**)	1
	Sig. (1-tailed)	.007	
	N	78	79

** Correlation is significant at the 0.01 level (1-tailed).

Table 19: Correlation between levels of ICT-related anxiety (q6) and the perception of the course website (q10)

		q10	q6
q10	Pearson Correlation	1	.161
	Sig. (1-tailed)		.079
	N	79	79
q6	Pearson Correlation	.161	1
	Sig. (1-tailed)	.079	
	N	79	81

Table 20: Correlation between levels of satisfaction with progress (q30) and the levels of anxiety related to recording assessments on-line (q12)

		q12	q30
q12	Pearson Correlation	1	.401(**)
	Sig. (1-tailed)		.000
	N	77	77
q30	Pearson Correlation	.401(**)	1
	Sig. (1-tailed)	.000	
	N	77	81

** Correlation is significant at the 0.01 level (1-tailed).

Table 21: Correlation between attitudes towards the role of ICT in DLL (q15) and the levels of anxiety related to recording assessments on-line (q12)

		q12	q15
q12	Pearson Correlation	1	.511(**)
	Sig. (1-tailed)		.000
	N	77	76
q15	Pearson Correlation	.511(**)	1
	Sig. (1-tailed)	.000	
	N	76	79

** Correlation is significant at the 0.01 level (1-tailed).

Table 22: Correlation between levels of ICT-related anxiety (q6) and the levels of anxiety related to recording assessments on-line (q12)

		q12	q6
q12	Pearson Correlation	1	.289(**)
	Sig. (1-tailed)		.005
	N	77	77
q6	Pearson Correlation	.289(**)	1
	Sig. (1-tailed)	.005	
	N	77	81

** Correlation is significant at the 0.01 level (1-tailed).

Table 23: Correlation between levels of satisfaction with progress (q30) and Attitudes towards the effectiveness of electronic communication with tutors (q13)

		q13	q30
q13	Pearson Correlation	1	.367(**)
	Sig. (1-tailed)		.000
	N	79	79
q30	Pearson Correlation	.367(**)	1
	Sig. (1-tailed)	.000	
	N	79	81

** Correlation is significant at the 0.01 level (1-tailed).

Table 24: Correlation between attitudes towards the role of ICT in DLL (q15) and Attitudes towards the effectiveness of electronic communication with tutors (q13)

		q13	q15
q13	Pearson Correlation	1	.496(**)
	Sig. (1-tailed)		.000
	N	79	78
q15	Pearson Correlation	.496(**)	1
	Sig. (1-tailed)	.000	
	N	78	79

** Correlation is significant at the 0.01 level (1-tailed).

Table 25: Correlation between levels of ICT-related anxiety (q6) and Attitudes towards the effectiveness of electronic communication with tutors (q13)

		q13	q6
q13	Pearson Correlation	1	.116
	Sig. (1-tailed)		.154
	N	79	79
q6	Pearson Correlation	.116	1
	Sig. (1-tailed)	.154	
	N	79	81

Table 26: Correlation between levels of satisfaction with progress (q30) and how interesting course materials were perceived to be (q25)

		q25	q30
q25	Pearson Correlation	1	.339(**)
	Sig. (1-tailed)		.001

	N	81	81
q30	Pearson Correlation	.339(**)	1
	Sig. (1-tailed)	.001	
	N	81	81

** Correlation is significant at the 0.01 level (1-tailed).

Table 27: Correlation between attitudes towards the role of ICT in DLL (q15) and how interesting course materials were perceived to be (q25)

		q25	q15
q25	Pearson Correlation	1	.253(*)
	Sig. (1-tailed)		.012
	N	81	79
q15	Pearson Correlation	.253(*)	1
	Sig. (1-tailed)	.012	
	N	79	79

* Correlation is significant at the 0.05 level (1-tailed).

Table 28: Correlation between levels of ICT-related anxiety (q6) and how interesting course materials were perceived to be (q25)

		q25	q6
q25	Pearson Correlation	1	-.097
	Sig. (1-tailed)		.194
	N	81	81
q6	Pearson Correlation	-.097	1
	Sig. (1-tailed)	.194	
	N	81	81

Table 29: Correlation between levels of satisfaction with progress (q30) and how easy to use course materials were perceived to be (q17)

		q17	q30
q17	Pearson Correlation	1	.396(**)
	Sig. (1-tailed)		.000
	N	80	80
q30	Pearson Correlation	.396(**)	1
	Sig. (1-tailed)	.000	
	N	80	81

** Correlation is significant at the 0.01 level (1-tailed).

Table 30: Correlation between attitudes towards the role of ICT in DLL (q15) and how easy to use course materials were perceived to be (q17)

		q17	q15
q17	Pearson Correlation	1	.374(**)
	Sig. (1-tailed)		.000
	N	80	79
q15	Pearson Correlation	.374(**)	1
	Sig. (1-tailed)	.000	

	N	79	79

** Correlation is significant at the 0.01 level (1-tailed).

Table 31: Correlation between levels of ICT-related anxiety (q6) and how easy to use course materials were perceived to be (q17)

		q17	q6
q17	Pearson Correlation	1	-.060
	Sig. (1-tailed)		.300
	N	80	80
q6	Pearson Correlation	-.060	1
	Sig. (1-tailed)	.300	
	N	80	81

Table 32: Correlation between levels of satisfaction with progress (q30) and levels of motivation (q22_2)

		q22_2	q30
q22_2	Pearson Correlation	1	.565(**)
	Sig. (1-tailed)		.000
	N	80	80
q30	Pearson Correlation	.565(**)	1
	Sig. (1-tailed)	.000	
	N	80	81

** Correlation is significant at the 0.01 level (1-tailed).

Table 33: Correlation between attitudes towards the role of ICT in DLL (q15) and levels of motivation (q22_2)

		q22_2	q15
q22_2	Pearson Correlation	1	.506(**)
	Sig. (1-tailed)		.000
	N	80	79
q15	Pearson Correlation	.506(**)	1
	Sig. (1-tailed)	.000	
	N	79	79

** Correlation is significant at the 0.01 level (1-tailed).

Table 34: Correlation between levels of ICT-related anxiety (q6) and levels of motivation (q22_2)

		q22_2	q6
q22_2	Pearson Correlation	1	-.173
	Sig. (1-tailed)		.062
	N	80	80
q6	Pearson Correlation	-.173	1
	Sig. (1-tailed)	.062	
	N	80	81

Table 35: Correlation between levels of satisfaction with progress (q30) and levels of self-assessment (q20)

		q20	q30
q20	Pearson Correlation	1	.369(**)
	Sig. (1-tailed)		.000
	N	80	80
q30	Pearson Correlation	.369(**)	1
	Sig. (1-tailed)	.000	
	N	80	81

** Correlation is significant at the 0.01 level (1-tailed).

Table 36: Correlation between attitudes towards the role of ICT in DLL (q15) and levels of self-assessment (q20)

		q20	q15
q20	Pearson Correlation	1	.249(*)
	Sig. (1-tailed)		.014
	N	80	78
q15	Pearson Correlation	.249(*)	1
	Sig. (1-tailed)	.014	
	N	78	79

* Correlation is significant at the 0.05 level (1-tailed).

Table 37: Correlation between levels of ICT-related anxiety (q6) and levels of self-assessment (q20)

		q20	q6
q20	Pearson Correlation	1	.051
	Sig. (1-tailed)		.327
	N	80	80
q6	Pearson Correlation	.051	1
	Sig. (1-tailed)	.327	
	N	80	81

Table 38: Correlation between attitudes towards the role of ICT in DLL (q15) and levels of satisfaction with progress (q30) controlled by levels of motivation (q22_2)

Control Variables			q15	q30	q22_2
-none-(a)	q15	Correlation	1.000	.538	.506
		Significance (2-tailed)	.	.000	.000
		df	0	77	77
	q30	Correlation	.538	1.000	.564
		Significance (2-tailed)	.000	.	.000
		df	77	0	77
	q22_2	Correlation	.506	.564	1.000
		Significance (2-tailed)	.000	.000	.

		df	77	77	0
q22_2	q15	Correlation	1.000	.355	
		Significance (2-tailed)	.	.001	
		df	0	76	
	q30	Correlation	.355	1.000	
		Significance (2-tailed)	.001	.	
		df	76	0	

a Cells contain zero-order (Pearson) correlations.

Table 39: Correlation between attitudes towards the role of ICT in DLL (q15) and levels of satisfaction with progress (q30) controlled by how interesting course materials were perceived to be (q25)

Control Variables			q15	q30	q25
-none-(a)	q15	Correlation	1.000	.538	.253
		Significance (2-tailed)	.	.000	.025
		df	0	77	77
	q30	Correlation	.538	1.000	.347
		Significance (2-tailed)	.000	.	.002
		df	77	0	77
	q25	Correlation	.253	.347	1.000
		Significance (2-tailed)	.025	.002	.
		df	77	77	0
q25	q15	Correlation	1.000	.496	
		Significance (2-tailed)	.	.000	
		df	0	76	
	q30	Correlation	.496	1.000	
		Significance (2-tailed)	.000	.	
		df	76	0	

a Cells contain zero-order (Pearson) correlations.

Table 40: Correlation between attitudes towards the role of ICT in DLL (q15) and levels of satisfaction with progress (q30) controlled by levels of Lyceum-related anxiety (q7)

Control Variables			q15	q30	q7
-none-(a)	q15	Correlation	1.000	.538	.464
		Significance (2-tailed)	.	.000	.000
		df	0	77	77
	q30	Correlation	.538	1.000	.481
		Significance (2-tailed)	.000	.	.000
		df	77	0	77
	q7	Correlation	.464	.481	1.000
		Significance (2-tailed)	.000	.000	.
		df	77	77	0
q7	q15	Correlation	1.000	.406	
		Significance (2-tailed)	.	.000	
		df	0	76	
	q30	Correlation	.406	1.000	
		Significance (2-tailed)	.000	.	
		df	76	0	

a Cells contain zero-order (Pearson) correlations.

Table 41: Correlation between attitudes towards the role of ICT in DLL (q15) and levels of satisfaction with progress (q30) controlled by the levels of anxiety related to recording assessments on-line (q12)

Control Variables			q15	q30	q12
-none-(a)	q15	Correlation	1.000	.543	.511
		Significance (2-tailed)	.	.000	.000
		df	0	74	74
	q30	Correlation	.543	1.000	.401
		Significance (2-tailed)	.000	.	.000
		df	74	0	74
	q12	Correlation	.511	.401	1.000
		Significance (2-tailed)	.000	.000	.
		df	74	74	0
q12	q15	Correlation	1.000	.429	
		Significance (2-tailed)	.	.000	
		df	0	73	
	q30	Correlation	.429	1.000	
		Significance (2-tailed)	.000	.	
		df	73	0	

a Cells contain zero-order (Pearson) correlations.

Table 42: Correlation between attitudes towards the role of ICT in DLL (q15) and levels of satisfaction with progress (q30) controlled by levels of self-assessment (q20)

Control Variables			q15	q30	q20
-none-(a)	q15	Correlation	1.000	.542	.249
		Significance (2-tailed)	.	.000	.028
		df	0	76	76
	q30	Correlation	.542	1.000	.393
		Significance (2-tailed)	.000	.	.000
		df	76	0	76
	q20	Correlation	.249	.393	1.000
		Significance (2-tailed)	.028	.000	.
		df	76	76	0
q20	q15	Correlation	1.000	.499	
		Significance (2-tailed)	.	.000	
		df	0	75	
	q30	Correlation	.499	1.000	
		Significance (2-tailed)	.000	.	
		df	75	0	

a Cells contain zero-order (Pearson) correlations.

Table 43: Correlation between attitudes towards the role of ICT in DLL (q15) and levels of satisfaction with progress (q30) controlled by the perception of the course website (q10)

Control Variables			q15	q30	q10
-none-(a)	q15	Correlation	1.000	.540	.275
		Significance (2-tailed)	.	.000	.015
		df	0	76	76

	q30	Correlation	.540	1.000	.264
		Significance (2-tailed)	.000	.	.020
		df	76	0	76
	q10	Correlation	.275	.264	1.000
		Significance (2-tailed)	.015	.020	.
		df	76	76	0
q10	q15	Correlation	1.000	.504	
		Significance (2-tailed)	.	.000	
		df	0	75	
	q30	Correlation	.504	1.000	
		Significance (2-tailed)	.000	.	
		df	75	0	

a Cells contain zero-order (Pearson) correlations.

Table 44: Correlation between attitudes towards the role of ICT in DLL (q15) and levels of satisfaction with progress (q30) controlled by Attitudes towards the effectiveness of electronic communication with tutors (q13)

Control Variables			q15	q30	q13
-none-(a)	q15	Correlation	1.000	.538	.496
		Significance (2-tailed)	.	.000	.000
		df	0	76	76
	q30	Correlation	.538	1.000	.365
		Significance (2-tailed)	.000	.	.001
		df	76	0	76
	q13	Correlation	.496	.365	1.000
		Significance (2-tailed)	.000	.001	.
		df	76	76	0
q13	q15	Correlation	1.000	.442	
		Significance (2-tailed)	.	.000	
		df	0	75	
	q30	Correlation	.442	1.000	
		Significance (2-tailed)	.000	.	
		df	75	0	

a Cells contain zero-order (Pearson) correlations.