UNIVERSITY OF SOUTHERN QUEENSLAND

HOW INFORMATIVE IS FORMATIVE ASSESSMENT?

Investigating the learning process of educators who adopt formative assessment as practice.

A Dissertation submitted by

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Certification of Dissertation

I certify that the ideas, experimental work, results, analyses, software and conclusions in this dissertation are entirely my own effort, except where otherwise acknowledged. I also certify that the work is original and has not been previously submitted for any other award, except where otherwise acknowledged.

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Signature of Candidate Date

ENDORSEMENT

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Signature of Principal Supervisor Date

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Signature of Associate Supervisor Date

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Abstract

Researchers of formative assessment have concluded that, when teachers practice formative assessment as a process of learning, student achievement of outcomes increases. Other researchers have explored the success rate of teachers' professional development when they engage in a professional learning community and have concluded it offers the best results. Both have distinct yet very similar attributes that lead learners into becoming cognizant and reflective conduits for knowledge acquisition.

The purpose of this study is to determine if instructors, who learn about formative assessment practice by participating in professional learning teams, would encounter a process of learning similar to learners who engage in a formative assessment environment. The investigation into current literature uncovered characteristics that were codified to elicit evidence of their learning. Using data collection tools such as transcribed conversations, journals, observation and student focus group, themes were revealed that provide evidence of similarities.

For this study, nine instructors who worked in a Canadian college located in the Middle East met regularly in professional learning teams, for three consecutive semesters, to learn how to implement formative assessment practice in their classrooms. They endeavoured to adopt the strategies and techniques essential to creating a formative assessment environment for students who have culturally different backgrounds.

Using an ethnographic case study approach with direct content analysis, the evidence from this study has revealed that the instructors learning behaviour in the professional learning teams is analogous to learners who engage in a formative assessment learning environment. In each environment learners collaborate, reflect and evaluate their learning. The study also revealed sharing of personal and professional experiences builds an environment of trust that nurtures and empowers those who participated helping them to learn, grow and change.

It is acknowledged that the social reality of the cultural context in this study leaves replication open to varying results. Attention to the affect of student motivation on teacher learning may produce differing outcomes.

CHAPTER 1 Introduction to Research

1. Background

The new millennium has seen a vast number of educational institutions chasing the dream of quality education. Books and papers have been written, studies have been done with a focus of identifying what quality is, how it can be measured and, how it can be achieved. A main component of identifiable quality in an educational institution is the effectiveness of its teachers. If students are successful in achieving their learning outcomes, the teacher is deemed to be effective in providing quality teaching for her students.

The aspiration of educational institutions is a quality education. Among the descriptors of quality is evidence of teacher effectiveness and my story is a small part of such a dream by creating an environment where educators could share a passion for learning. My journey began with the idea of introducing formative assessment as a process of learning to a group of language teaching instructors. I believed that if we could utilise formative assessment in its fullest form as described by many expert educational researchers, we might better cope with the rigours and stress compounded daily by having to constantly produce summative assessments.

I was intrigued by the idea that formative assessment was being advocated as an essential part of effective teaching because it enhanced student learning (Black & Wiliam, 1998b, 2005; Brookhart, 2009; Heritage, 2007; Popham, 2008; Stiggins, 2005b). I read that formative assessment was about student centred learning through concepts such as feedback, interaction, self-assessing, and planning; all of which led students and teachers to find and close gaps in learning. It was about turning learning weaknesses into learning strengths. The idea of students' increasing their metacognition to improve their learning was intriguing. I thought that if our instructors could provide this kind of environment for our students, we could convince our administration that formative assessment could be a valid alternative approach to summative assessment. However, I knew it would only be accomplished if teachers were to provide such an environment where student outcome improvement was possible. Therefore, in order for students to benefit from formative assessment practice, instructors needed to be cognizant of the formative assessment strategies and techniques that would give students an opportunity to improve their learning by turning challenges into successes.

In order to move forward, I had to determine a way for our instructors to acquire the necessary strategies and techniques involved in using formative assessment as a practice of learning, and then give them an opportunity to try them in their classrooms. It was at this time I began investigating professional development to ascertain the best possible opportunity for professional learning. What I found was that teachers were best able to learn if they participated in a professional learning community that provided learning experiences that were collaborative, relevant, and sustainable. Therefore I began contemplating the notion of creating professional learning teams and

developing a learning package where I could share the true meaning and value of formative assessment.

2. Identification of Research Focus

The initial investigation into the literature revealed that most research on formative assessment focussed on the elementary and secondary public school settings. The studies indicated that at these levels the quality of learning improved because student achievement improved when teachers adopted formative assessment as classroom practice. There were few studies done on formative assessment, however, that made reference to students at the tertiary level. The few available studies did not establish whether adopting it as classroom practice would lead to a change in the effectiveness of the teachers' own practice. A typical reference to the positive effects of formative assessment only stated that student learning improved. In fact, it appeared the literature made no mention of actual teaching improvement at all. Therefore I determined there was a need to continue forward in this area.

I began to develop an interest in understanding what effects, if any, our instructors might experience if they had the opportunity to learn about formative assessment and then practice it with their students. It became evident to me there was a gap in understanding the backwash effects formative assessment practice might have on teachers' professional development and on changes to their classroom practice. In order to proceed, I reached out to my colleagues for their opinion on formative assessment.

At the time of this study, I had been working in the Middle East for 12 years with seven of those years as a language instructor in a Canadian college that catered to the needs of the Qatari people. Due to the initial development of the college as per the agreement between the State of Qatar and the College of the North Atlantic (Newfoundland, Canada), all instructors hired were required to be Canadian. However, many of my colleagues in the Language Studies department had spent several years teaching English in other countries before making their way to Qatar. They all had certification in teaching English as a foreign or other language along with graduate qualifications suited to teaching at a post-secondary level.

Discussions with many instructors revealed that their understanding of using formative assessment in the classroom was limited to talking with students, leading them to make quick judgements on their students' progress. Further discussions also uncovered, staff practising formative assessment by editing their students' written work and then providing them with revision suggestions. Although both of these techniques are considered formative, the language faculty were not aware that formative assessment as a process of learning also involved planning, paying close attention to students through consistent tracking, and making regular adjustments by both the teachers and students. Buck, Trauth-Nare, and Kaftan (2010, p. 404) recognised that "many educators do not understand their role in the formative assessment process". This statement solidified for me the realisation that if we were to implement formative assessment, then I would need a more formal structure

to successfully teach my colleagues how to transform their classroom practice. We would then be in a position to convince our administration it would be possible to change our approach to assessing students. Therefore, my investigation into the literature turned to searching for a type of professional development that would provide an opportunity for instructors to learn about formative assessment and thus document potential changes in practice.

In my role as team leader, I was partly responsible to provide opportunities for the professional development of my colleagues. Therefore I explored the possibility of creating professional learning teams where instructors would be able to learn more about formative assessment strategies and techniques. I also looked into providing a venue for them to plan and discuss how formative assessment could be used in their classrooms.

Many authors and researchers now understand that effective professional development needs to be job-embedded, relevant to pedagogic knowledge and be a collaborative and on-going process (Caine & Caine, 2010; Diaz-Maggiolli, 2004; Goldschmidt & Phelps, 2009; Koster, Dengerink, Korthagen, & Lunenberg, 2008; Robinson & Carrington, 2002).

3. Professional Development Teams and Formative Assessment: A Systematic Comparison

Extant literature discusses the benefits for teachers when they engage in collaborative, relevant professional development that is sustained over an extended period of time (Caine & Caine, 2010; Diaz-Maggiolli, 2004; Goldschmidt & Phelps, 2009; Koster, et al., 2008; Robinson & Carrington, 2002). Likewise, the literature discusses the benefits students' reap when their teachers practice formative assessment. Black and Wiliam (1998b), who were the groundbreaking researchers of formative assessment, recognised there are many factors teachers must contend with in order to help students become better learners. In their research review they concluded that formative assessment practice raised standards of learning.

Black and Wiliam (1998b) argued that teaching and learning must be interactive and that all activities relating to assessing should provide information. The information is to be used by teachers as feedback on their students' progress so they could meet the needs of the students by adapting their teaching style to the developmental stages of their learners (Matthews, 2003). This approach mirrors the constructivist theory of information gathering and processing that leads to the construction of knowledge. A teacher employing constructivist theory provides learning experiences that enable the development of the learners' understanding. I began to imagine that if formative assessment practice was constructivist in nature, then instructors could reap the benefits from using its strategies in their classrooms because they would be actively engaging in a process of learning themselves. There appeared, however, to be a limited amount of research devoted to understanding the similarities between teachers engaging with formative assessment as classroom practice and the knowledge they construct through partic-

ipating in the current professional development approach of professional learning teams.

There are many similarities between formative assessment practice and professional learning in a community. The underlying key strategies are:

- interaction/collaboration –reinforces concepts or adds new ideas not thought of by those sharing their learning experiences (Andrade & Valtcheva, 2009; Brookhart, 2008b; Caine & Caine, 2010; Moss & Brookhart, 2009; Rolheiser & Ross, 2000; Runhaar, Sanders, & Yang, 2010; Tillema & van der Weshuizen, 2006; Webb & Jones, 2009);
- feedback – plays an important role no matter who the learner is since it is essential for knowledge construction (Andrade & Valtcheva, 2009; Brookhart, 2008b; Caine & Caine, 2010; Moss & Brookhart, 2009; Rolheiser & Ross, 2000; Runhaar, et al., 2010; Tillema & van der Weshuizen, 2006); and
- self-assessment/reflection – encourages the development of meta-cognitive skills (Andrade & Valtcheva, 2009; Brookhart, 2008b; Caine & Caine, 2010; Moss & Brookhart, 2009; Rolheiser & Ross, 2000; Runhaar, et al., 2010; Tillema & van der Weshuizen, 2006).

The authors referenced above have identified through their research that using these strategies leads to a more successful learning environment. These three main processes are said to improve teacher practice as demonstrated through increased motivation, autonomy, and confidence of their students (Hirsch, 2005; Lyons, 2006; Mizell, 2010; Roberts, Crawford, & Hickmann, 2010). Each process is summarised below.

3.1 Interaction / collaboration.

For the purpose of this study, it was important to make a distinction between learning interactively in the classroom and working collaboratively in a professional learning team. Although they are very similar in nature, collaboration refers to people meeting in a group who have a personal agenda. They also respect and highlight individual group members' abilities and contributions (Panitz, 1996). On the other hand, to interact is to communicate and have an effect on each other (Hornby, 2010), which in this study refers to teachers and students coming together in a formative assessment environment taking cues from one another on how to further the learning.

Collaboration in a professional learning team operates according to rules. Each member has a role that contributes to the greater good of the team. There are ground rules by which each member must abide by in order to create an open and inquiry based environment. These rules included such things as: developing an ethic of sharing, encouraging members to ask questions, and never saying “I already do that” (Brookhart, 2009).

Interaction in the classroom comes in many forms. In this study, it started with the teacher/instructor as she interacted with students by providing learning opportunities by introducing concepts or questioning students for

information gathering and encouraging engagement (Moss & Brookhart, 2009; Popham, 2008). Students also interacted with their classmates either through teacher design using formative assessment strategies or by their natural tendency to talk with their neighbours. Also pertinent was the interaction of students with learning materials. When students were engaged with the material provided by the curriculum (e.g. a textbook), or the teacher through the use of activities, they were encouraged to apply concepts for deeper understanding and thereby interact with the classroom materials.

3.2 Feedback.

Feedback is a necessary part of learning. Without knowing how we are doing in the present, we can never know how to advance in the future. Feedback should convey information that fills the gaps that stunt learning. It can take the form of a written or oral commentary, or it can be administered through effective questioning that makes us review what we have just done and decide on our own how we can make it better (Brookhart, 2008a; Moss & Brookhart, 2009; Popham, 2008).

In the classroom, teachers lead in providing feedback to their students. In a formative assessment environment, feedback is considered a process that uses suggestions for improvement or devises strategies that allow students to reach their goals (Brookhart, 2008b). Teachers will also encourage self and peer assessment in order for students to take ownership and responsibility for their learning.

In a professional learning environment, colleagues provide feedback to one another that is based on their experiences and/or prior knowledge that builds on the concepts they are learning. For example, instructors in this study listened as one colleague described an activity she introduced to her class. Other colleagues asked germane questions to seek clarification or, more importantly, to set up an opportunity to give suggestions on how a classroom activity could be changed or improved upon.

3.3 Self-assessment / reflection.

A critical element for improving teaching is to be able to reflect upon the teaching situation. Engaging in reflective practice is a deliberate act to increase one's conscious awareness by gathering and examining evidence of teaching and student learning (Lowe, Prout, & Murcia, 2013). It allows an individual to construct new knowledge of content, theories, processes, and practices (Lyons, 2006). Reflective engagement provides opportunities to ask thoughtful questions about best practices, core values, and to make concrete plans to improve oneself (Roberts, et al., 2010). This practice is mirrored in this study as instructors met regularly to reflect on their classroom experiences. They shared stories of using formative assessment techniques and students' responses to instructor feedback, giving insight to new avenues on how to improve their own methods and techniques. In this study, reflective practice of the instructors was facilitated in two ways: a) through the use of formative assessment in the classroom, and, b) in ongoing professional development. That is, reflective practice was applied to:

- students in the classroom;
- the instructor directing the class; and
- the instructor as a professional learner.

3.4 Professional learning teams and formative assessment: an iterative process.

One aspect of this investigation involved whether instructors, who learned how to implement formative assessment by participating in a professional learning team, demonstrated reflective practice during their own learning journey and through modeling it in their classrooms with students. Figure 1.1 conceptually demonstrates the process of reflective practice for instructors and students and its relationship to formative assessment, professional development, and improved teaching and learning.

Figure 1.1 displays the learning processes the instructors encounter as they engage in learning about formative assessment practice in their professional learning teams. In the teams, they understand and contribute to aiding one another in the construction and co-construction of knowledge. They then take the learning they have acquired from the collaboration, into the classroom. The students are already engaged in the course content but now the instructors bring in the formative assessment strategies such as:

a) giving descriptive feedback for the students to think about and administer to their learning;
b) providing self and peer assessing tasks for the students to evaluate their work before facing summative testing; and,
c) asking rich questions to elicit their understanding of the content.

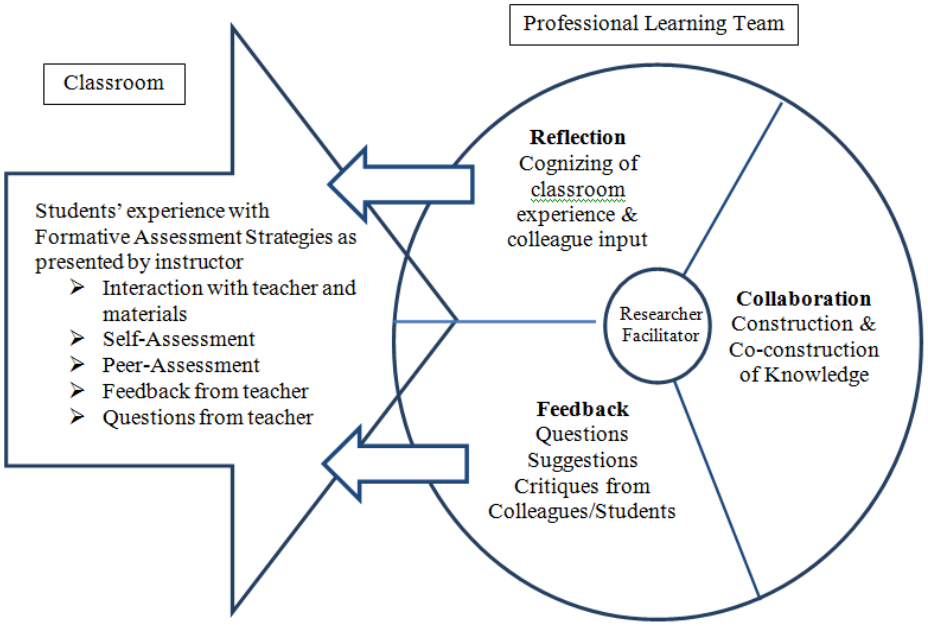


Figure 1.1
Common Strategies of a Formative Assessment Environment and a Professional Learning Team

Once the instructors complete their activity, they reflect on how it went, how the students responded to the strategies, and whether they need to change their approach to teaching. Then they take their teaching activity back into the professional learning environment where they relay and discuss how their students responded to the activity. Colleagues ask questions and offer feedback in the form of critiques or offering suggestions for improvement.

Formative assessment and professional learning teams have much in common. Inherent in the use of formative assessment is the need to actively interact with and listen to one's students. Professional learning teams have the same requirement since instructors must listen to their colleagues' experiences as they learn and try formative assessment practices. A formative assessment technique is to use open-ended questions to encourage students to think and deduce answers; a professional learning team instructor might naturally ask their colleagues in the team what successes or failures they have had in using formative assessment tools to help themselves better understand their own experiences. Finally, formative assessment practice employs the use of self-assessment and peer-assessment just as the instructors do when they are re-living their experiences about how their students reacted to the formative assessment tools or techniques they tried in their classrooms.

This study promoted collaborative and cooperative learning through the use of professional learning teams. Schoenfeld (2011) claims that teachers need to be aware of their beliefs when it comes to how they teach. They also need to understand how they think students will learn so those beliefs can shape what they are doing as teachers. If teachers are not cognizant of their beliefs, then professional development is not going to have an impact on their teaching practice.

In a professional learning team the instructors are able to understand their approach to using formative assessment as they reflect and discuss with one another during their day-to-day classroom activities. Therefore, the professional learning team provides a natural collaboration amongst teachers who gather or gravitate towards the topics in, or methods of, teaching that suit their belief system.

4. Context

This investigation took place in the Middle East, where there is the governmental expectation that their citizens will be provided quality education. In order to achieve this, governments have relied on Western educational practitioners to take charge of their post-secondary institutions (Akkari, 2004; World Bank, 2007; Zellman, Ryan, Karam, Constant, Salem, Gonzalex, …Al-Obaidli, 2009). In contrast to Western pedagogical practice, however, Middle Eastern pedagogical ideology requires a great deal of emphasis be placed on summative assessment. As such, a great deal of stress is put on the respective educators, whether Western or otherwise, because there is an expectation they will develop tests and exams for their students that demonstrate success.

One of the main reasons for the existence of the College of the North Atlantic - Qatar (CNA-Q) was due in part to Sheikh Hamad bin Khalifa Al Thani who was, and still is, credited with taking the State of Qatar from an underdeveloped, Bedouin nation into a bustling ever changing modern society. During this time of rapid development, Qatar has many ex-patriots living amongst the citizenry to assist with the transformation. Their job is to educate not only in a formal institutional setting but also with on-the- job training. Most, if not all, of the businesses operating in Qatar have an ex-patriot partner. The Sheikh hopes that one day his people will run all aspects of the country to decrease its dependence on the ex-patriot community.

In response to the government expectation of successfully teaching and training its citizens, the Language Studies department of CNA-Q decided to move forward pedagogically to improve education for their students. As an instructor at CNA-Q, I worked with my level team to provide the best assessments possible; however, we felt our efforts would be better focussed if we were able to track our students' progress regularly. We believed this would better situate the students when it came time for them to write their tests, quizzes and exams. Therefore, this research began by exploring formative assessment with the intent of offering it as an alternative way to measure the success of the students thereby alleviating some of the stress these instructors encountered through test development.

To date there has been no studies done on formative assessment using Middle Eastern students, especially as language learners. It can be surmised this is due in part to the type of pedagogical methodology that is prevalent throughout the region, as it does not lend itself to practising formative assessment as a process of learning. Middle Eastern pedagogy tends to be what Western educators would consider a more traditionally passive practice (Akkari, 2004; World Bank, 2007). That is, the teacher does all the talking and the students do individual practice work (Zellman, et al, 2009). In 2007, a report created by The World Bank on Middle Eastern and North African education reforms acknowledged that even though their educational systems have encouraged their teachers to adopt pedagogical reforms, there is little evidence of change. Ergo, there would be no need for a Middle Eastern teacher to adopt formative assessment as classroom practice. When it comes to language teaching, a didactic approach may have its place from time to time (e.g. perhaps when introducing a new grammar concept) but it is not a generally accepted practice, particularly in the language department at CNA-Q.

The language department espouses a communicative approach to language teaching which means positioning the students as active learners. It is expected the students will construct language through interaction. The communicative approach means teachers use tasks based on real-life situations that draw out students' communicative ability; it promotes learning by doing; and it promotes cooperative/collaborative learning (Brandl, 2008). Therefore, it is expected the students will productively demonstrate their language acquisition by using the English language through a combination of four skills: listening, reading, writing and speaking. Having the students

change their learning style to one that is more active means they can no longer be passive recipients of knowledge when their typical learning experience has been just that.

In 2009, The Rand-Qatar Policy Institute prepared a report for the Supreme Education Council of Qatar. That report indicated that as of 2007, students were generally taught in large groups (upwards of 40 per class) with the teacher standing at the front lecturing and calling on students to recite answers (Zellman, et al., 2009). Another education report entitled "Education in the Schools of Qatar" (2013) and conducted by the Supreme Council of Education Qatar has used statistical tables to demonstrate the frequency with which various teaching approaches are implemented by the teachers. It reveals that most days to every day, teachers lead the class and give lectures (p. 65). As well, the report acknowledges that most days to every day, students are required to do individual worksheets or workbooks (p. 64). While the report does indicate that most days students have supplementary reading materials (p. 63), when it comes to doing extended writing tasks, there is a very low score (almost few days) (p.63).

The language staff at CNA-Q has often made reference to Qatar being an oral culture. The Arab countries, on the Arabian Peninsula, have seen a rise in literacy since their independence in 1971 because of an increase in free and mandatory public education (Nydell, 2006). For centuries, however, education was only available to boys who were taught by the mutawa'a (religious men) who relied heavily on rote learning to memorise the Koran (Akkari, 2004; Davis, 2010). As the language staff were familiar with this fact, they believed there was little written about Arabian historic events while folklore had been passed down orally from generation to generation. Transferring historical events orally is known as Hakawati in the Arabic Middle East. It is a form of storytelling that brings a piece of the past to life through dramatised versions of history including kings, warriors and those considered heroes (Chaudhary, 2014). Before the transition to literacy, many people of Qatar were illiterate and storytellers or Hakawati were common.

Another idea that supports the belief that Qatar stems from oral culture is the knowledge that all public schools in state, which are solely for the Qatari children, are taught by fellow Arab teachers from Egypt, Syria, Jordan, Lebanon, and other teachers from countries whose first language is Arabic. Therefore, since Qatari students have Arab teachers, it is a reasonable assumption these teachers would bring with them the same learning experiences from their home countries, thereby placing more emphasis on the traditional concepts of passing on knowledge orally through lectures rather than by reading. This assumption is also supported by discussions instructors have had with their Qatari students who have explained their prior learning experiences.

Finally, the education report of 2013 appears to support the instructors' belief that oral reporting is the most productive mode of learning as it is done individually and in groups on most days (p. 65). Therein lays the contrast. The language staff would characteristically encourage students to learn by

using higher order skills such as application and demonstration of vocabulary or grammar, while the students were more adapted to using skills such as memorising and recollection to recite vocabulary or grammar.

As indicated previously, this study took place in a Canadian technological college that was invited by the State of Qatar to assist with the educational development of its citizens. The agreement struck by the state and CNA-Q meant the classroom was a cultural blend; the Canadian instructors' pedagogical training was contrary to the learning experiences of their Qatari students. As one instructor so aptly put it,

> Teaching here in the Gulf with this particular group of learners is very different from anything I have experienced. My students don't come equipped with strong study skills or even literacy skills in their first language and these have an impact on learning a second language.

Therefore, the mix of Western teachers, who used constructivist learning activities with students who were used to rote learning, created a separate unique school culture in its nature. This mix of cultures and styles led to situating culture at the front of this research.

4.1 Cultural significance.

If it is true as Merriam (2001b) states, that a socially constructed context shapes the learning of the individual, then it is important to this study to understand the culture in which it is set. Culture was a significant aspect to this study because of the type of students enrolled at CNA-Q and their subsequent connection to the instructors in this study.

Given the context in which this study occurred, the significance of culture rested within the actual classroom. It was anticipated that as the instructors became increasingly adept with formative assessment tools and techniques, they would take them into the classroom to try them out with their students. Therefore it was necessary to pay particular attention to the differences between the instructors, as teachers learning a new practice, and their students, as learners adapting to a new method. By the very nature of the institution and its purpose, language was first and foremost a variable that needed to be acknowledged. However, there were also cultural factors that needed to be taken into consideration within the framework of this study.

Another important aspect of culture addresses the students' motivation toward being active in their role of knowledge construction. In 2010, the President of Qatar University, Sheikha Abdulla Al-Misnad acknowledged the educational movement into the new millennium had resulted in most men being "absent from post-secondary education". The majority of the students involved in the instructors' classrooms were young men sponsored by a company that was chosen, in most cases, by their parents. Many of these students did not choose to work in that field or to even be in College to learn English. Instead they were expected or required to attend because that was the wish of their parents based on the wish of the Sheikh. The fact

that the students did not have control of their own livelihood led to the possibility of decreased motivation for many of the students in this study.

Furthermore, at the time this study occurred, this oil rich country had a benevolent leader who looked after his citizens. The hope of Sheikh Hamad bin Khalifa Al Thani was to have his young people be educated, employed and taken care of. Therefore the students earned a considerable salary from their sponsor companies. Even though their attendance in class was supposed to be linked to their salary, their absences were often overlooked by administration and they suffered no loss in pay. Therefore many students knew that being a studious, hardworking student was not necessarily linked to achieving a comfortable lifestyle.

Such cultural differences in the classroom had the potential to impact the study. Many of the students lacked motivation, and all the students had prior learning experiences contrary to the learned pedagogy of the instructors. Therefore the students in this research became a significant factor to consider. Would the instructors have difficulty implementing the formative assessment tools and techniques due to the students' resistance to changing their learning style? Would the instructors want to give up on their journey to learn a new pedagogical practice or would they persevere and continue to encourage the students to think outside their comfort zone? These were questions that posed a real possibility of influencing the outcomes of this study.

5. Purpose of the Study

Based on the premise that formative assessment improves student learning, motivation and autonomy (Black & Wiliam, 1998a; Brookhart, 2010; Haystead & Marzano, 2009; Klein, 2007; Popham, 2008; Shepard, 2005; Stiggins, 2005a)**,** this investigation considered the possibility that adopting formative assessment as classroom practice enhances instructor teaching practice. A catalyst for this investigation was due in part to regarding formative assessment as a process of learning that uses strategies such as feedback, open-ended questioning and self-assessment to increase students' meta-cognitive skills. My assumption was that instructors opting to implement formative assessment and participate in a professional learning team may likewise experience the same positive effects as students. This assumption was a result of knowing instructors would also receive open-ended questions from their colleagues in the team, feedback from their students in the classroom, and feedback from their peers in the professional learning team. This, in turn, would lead instructors to self-evaluate and self-regulate their classroom practice.

If student learning benefits from the use of formative assessment practice, then there was a possibility that instructor teaching practice may benefit. I posited that applying formative assessment could act as a legitimate form of reflective practice which, in turn, would be an effective form of professional development. This assumption was based on the evidence that there are similar strategies inherent in formative assessment and professional development as previously noted.

6. Significance of the Research

It was the aim of this research to add to the existing body of knowledge regarding formative assessment and its benefits to those who encounter it. The literature I had investigated indicated that educating teachers about formative assessment was not generally done formally through teacher education programs (Buck, Trauth-Nare, & Kaftan, 2010). Therefore, offering instructors an opportunity to learn what formative assessment practice was all about by participating in a professional learning team, and studying what impact it may have on the instructors involved, is a new approach. I had often found in my own teaching experience that tackling any new concept, teaching strategy or teaching technique has contributed to my own professional development. Therefore I believed it was possible that the instructors may realise the same benefits.

The investigation into the extant literature I had done uncovered few studies linking formative assessment to professional development. In the most up-to-date literature, studying formative assessment generally only applied to the effects the process has on the students. Therefore, I believed my research would be a valuable contribution to the knowledge bank of education in the Middle East and to education in general.

In the longer term, there are other possible areas of study that could be done. For instance, the teachers' perception of how their students are doing and the students' perception of their learning styles – has their learning changed, become more focussed, and has their student success rate increased?

This research also has the potential to build a partnership between the university/college and public schools in the State of Qatar (Bullough & Baugh, 2008). It could possibly develop into a longitudinal study through the expansion of the professional learning teams into a learning tree. In doing so, the instructors would be able to share their learning experience with colleagues who would then be able to carry on the learning and this could continue to others. The instructors involved in this study may also have the option of doing action research on their own formative assessment development to further their own professional growth. Building an infrastructure filled with purposeful policies that provide sustained and extensive professional development will develop a practice that can lend itself to improved educational experiences for both instructors and students.

Finally, there is the potential of doing a comparative study based on the venue of learning. For example, this study was done in a non-English speaking country that includes an environment of teaching and learning English as a foreign language. However, a similar study could be done in an English as a Second Language teaching and learning environment in a country where English is the official language.

7. Relevance and Scope of the Study

The scope of this study extends beyond the classroom; it includes the experiences of the instructors as they learn about and implement formative as-

sessment strategies. There is little research to-date that measures whether professional development has any lasting effect on instructor learning, let alone their teaching practice (Koster, et al., 2008). Goldschmidt and Phelps (2009) claim that what is typically investigated in large scale studies is the relationship between a course of study and student achievement; not the effect professional development has had on the learning and teaching of the practitioners. Even the meta-analysis done by John Hattie involving over 50,000 studies looked at learning of students in the classroom and not at the improved practice that may result from the teachers visibly noticing learning (Hattie, 2012).

As well, there is little current literature discussing the inter-relationship between improving student learning when the teacher uses formative assessment as a process of learning and improvement to teaching practice that clarifies the nature of this relationship. This study investigated that relationship and its impact on the instructors' reflective practice which, to-date, has not been studied in-depth (Lyons, 2006).

As little literature exists on language pedagogy involving the use of formative assessment this study can be relevant to educators of second-language pedagogy to better understand that blending and applying formative assessment in their classroom practice is possible.

Finally, the techniques proposed in this study extend the work of others by further investigating how formative assessment can help second-language students have a meaningful learning experience and the impact professional learning teams will have on instructors' reflective and classroom practice, collaboration and learning.

8. Research Design

As previously identified, this research was conducted within a unique cultural context. Therefore a blend of methodological approaches enables the study to use a range of methods for data collection to enhance triangulation.

In an ethnographic study, the researcher becomes immersed in a culture to find commonalities among the social group. The researcher studies the participants' ongoing behaviours as they naturally occur and is then able to interpret the cultural behaviour (Nunan & Bailey, 2009). Ethnography is about turning a social context into a research context and I, as the researcher in this study, was positioned as a facilitator of formative assessment tools and techniques to help instructors when they required assistance. I was immersed in a social reality of the instructors as they learned about formative assessment and implemented it with their culturally and educationally divergent students.

On the other hand, a case study approach places emphasis on professional improvement rather than evaluative decision-making which involves depth over coverage (Nunan & Bailey, 2009). It requires boundedness which suits this study given its unique cultural context as it occurred during a specified time period. This case was bound in two ways: first, in the discussions

held by the instructors as they learned formative assessment strategies and tools and how they planned to blend them into their classroom practice; and second, in the classroom where the instructors implemented the strategies and tools with their students. The case study approach allows the data collection to come from several sources, and in this study data was collected through the use of journals, audio recordings, focus group and observations.

The purpose of this ethnographic case study was to discover and describe the transformative potential of formative assessment in relation to the instructors who adopted it as classroom practice. For the purpose of this research, the transformative potential of formative assessment was generally defined as the way in which implementing formative assessment as a process of learning could be a valid and worthwhile form of professional development for the instructors who taught English language skills to Qatari students.

The question as to whether positive effects are lasting effects necessitates the need for extensive study because the studies referenced here have extended beyond several months of concentrated research. For verified and fixed results, tracking students and teachers for a period beyond a year would further substantiate effects of formative assessment.

9. Strengths and Limitations

This study was the first of its kind done in the Middle East using second-language learners. The extant literature I had accessed did not include studies or experiences in practising formative assessment with Middle Eastern students. This study discovered whether the cultural differences between the instructors and their students has any effect on learning in regards to everyone involved.

In this study, consideration needed to be given to the types of learners because there were learners in the professional learning team and learners in the classroom. The instructors were adult learners who worked together in a collaborative environment in contrast to their students who had limited exposure to active learning. The students' prior learning experiences included surface learning only, as opposed to deep learning which includes critical thinking, reflection, and interaction. These skills increase one's metacognitive ability when engaging in a formative assessment environment. Therefore, if the students in this study had no prior experience with a learning environment that required taking an active role in their own knowledge construction, then student learning had to be considered as a possible limitation to the research itself. If the instructors' students had difficulty adjusting to the new learning environment of formative assessment, might that have some sort of effect on the learning of the instructors?

The cultural context in this study brought forth two points to consider. First, the instructors' students came from families whose background consisted of a nomadic life. The students' education was not based on books but rather on how to sustain life. Although those families now live in an urban community, they are generally not a reading-based culture (Wold Bank, 2007).

In the home during the first three years, it is said, significant learning can take place (Sousa, 2011). If students in this study have not had that stimulus to trigger the production of synaptic activity, they would not have the same neural development as others who have had such early stimuli. Second, the education system that is responsible for the students' learning is based on a very different methodological approach; it does not employ experiential activities to encourage critical thinking or decision-making (Zellman, et al., 2009). Understanding the cultural context of these students, given the nature of their learning experiences, is important to understanding the added possible challenge to the instructors in this study.

10. Thesis Structure

Chapter 1 of this thesis lays the groundwork for the study in that it provides the context, purpose, significance, and theoretical assumptions on which the questions are based. Chapter 2 presents the literature review that reveals the foundation for the theoretical assumptions and provides support to the various characteristics involved when investigating adult learning and the process of learning identified in formative assessment practice. Chapter 3 begins by outlining the most suitable methodological approach for this study before determining the most appropriate research design and methods of data collection and analysis. The remainder of the chapter discusses how the study is valid and reliable in addressing issues therein, and ends with ethical considerations. Chapter 4 presents the analysis by detailing the analytical approach, construct, and framework ending with a presentation of the study findings. Finally, Chapter 5 presents the findings. It begins with discussing preliminary findings that aided in solidifying to codes. Then, general findings are presented by defining each code which are summarised to present the behaviours demonstrated by instructors as they progressed in their learning teams. Finally, Chapter 6 brings the study together by with conclusions and implications of the findings.

11. Chapter Summary

This chapter gives an overview of what this study entails. An explanation of a theoretical assumption presented the premise on which the study is built. This chapter discusses the need for the research and outlines the context in which the study takes place. Significant to the study is the cultural differences the instructors encounter in the classroom and the possible impact those differences may have on the instructors' approach to learning formative assessment strategies and techniques. In this study, instructors learn about formative assessment in a nurturing environment where they knew they can try different strategies and return to the group for discussion.

CHAPTER 2 Literature Review

1. Introduction

Chapter 1 establishes the background and contextual environment in which this study took place. It identifies the focus of the research as well as similarities between students who experience learning through formative assessment practice and the learning experiences for teachers/instructors who engage in a professional learning team. The chapter also identifies the cultural context and limitations that culture imposes within this study. It acknowledges that within the confines of the classroom there are pedagogical differences between the instructors and their students which influence the process of learning for both.

Chapter 2 concentrates on understanding the theory of professional development and how it evolved over time. It identifies what has already been done in the area of teacher learning and distinguishes between the learners involved in this study. This chapter provides an in-depth synopsis of the literature to identify the research that explores the fundamental strategies that connect formative assessment and professional learning. The discussion then reviews the potential of using formative assessment strategies in a culturally different tertiary context, and in particular, within a professional learning team. Chapter 2 makes a connection between the theory as it relates to formative assessment and professional learning teams and to the practical underpinning of that theory to this study. Finally, the chapter ends with a personal note that addresses how the research questions were realised.

2. The Evolution of Effective Professional Development as a Formative Process

Research done on determining the best approach to professional development always has and likely always will begin with the rationale that student achievement must be increased (Diaz-Maggiolli, 2004; Doolittle, Sudeck, & Rattigan, 2008; Goldschmidt & Phelps, 2009; Mizell, 2010). Early educational experts in the 20th century knew that the key to improving student learning was through the improvement of the teaching. Thus began the pursuit of raising educational standards by keeping the educators up-to-date with professional practice thereby improving student learning outcomes.

In the 1970s professional development was referred to as in-service teacher training programs. They were meant to keep the teacher knowledgeable and skilled enough to meet the demands of a changing society. Unfortunately, they were often not intended to assist teachers in practising new skills, let alone implementing them or assessing whether they were effective classroom tools (Seagren, 1974). Teachers would receive between three hours to thirty hours of workshop time which meant they would be trained in a certain area but that training was not built into their weekly schedules, nor did they have time to practice what they had learnt (Seagren, 1974). Professional development was a way of introducing new ideas; ideas that came

from someone else without any teacher input. It often had no follow-up or institutional support and it was thought to have no positive effects on student learning (Diaz-Maggiolli, 2004).

That being the case, governments began to question the approach to in-service training programs and their effectiveness. Therefore, in the mid-1980s, industrialised countries began to de-centralize their education systems. Countries allowed local authorities to assume responsibility for the administrative planning of staff development by introducing the concept of school-based management (McGinn & Welsh, 1999). The reason for this shift was to concentrate efforts locally because it was felt local authorities would be in a better position to know best what was needed for their schools. Professional development (under the auspices of training of McGinn & Welsh, 1999, p. 52) was one area that began to be locally administered. Wade (1994) conducted a meta-analysis of research into in-service education because she felt the disseminated information came from a "heterogeneous conglomeration" (p.48) of researchers rendering it confusing. Her conclusion of the meta-analysis was to advise administrators to plan collaborative programs, offer incentives to staff, encourage independent study and self-instruction over traditional workshops, to set clear goals for the instructors, and finally, to use techniques such as observation, feedback and practice. Wade's forward thinking was a catalyst for moving toward a different approach to professional development.

By 2003, 13 published lists outlining the characteristics of effective professional development had been created. In an investigation done by Thomas Guskey (2003), he recognised that the lists were derived in many different ways and that their use of the term "effectiveness" developed from criteria that varied widely. He concluded that most lists were research-based but the source of the information typically came from the opinions of the teachers involved in professional development and not on improvements in instructional practice. Researchers continued to investigate, leading to professional development in the 21st century taking a paradigmatic shift by moving away from the "shotgun approach" or "drive by workshops" (Darling-Hammond & Richardson, 2009; Thompson, Gregg, & Niska, 2004) to a more powerful, collaborative, context relevant, job-embedded and sustainable way of learning that keep educators up-to-date with pedagogical practices.

Professional development is now considered to be an opportunity that allows practising teachers to gain knowledge and refine skills to meet the standards defined by that professional group. This new approach to professional development is believed to have lasting effects for both student and teacher (Caine & Caine, 2010; Koster, et al., 2008; Roberts, et al., 2010).

Some experts claim that professional development is most effective when it is instructor driven, connected to the reality of the instructor`s situation, has a shared purpose, and includes strategies to sustain learning (Robinson & Carrington, 2002). Many researchers have concluded that a modern characterisation of effective professional development reflects that it should: have a purpose, be participatory and collaborative; contain contextual knowledge,

be ongoing, experiential and developmental for the instructors, be analytical and reflective, and be built around a professional learning community (Darling-Hammond & Richardson, 2009; Diaz-Maggiolli, 2004; Doolittle, et al., 2008; Robinson & Carrington, 2002).

In this study, formative assessment is the learning experience for instructors that is job-embedded, adds to the pedagogical knowledge base, and is an on-going process of learning. The professional learning team provides the environment in which they learn and experiment with new techniques and strategies for student learning.

2.1 Professional learning teams.

A professional learning community takes academic learning away from the institutions and gives the opportunity for learning to the teachers themselves. With support from the administrators, it can create a culture shift in the school, address skills needed for self-directed learning, ensure the team is led by someone who is more advanced at a particular skill, and most importantly, can ensure active support by school leaders that can lead to a quality education (Chappuis, Chappuis, & Stiggins, 2009). It is the means by which teachers can learn, change and/or improve their pedagogical theory and practice (Wood, 2007).

A professional learning team is the organisational tool that encompasses the characteristics described above. It allows its instructors to share their knowledge, and receive feedback when they try newly-acquired strategies or techniques in their classrooms. They can discuss with colleagues how their students responded so they can make the most of their learning experience. In short, it provides an opportunity for dialogue and a place where teachers can grow professionally.

Professional learning teams build on the concept of knowledge acquisition as practice whereby teachers learn and build knowledge together as they elicit each other's tacit knowledge in order to share and critique one another (Caine & Caine, 2010). The team requires, and in fact relies on, teachers committing to working and learning between meetings. Through a learning team, teachers have an opportunity to collaborate on inquiry-based topics, providing an opportunity to learn for understanding and real-world performance (Snow-Gerono, 2005).

A professional learning team begins with any topic and is similar to communities of practice in that it is a group of people who meet regularly to learn how to do something better. However, a professional learning team is more structured than communities of practice in that they meet regularly, commit to contribute and collaborate to construct knowledge, and take on team roles to keep the meetings consistent and smooth running. Teachers in a professional learning team have the opportunity to learn new methods of teaching, can apply them in the classroom, and reflect on how it went or if anything could be done to improve or make that method better (Caine & Caine, 2010; Chappuis, et al., 2009; Darling-Hammond & Richardson,

2009; Diaz-Maggiolli, 2004; Doolittle, et al., 2008; Harris & van Tassell, 2005).

The professional leaning team in this study acts as a voluntary approach to professional development that provides a venue for collaboration and an exchange of ideas that foster improved teaching and learning practice. The collaboration of the instructors and reflective dialogue can lead to success for their students and a positive learning experience for themselves.

3. The Practices of Reflection, Formative Assessment and Professional Learning: A Comparative Analysis

Reflective practice stems from the groundbreaking work of John Dewy (1933) when he conceptualised reflective thinking as having two processes: uncontrolled and controlled thoughts. An uncontrolled reflective process could be likened to thinking about different aspects of one's teaching but that thinking about it does not necessarily lead to changing or improving teaching (Wallace, 1991). Dewey defined controlled reflective thought as being "active, persistent and (given to) careful consideration" (Dewey, 1933, p. 7). A case study involving three elementary teachers at a public school (Lyons, 2006) concluded reflective engagement to be a deliberate and systematic approach to inquiry of practice that raises one's conscious awareness in order to make change to teaching and student learning. Reflective practice has also been identified as an iterative process that moves teaching forward from theory to practice and from practice to theory (Rodgers, 2002).

Reflective practice can involve an individual educator attempting to change or improve a single aspect of her teaching or it can be a collaborative activity among colleagues who all have the same desire to learn a new approach (Amulya, nd; Rieger, Radcliffe, & Doepker, 2013). Both forms of practice require an avenue that allows the user to address real-life concerns that they feel are important and can have some influence over in order to make change. Areas for investigation could derive from particular individual experiences that might trigger one to reflect. For instance, struggles in the classroom create feelings of uncertainty or the need to discover gaps between where one is now and where one would like to be (Reynolds, 2011). Whether one's focus is on one activity or changing classroom management style, reflective practice is an approach to help its user discover a way of effecting change to teaching and learning.

As identified in Chapter 1, there is a close relationship between teacher performance in the classroom when practising the formative assessment as a process of learning and the process of learning that occurs in a professional learning team; both are analogous to reflective practice. When a teacher adopts formative assessment as classroom practice, she must self-reflect on her role as teacher and how her students are responding to her presentation of knowledge and concepts. She needs to ask herself if they understand the concepts and if not, how can she change her methodology to accommodate their learning (Popham, 2008).

Formative assessment practice requires that a teacher be well versed in the course content. Such knowledge is essential because she must be able to plan on when the tools and techniques will be used so that recognition of student awareness becomes visible. Reflecting on the lesson and determining its success (or identifying certain challenges) requires a similar process to that of reflective practice. During the reflective process in formative assessment, the teacher will identify a trigger point (a crucial moment in student learning and understanding) (Heritage, 2008; Popham, 2008). She must then select a formative assessment technique that will gather information about that trigger point. Students' responses to that trigger are analysed and the teacher then decides if there needs to be an adjustment made to her teaching or if the students ready to move on; thus planning the next step to teaching.

When teachers participate in a professional learning team, they commit to learning something new. They attempt to adopt it into their existing pedagogical repertoire that will enhance or improve their teaching practice. The process they go through begins by learning a new concept, activity and/or strategy that they will take into the classroom. As they become more confident in how to implement what they have learned, they present it to their students. Upon completion of that lesson, these teachers must reflect on the students' feedback in adapting to or accepting the new concept/activity /strategy. When they return to their professional learning team, they discuss their reflection for further input into making adjustments or improvements. Once again, they return to the classroom to revisit the new approach to teaching. This cycle can continue until the teacher is satisfied.

Reflective practice, formative assessment and the professional learning team use an iterative process and that process can continue until one is content with the outcome. Displaying the cycle for each of the aforementioned processes are Figures 2.2, 2.3, and 2.4. The following depiction of a reflective cycle is an adaptation of a model proposed by Boud, Keogh, and Walker (1985); Kolb and Fry (1975); Murray, Gillese, Lennon, Mercer, and Robinson, (2007). It begins with a concrete experience that undergoes the process of reflection and re-construction of that experience both reflectively and concretely. Similar to that, are the processes that teachers experience while engaging in formative assessment practice and the instructors involved in a professional learning team.

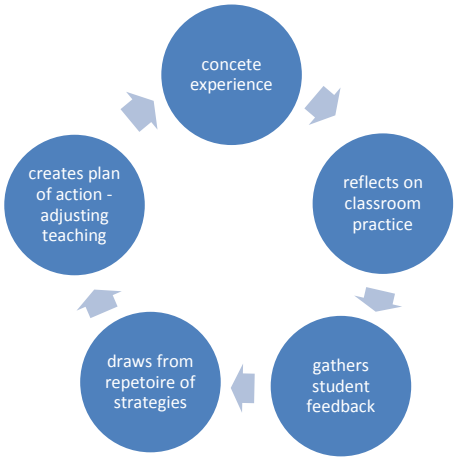


Figure 2.1 - Reflection Process

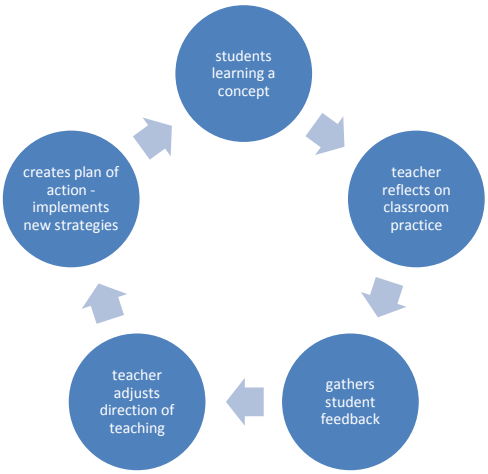


Figure 2.2 - Formative Assessment Practice

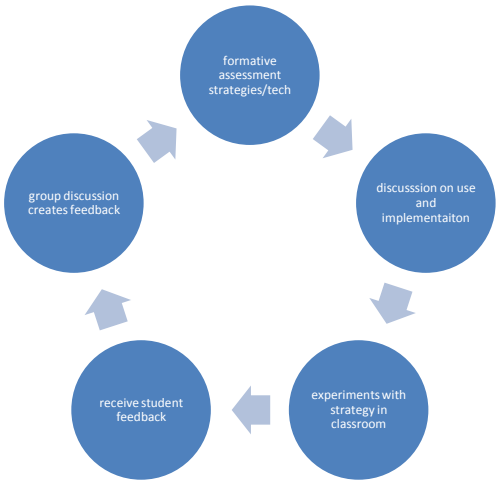


Figure 2.3 – Professional Learning Team

This section has demonstrated that researchers in the area of professional development acknowledge that informing one's self about one's practice through reflection is a process of learning that contributes to changing or improving teaching. Likewise, it has identified that researchers in the area of formative assessment acknowledge that the quality of learning is improved because students are taught to self-assess their work which leads to successfully achieving learning outcomes. The next two sections elaborate on reflection by linking the strategies used in formative assessment to the acquisition of knowledge that is based on brain activity and development, which in turn lead to changes in teaching and learning.

4. New Understandings from Neuroscience, Cognition and Learning

Formative assessment strategies require greater use of one's cognitive abilities. However, the rate at which those skills develop relies heavily on the amount of exposure one has had to such learning. Cognitive skills are context specific. The teaching of those skills develops: knowledge in students about themselves as learners, knowledge about course content and learning

tasks, and knowledge about what strategies one must select and use (Cornford, 2004). Within the context of this study, it needs to be recognised that presenting the instructors' students with formative assessment tools and strategies presents a certain challenge.

It was identified in Chapter 1 that the instructors' students did not have sustained exposure to stimulating, mind-expanding activities that researchers in the field of neuroscience say produce synaptic activity in a certain area of the brain. Therefore the neural plasticity development of the brains of students who had previously experienced a passive learning environment may be at an initial disadvantage when it comes to readily accepting formative assessment practice. This is due in part to the fact that formative assessment practice encourages the use of self-assessment, and strategies such as feedback, rather than memorisation and rote learning. To fully understand why this may be true, an explanation of the nature of neural synaptic brain development follows.

Neural plasticity refers to repeated experiences that shape the brain. Neurons are constantly changing their structure or relationship to one another, depending on the demands that surround the individual (Cozolino & Sprokay, 2006). The brain remodels or reorganises itself based on the experiences encountered. This reshaping occurs throughout one's life but occurs exceptionally rapid in the early years (Sousa, 2011). Research into neuroscience done by Bruer (1997) uncovered that early brain stimulation produces a higher density of synaptic activity because the dendrites connect to that area, thus making it stronger. He claims the more complex the environment (having more stimulus), the greater capacity for synaptogenesis (continued regeneration of synaptic activity) to occur. Although, the authors of Teaching and Learning Research Programme (TLRP, 2007), a UK based educational research group, have somewhat refuted that statement, they do agree that research indicates that impoverished environments can inhibit neural development.

Since the instructors' students have had only activities that allow passive learning which create a different set of cognitive strategies and skills, it is possible the synaptic area built up in their brains would be different to those students who started at a young age to develop their brains through active learning. On the other hand, when it comes to the instructors, they should be in an ideal position to be learning, developing new skills, reflecting and self-evaluating their learning for two reasons. First, they are eager to indulge in an empowering experience preparing the brain by adding motivational incentive. Second, they are Western trained learners and educators whose brains have been exposed to constructivist pedagogy, further preparing them for more neural synaptic development. That is to say, they would have had exposure to and the experience in the type of activity that would strengthen the part of the brain already developed and needed to accept new knowledge.

The instructors have come from a very different educational culture than their students. It is a culture where the philosophy of education is to pro-

mote active learning from a very young age. In the 20th century, Western education had researchers such as Pavlov, Vygotsky, Bandura and Skinner contribute immensely to teaching and learning theory. In the 1990's with the advancement of technology, researchers began investigating learning through brain mapping to the point that many now consider 1990's to be the decade of the brain (Bos, 2002). As a result, many new learning theories have developed by experimenting with new methodological approaches to teaching.

In this study, learning for the instructors takes place through the professional learning team. The team provides a safe and nurturing environment that encourages the development of social relationships, activating the neural circuitry and stimulating the neuroplastic processes required for certain kinds of learning (Cozolino & Sprokay, 2006; Mercado III, 2008; Willis, 2007). The instructors are stimulated regularly through open-ended questioning and reflection on their teaching. They must self-evaluate their teaching practice in order to contribute to the discussion as they work through the professional learning package on formative assessment and try implementing formative assessment tools and techniques into classroom practice.

Learning is a significant part of this investigation. Therefore the types of learners need to be identified to differentiate the effects of neuroplasticity development in relation to learners' cognitive and learning development.

4.1 Identifying learners through andragogy and pedagogy.

In this study, there are the instructors who are learning to adopt formative assessment as classroom practice. As adults, they are automatically considered to be andragogical learners. An andragogical model of teaching ensures the learners are provided with procedures and resources for acquiring the necessary knowledge and skills, which in this study is the learning package on formative assessment. Holmes and Abington-Cooper (2000) state that much of the literature in learning theory indicate teachers teach adult learners differently than they do younger learners. The difference is attributed to the recognition that adults are characteristically different learners than young people. In characterising adult learners, various authors have identified them as being self-directed, self-motivated, responsible and self-evaluative; they have a broad base of experience; they are ready to learn and they know what they need to learn (Davenport & Davenport, 1985; Gregson & Sturko, 2007; Hiemstra, nd; Holmes & Abington-Cooper, 2000). These characteristics can describe the instructors in this study who are involved in the professional learning teams but not necessarily the students of the instructors.

On the one hand, the instructors' students are adults but their learning experiences have not prepared them to be considered androgogical learners. Instead, a pedagogical model of learning more suitably describes them as learners because that model sees the teacher as having full responsibility for passing on knowledge and skills to their students. The teacher makes the

decisions concerning what will be taught, how it will be learned and provides the materials needed for the students to learn. In characterising younger learners, the same authors have prescribed different characteristics. They are dependent, have little experience, need to be told what to do and how to do it, and most importantly, they are extrinsically motivated in contrast to andragogical learners who tend to be intrinsically motivated. While it should be noted that in some cases adults depend highly on a teacher structured environment and some young learners are more independent and self-directed (Merriam, 2001a) that is not the case in this study.

Understanding the students in this study is relevant to determining how the instructors may view their learning. In the cultural significance section 4.1 of Chapter 1, it was recognised these students may lack motivation given the circumstances they are attending language classes. Key to determining whether a teacher should follow a pedagogical or andragogical model relates to motivation of the learner. Pew (2007) recognises that most students entering college must be intrinsically motivated because they are adults taking responsibility for their learning. That is not the case with the instructors' students in this study, as previously explained.

The next section discusses effective learning strategies which are relevant to determining how the instructors will tackle learning and adapting to a new methodological approach to teaching.

5. The Nature of Effective Strategies in Learning

Formative assessment is defined as a process of learning that uses strategies to develop metacognitive abilities in learners. Professional learning communities require that teachers be exposed to sustained and collaborative environment in order to change teaching practice. The professional learning teams provide such a venue. Researchers who have investigated these strategies have identified two key attributes that create an active and stimulating learning environment in order for learners to construct knowledge in an effective and personal way: feedback and the reflective/evaluative process.

5.1 Feedback and learning.

Both formative assessment and professional development require feedback which has been associated with the "cognitive factor" of the self. Once learners feel they are assuming some control over their learning then feedback is linked to the "motivational factor" of the self (Brookhart, 2008b). Recent research on student feedback reveals that it is generally filtered by the learners' perception of what they already know, the experiences they have had and how motivated they are to move forward (Black & Wiliam, 2003; Brookhart, 2008b; Mandarnach, 2005; Wang & Wu, 2008). If feedback is used as information requiring attention then it can be considered a process moving learning along a path that will close an already identified gap. Therefore, feedback should be instructive and evidenced-based, and it takes on many forms. It should be either verbal or written questions or comments. It should focus on strengths and/or weaknesses, and should be descriptive and/or evaluative. Feedback should identify areas of possible

adjustments for learners. In doing so, feedback then becomes a process of learning. The information received from the feedback drives the process of learning and attaches meaning for the learners that ultimately requires the use and control of one's own thought process (Brookhart, 2008b). Learners begin to self-regulate what they are achieving and how they are achieving it.

Feedback is an integral strategy in formative assessment as it builds cognitive abilities to give students an overview of how they are performing, provides insight into their overall capabilities, and enables them to see what needs to be improved (Black & Wiliam, 1998b; Hwang & Arbaugh, 2009). Students begin to generate internal feedback as they monitor their engagement in their learning activities.

Feedback in the form of reflective questions guides learners into thinking about what they are doing as they begin to process the data for future reference (Edwards, 2008). Frey, Fisher and Everlove (2009) liken the giving of feedback to the strengthening of the neural pathways because it focuses attention, encourages practice and provides a reward that stimulates the neuroplasticity in the brain. Frey et al (2009) claim that sustained attention, corrective feedback, and repetition make these pathways stronger thus paving the way to successful learning. Furthermore, Cornford (2004) reports that research into teaching meta-cognitive skills to adults suggest the brain is likely to be most fruitful and ready to plan, monitor, and evaluate one's own performance. Thus, providing formative assessment at the tertiary level may be advantageous to the learners involved in this study, student and instructor alike.

Professional development also requires the use of feedback in order for teachers to grow, learn, change, and/or improve their pedagogical theory and practice. Based on that, feedback through a professional learning team can be considered a link to knowledge construction (Tang, 2010; Tillema & van der Weshuizen, 2006). In planning the use of formative assessment, instructors need to identify adjustment occasions (Popham, 2008). These occasions require teachers to recognise how their students are performing so they can judge whether learning is progressing smoothly or if gaps are occurring that need filling. As instructors work through the learning package collaboratively, and take their formative assessment tool and/or strategies into the classroom, they become informed of and by their students' performance. Upon returning to their professional learning team, the collaborative nature of discussion provides an opportunity for them to co-construct knowledge and/or direct their planning. In this instance, teachers need to demonstrate how instructionally astute they are and, if adjustments to instruction are necessary, collegial consultation through a professional learning team allows for knowledge sharing and the construction of one's own instructional strategies. As feedback informs students about their present state of learning and performance, so do teachers begin to construct internal feedback as they interact with the materials and students, and collaborate with their colleagues. However ultimately, it is necessary for teachers to rely on themselves to guide the learning progression of their students.

Tillema and van der Weshuisen (2006) speak of conceptual artifacts for professional practice as the products or objects of thinking and reasoning. Collaboration can extend the instructors' knowledge, in this study, by sharing their professional perspectives and existing knowledge when working together to implement formative assessment; thus creating new individual conceptual artifacts.

5.2 Reflective / evaluative process and learning.

Equally important concepts of formative assessment and professional development are analysis and reflection; this pertains to what one understands and how it reinforces the lasting effects of learning. Wendon (1998, cited in Hsu, 2005) acknowledges that learners need to be aware of their learning, otherwise they will never be autonomous. Therefore metacognition plays an important role in being able to understand if gaps in learning are present.

As indicated section 5.1, effective feedback leads to internalising information and self-regulating one's cognitive development. Meta-cognition refers to one's ability to be aware of and monitor one's learning process (Cassidy, 2006; Imel, 2002). Reinders (2000) research, found that meta-cognitive awareness consists of three parts: meta-cognitive knowledge (thinking of what one knows), meta-cognitive skills (thinking of what one is doing), and meta-cognitive experience (thinking of what one is feeling while one is doing something). These three factors create an optimal opportunity for knowledge construction that provides sustainable, lifelong learning (Cornford, 2004).

While some researchers posit that adult learners often fail to monitor their thinking (Dawson, 2008), learners who have been taught meta-cognitive skills at an early age, learn better than those who have not been taught these skills at all (Cornford, 2004; Dawson, 2008; Klein, 2007; Nicol & MacFarlane-Dick, 2006). Therefore, if teachers have decided to add formative assessment to their pedagogical repertoires, they would be in a position to transfer skills taught to their students to their own way of thinking and doing, thus establishing their own self-monitoring system.

To self-assess is to reflect on the quality of one's work based on evidence and explicit criteria (Rolheiser & Ross, 2000). Coupled with that, self-assessing is to judge the degree to which one's own work reflects explicit goals and to revise accordingly (Andrade & Valtcheva, 2009). Engaging in reflective practice is a deliberate act to increase one's conscious awareness by gathering and examining evidence of teaching and student learning. Proponents of formative assessment emphasise the importance of having students self-assess their understanding of knowledge on a regular basis (Black & Wiliam, 1998a; Heritage, 2007; Popham, 2008; Stiggins, 2005b) while the current tenets of professional development include the use of self-reflective practices to guide practitioners' effects on student learning (Birenbaum, Kimron, Shilton, & Shahaf-Barzilay, 2010; DuFour & Eaker, 1998; Snow-Gerono, 2005).

Feedback can awaken one's cognition and strength neural pathways through stimulation of the brain's neuroplasticity. Similarly, the instructors' discussions of their reflective processes can activate the neurotransmitters as a result of proper social relationships (Cozolino & Sprokay, 2006) developed in professional learning teams.

6. Formative Assessment and the Professional Learning Team as Mediators of Empowerment

Instructors working in the language department at CNA-Q face the pressures of developing ongoing summative assessments. Chapter 1 acknowledged those pressures which can be roadblocks to empowering instructors to be effective teachers (Stacy, 2013). If practising formative assessment as a process of learning steers students toward success, then leading staff to adopt it as a methodology can provide an empowering experience. Offering the language instructors the opportunity to participate in a professional learning team presents an avenue that can reduce pressures of testing, while at the same time, providing an empowering opportunity by changing the focus of assessment from testing learning to tracking learning.

When teachers are allowed to direct their own professional development, they claim ownership of their work and invest in it accordingly; it gives them a sense of empowerment (Lichtenstein, McLaughlin, & Knudsen, 1991; Stacy, 2013). To feel empowered is to believe that one has the skills, knowledge and competence to improve the situation in which one works (Bogler & Somech, 2004). When teachers are empowered they are capable of engaging in, sharing control of, and influencing events that affect their lives (Murray, 2010). Feeling empowered improves motivation, self-efficacy, and commitment to the profession organisation that in turn leads to improved student performance.

Involvement in the professional learning teams in this study, allows the instructors to learn and adopt a new methodology that offers their students an opportunity to understand their own learning requirements.

7. The Nature of Formative Assessment, Professional Learning and Quality Teaching

There is a distinction to be made between professional development and professional learning. A report done by the Centre for the Use of Research Evidence in Education (CUREE, 2011), states that professional development refers to the processes and activities designed to enhance one's professional knowledge, skills, and attitudes in order to improve student learning.

Professional learning, on the other hand, is referred to as the internal process by which individuals develop professional knowledge. Based on adult learning theory, effective professional development can easily increase a teacher's professional knowledge, practice, and efficacy when they are actively engaged in a collaborative activity. The instructors are in a position to do this because they are, by definition, motivated, self-directed learners who are able to understand gaps in their knowledge and understand how

they might close those gaps. Research involving professional development states that teachers, who take charge of their learning by participating in professional learning communities, action research, instructor inquiry or reflective engagement, became more effective at raising the quality of their classroom practice (Brookhart, Moss, & Long, 2010; Frey & Fisher, 2008; Hall, 2009; Koster, et al., 2008; Lyons, 2006; Roberts, et al., 2010).

A characteristic of quality teaching is the use of formative assessment as a process of teaching and learning that requires teachers to work closely with students. By using formative assessment, teachers encourage their students to uncover strengths and recognise their weaknesses in order to identify gaps in learning. If, as the research says, learning to implement formative assessment leads to improved classroom practice, then defining quality teaching is eminent. Although quality can be an elusive situation to determine, and is not directly related to this study, it is an integral part of and inextricably linked to both formative assessment and effective professional development. Therefore it must be considered as related therein.

The literature makes quality teaching synonymous with good or effective teaching, or teaching excellence (Goldschmidt & Phelps, 2009; Henard & Leprince-Ringuet, 2008; van de Grift, 2007). Although, White (1998) acknowledges quality teaching as being linked to instructor education (knowledge of content and pedagogy), Wood (2007) claims quality instructors know how to create engaging and effective learning experiences for their students. Hirsch (2005), however, reports that the research indicates there is no greater impact on student achievement than the quality of teaching in the classroom.

Stronge, Tucker and Hindman (2004) have identified several characteristics that can determine the effectiveness of one's teaching stating it is an ongoing process of development. They have categorised skills that are useful in planning the focus for teacher reflection and observations. Those skills include concepts such as: current performance, management and organisation, instructional organisation, instructional implementation, and tracking student progress. These categories provided a baseline to assist the instructors in this study to self-assess their classroom efficacy.

Quality classroom practice involves reflective and evaluative practice by both teacher and student. Effective practitioners share their goals with students, engages students in constructive and creative learning experiences, employ effective questioning techniques, give effective feedback, listen to their students, and plan out the direction in which they will take their students towards achieving their goal. All these qualities are required when implementing formative assessment as a process of learning.

In defining an effective teacher Stronge et al. (2004) say an important aspect is to understand the teacher as a person. They look at qualities such caring, fairness and respect to name a few. When determining the extent to which one may be a caring, fair and respectful teacher depends on one's self-efficacy. Self-efficacy is a naturally occurring phenomenon that plays an

important mediating link between cognition and behaviour (Ellett, Loup, Culross, McMullen, & Rugutt, 1997). Self-efficacy in large part influences ones meta-cognitive skills and vice versa. Although authors may have slightly different definitions, all refer to one's perception or belief in their ability to perform a task and their judgement on their level of attainment or accomplishment (Dellinger, Bobbett, Olivier, & Ellett, 2008; Ellett, et al., 1997; Moss & Brookhart, 2009; Tschannen-Moran, Woofolk Hoy, & Hoy, 1998). Identifying these qualities was important to this study, as the instructors needed to self-evaluate their own performance regularly and determine their own path to changing their practice.

8. How the Research Began and Developed – A Personal Perspective

My journey began when I first set out to assist the instructors in the language department at CNA-Q. I wanted to alleviate some of the pressures incurred due to the expectations of producing summative assessments that demonstrated the success of the students enrolled in the English language program. During my investigation of the literature, I realised there were stark similarities between experts' interpretations of how to employ formative assessment as a process of learning (Brookhart, 2009; Chappuis & Chappuis, 2008; Frey & Fisher, 2011; Greenstein, 2010; Heritage, 2007; Popham, 2008; Stiggins, 2005a) and experts' visions of how to develop a learning environment for teachers that would improve their professional practice (Chappuis, et al., 2009; Darling-Hammond & Richardson, 2009; Diaz-Maggiolli, 2004; DuFour & Eaker, 1998; Hirsch, 2005; Wood, 2007). Both groups of experts identified concepts such as interaction and collaboration, feedback, and self-assessment and evaluation that were beneficial to advancing learning for those seeking to acquire new knowledge.

There has been a great deal of empirical evidence to substantiate the assertion that formative assessment steers students toward success. Extant literature claims that implementing formative assessment changes school classroom practices and outcomes. Formative assessment practice encourages learners to be active, understand the goals, and fosters their meta-cognitive skills through feedback and self-reflection. Those changes are the result of instructional intervention that increases student learning and success (Buck, et al., 2010; Colby-Kelley & Turner, 2007; Lee, 2007; Stiggins, 2005a). Formative assessment, therefore, provides effective learning experiences as studies have revealed that students become more engaged and autonomous when they are able to understand their strengths and know what they need to do to fill any gap in knowledge or understanding (Colby-Kelley & Turner, 2007; McKay, 2005; Murphy, 2007; Wang & Wu, 2008). This type of student activity impacts on the quality of their learning.

While, I could never deny that the quality of student learning is important, the thrust of my investigation was towards alleviating the pressures that summative assessment created. I was more interested in changing teaching practice to provide the formative evidence of student success. What interested me the most, however, was the realisation that the literature left a gap

with regards to whether formative assessment would improve the practice of the person employing it because of its design as a process of learning. My investigation into the literature reinforced the notion that if formative assessment was beneficial for students then perhaps it could be equally beneficial for the teachers who had chosen to adopt it as classroom practice.

During my investigation, I discovered institutions had an immense demand for quality education that placed emphasis on teacher education and student learning. I believed their pursuit was sparking new epistemology regarding students being able to successfully achieve learning outcomes. The emphasis on formative assessment as being the "be-all and end-all" to student learning, led me to think it had taken on an educational life of its own due to the praise it had received regarding student success. I wondered if assessment in education was becoming more than just the sum of its part. I thought that perhaps assessment was becoming a new methodology for successful learning to all those who engaged in it; students and teachers alike, and it could replace our department's emphasis on summative assessment.

What was more exciting for me, however, was that given the literature indicated that public school students thrive and succeed in a formative assessment environment, I believed in the possibility that our instructors might also learn and be more successful instructors by incorporating formative assessment strategies/techniques into their teaching practice. As a result, I had formulated many questions. What value does formative assessment have to the teachers who have chosen to learn and practise it? If there is value, can engaging in formative assessment provide a process of learning for teachers? Are the teachers actually going through the same process of learning as the students?

It was at this point that I moved into the territory of what experts said about professional development because I realised that in order to assist the instructors with a new methodology, they would have to be put into a position of learning it. My shift towards investigating professional development revealed many practical similarities between teachers as they learned to change their teaching approach and students as they learned to become active instructors of knowledge construction. The research I had done revealed that authors and researchers of both formative assessment and professional development recognised the following:

a) the need to allow for knowledge construction (Black & Wiliam, 2005; Popham, 2008);
b) feedback assists learners in directing their learning (Black & Wiliam, 1998b; Nicol & MacFarlane-Dick, 2006); and
c) self-assessment leads to increased meta-cognition (Brookhart, 2010; Gijbels & Dochy, 2006) which ultimately enhances the quality of teaching and learning.

As noted in Chapter 1, this research was based on the underlying assumption that a teacher-student learning partnership that gathers information about the strengths and weaknesses of their performances is likely to change teacher practice in some way, shape or form. Formative assessment is about

identifying gaps in learning. It is about self-reflection and assessment, and about re-directing learning done by interacting and using effective feedback methods (Liutkus, 2010). Effective professional learning espouses similar characteristics in that it needs to be on-site, is collaborative, relevant, ongoing, and self-regulating (Chappuis, et al., 2009) in order to affect any change in teaching practice. Based on the similarities established and presented in the literature I discovered questions that need to be answered.

9. Research Questions

Characteristics of teacher learning in a professional learning community closely resemble characteristics for student learning in a formative assessment environment and became the underlying factor of this study. Therefore:

a) What is the process of learning within a professional learning team engaged in learning about formative assessment?
b) How does the process of learning in a professional learning team align with the classroom implementation of formative assessment practice?
c) What impact does the culture of the students have on the instructor's engagement in formative assessment practice?

10. Chapter Summary

This chapter discusses the characteristics that envelop formative assessment and professional learning teams. Through an analysis of the strategies used when engaging in formative assessments and professional learning teams, this chapter has recognises that both use a similar process of learning. Involved in each of the processes are giving/receiving effective feedback, self-assessment and evaluation to identify weaknesses, and realised neural plasticity activity spurred through such meta-cognitive development.

This chapter also acknowledges that even though this study is done at a tertiary level, there are two very different types of learners involved. It establishes there is the potential for empowering the instructors as they actively engage in learning to use formative assessment, and that in the end, there is also the potential of improving the quality of their teaching practice.

The next chapter identifies the methodological approach used to investigate behaviours and presents the data collection tools selected to demonstrate those behaviours.

CHAPTER 3 Methodology

1. Introduction

Evident thus far is the overall direction of this research. Chapter 1 presented the groundwork by identifying the need for this study, outlined the potential transformational effect that formative assessment might have on the instructors adopting it as classroom practice, and established the complexities of the context in which this study took place. Chapter 1 also identified the relationship between formative assessment practice and professional learning communities revealing they have very similar identifiable characteristics that make each successful in improving student and teacher learning.

Followed by a thorough investigation of the literature in Chapter 2, it was revealed that strategies such as effective feedback and reflective practice are paramount in both formative assessment practice and professional learning communities. These strategies are essential to aiding learners with the development of knowledge construction. As a result, questions emerged that helped guide the development of the methodology that is presented in Chapter 3.

Chapter 3 focussed on the methodology of this study. It established the framework for this investigation by examining the qualitative methods to provide a better understanding for the selection of an ethnographic case study approach. This chapter also delineated the questions to clarify the focus, outlined the research design, and discussed the data collection tools used to reveal the viewpoints of the instructors and their students.

2. Context of the Research

Researchers such as Black and Wiliam (1998b), Brookhart, et al, (2010), Haystead and Marzano (2009), Popham (2008), and Stiggins (2005a) have completed studies that show formative assessment practice is a formidable way for students to learn and achieve success. Their claim is founded on the premise that the tools and techniques used therein foster a process of learning that develops and/or strengthens students' metacognitive skills. On that basis, this study investigated what the backwash effects might be to the instructors' process of learning as they worked in a professional learning team that provided the same formative assessment techniques such as reflection and feedback. Necessary to keep in mind was the cultural differences between the instructors and their students which may have had some impact on their engagement with formative assessment. In order to discover those effects, an appropriate research approach was selected to concisely provide answers to the research questions:

1. What is the process of learning within a professional learning team engaged in learning about formative assessment?
2. How does the process of learning in a professional team align with the classroom implementation of formative assessment practice?

3. What impact does the culture of the students have on the instructor's engagement in formative assessment practice?

Qualitative methodology offers researchers the opportunity to be descriptive and interpretive while understanding, identifying and reporting recurrent patterns of behaviour. Merriam avers that qualitative studies "seek to discover and understand a phenomenon, a process, or the perspectives and world views of the people involved" (as cited inWasonga & Murphy, 2010, p. 11). This study required the need to observe, listen and record the instructors as they socially constructed an environment through their interactions and discussions in a natural professional learning team setting. Also involved in this study was the researcher who gained a sense of the context by being situated as a facilitator and mentor to provide knowledge and background experience to the instructors.

Due to the exploratory nature of this study, qualitative methodology provided the opportunity to employ a systematic and rigorous iterative process. This involved moving back and forth between data collection, analysis and interpretation. This iterative process offered an opportunity that allowed the similarities and differences of key characteristics to emerge between the patterns of behaviour and thinking on the part of the instructors, thus illuminating any effects on the instructors' learning. Qualitative methodology also suited the needs of the study's naturalistic setting and its social phenomenographic orientation because it enabled the instructors' viewpoints to emerge unencumbered through the trusting and reciprocal nature of the professional learning teams.

Qualitative methodology has five distinct approaches. Each approach presented the researcher with the opportunity to locate herself as an observer in a world constructed by her participants. She was able to study them in their natural setting in an attempt to interpret meaningful patterns or themes (Creswell, 2007). To provide for the specific needs of this study, an ethnographic case study approach was selected due to the sensitive contextual nature of the research setting and the need for the researcher to be situated as an instructor observer. To demonstrate how this approach was suitable a critical analysis of the qualitative approaches is presented, as identified by Creswell (2007) and others.

As identified in Chapters 1 and 2, based on the premise that formative assessment improves student metacognitive awareness through the use of strategies such as interaction, feedback and self-assessment, (Black & Wiliam, 1998a; Brookhart, 2010; Haystead & Marzano, 2009; Klein, 2007; Popham, 2008; Shepard, 2005; Stiggins, 2005a)**,** the purpose of this research was to determine the process of learning within the professional learning team. It also looked at whether instructors, who learn about formative assessment while concurrently applying its strategies in their classrooms, experience a similar learning process as the students whose teacher was using formative assessment as classroom practice. Therefore an ethnographic case study approach was selected because ethnography is open to changes in research design and acknowledges that a researcher does not enter with an

blank mind (Hammersley & Atkinson, 2007). Thus a case study approach supported a deeper and more detailed investigation that needed to answer questions describing what happened or explain how or why something happened. As well, a case study explores an issue within a physical or temporal bounded system in its natural context (Yin, 2006) both of which were relevant in this study.

2.1 Ethnographic case study.

Nunan and Bailey (2009) acknowledge that case studies can be used with a variety of purposes in mind. They refer to Stenhouse (1983, as cited inNunan & Bailey, 2009, p. 165) who has identified a typology of case studies in which he describes a neo-ethnographic case study as an "in-depth investigation of a single case by an instructor observer". Taking into account the emic perspective the researcher adopts within the ethnographic research process, blending a case study into ethnography better suited the needs of data collection and analysis.

An instructor observer is a researcher who becomes involved in the research and as noted earlier, the researcher in this study was required to do just that. I had taken on the role of full instructor observer, which led to being seen by the group as not just an observer but one who could be relied upon to give help if needed. Therefore, the role of ethnographer in this study became overshadowed by the participant as an equal amongst the group (Johnson, Avenarius, & Weatherford, 2006). That situation created an atmosphere that allowed the researcher to search for depth rather than breadth in this investigation. Nunan and Bailey (2009) also point out that "emic analyses incorporate the instructors' perspectives and interpretations in the descriptive language they use" (p. 197) and the researcher in this study had to give a voice to the instructors as they struggled to adapt a Western pedagogical method into a Middle Eastern learning environment.

In this study, the concept of social reality became significant as it is constructed in each of the instructors' classrooms. A distinct mode of being existed in the classroom (Lawson, 2012). Each demonstrated their own personalities, challenges and successes. Since the instructors had to work with students whose educational background was significantly different than that of their own pedagogical training, separate and distinct social realities were created. As well, a social reality was revealed in the professional learning teams as the instructors struggled to make sense of formative assessment and how it could best be applied in their particular situation. Stark and Torrance (2005) explain that "social reality" is created in a particular context bringing into the mix individual histories and experiences. In this environment where learning was central to the research, the case study approach allowed the researcher "to develop what is perceived to be the case's own issues, contexts, and interpretations, its 'thick description'" (Stake, 2005, p. 450).

The remainder of the section provides a detailed analysis of both ethnography and case study approaches by identifying the individual characteristics

that make them an appropriate choice for this study. It also presents an in-depth look at narrative, phenomenology, and grounded approaches to qualitative research. In doing so, it recognises their lack of suitability to this study, thereby reinforcing the decision to select an ethnographic case study approach.

2.2 Ethnography.

An important aspect in ethnography is that instructors in this study were seen as a culture-sharing group who developed shared patterns of behaviour, beliefs and language. Often extended observations during prolonged periods of time are required as the researcher studied the interactions among members. Ethnography takes into account the emic perspectives of the instructors and the etic perspective of the researcher It places great emphasis on the collection and interpretation of the data and is holistic in nature (Creswell, 2007; Goldbart & Hustler, 2005; Heigham & Sakui, 2009; Nunan, 1992; Nunan & Bailey, 2009). The researcher in this study was considered to be an instructor observer in the everyday lives of the group being studied and collected rich descriptive details of the cultural scene.

Ethnography entailed getting involved in a social situation to find out how the instructors viewed that world while at the same time it allowed the researcher to get involved in the instructors' world and describe how its culture operated (Goldbart & Hustler, 2005). The researcher in this study participated in the professional learning teams to facilitate the meetings; provide knowledge and background experience in formative assessment; and support the instructors if they began to feel like "it would never happen". Ethnography provided an inside look from an emic perspective that supported the observer's point of view regarding the cultural context of the research to be interpreted. It was both descriptive and interpretive, which was vital in creating a deep and credible picture of the culture that was created in the educational institution in which this study took place. The researcher was able to describe and interpret in a holistic manner the shared and learned patterns of behaviour (Creswell, 2007) displayed by the instructors in an attempt to determine answers to the research questions.

Although, "the researcher" was considered to be an instructor observer in this study through participation in the professional learning team meetings, she also had to adopt an emic perspective due to the nature of that involvement. She regularly interacted with the instructors in the professional learning teams by providing an opportunity to reflect and report on situations as they occurred. Therefore ethnography accommodated the iterative process necessary to reflect on the instructors' collaboration and discussion during the professional learning meetings in order to develop reflective questions for their use in the journal entries.

Since this study took place in a naturalistic environment both in the professional learning team and the classroom, ethnography was appropriate because it allowed for the study of people's ongoing behaviours as they naturally occurred, while at the same time it allowed the researcher to interpret

said cultural behaviour (Nunan & Bailey, 2009). As stipulated in Chapter 1, the instructors in this study came from a very different background than those of their students and together made a unique culture unto itself. Therefore ethnography allowed the researcher to spend time in the prevailing culture to understand, explore and take into account the cultural disposition of its members (Hayes, 2001).

While not every aspect of the study actually involved the students, they were a major variable in this investigation. When the instructors were in their professional learning teams, they discussed the students' responsiveness to the formative assessment practice. Each instructor created their own purpose and their own meaning of what was happening in their classroom. Based on the students' reactions to the tools and strategies used, the instructors needed to decide on the best way to move forward or even if they could move forward.

This study needed to take a comparative look at the learning process, using a pre-determined set of criteria to assist with analysis. The theoretical framework presented in Chapter 2 directs attention to certain aspects of individual behaviour that needed to be addressed in order to answer the research questions. A case study collected information by studying the characteristics of the people involved in the same situation and their relationship; it was about the intrinsic interest of a particular event, situation or condition (Rowley, 2002).

2.3 Case study.

According to Creswell (2007), a case study approach to qualitative research attempts to understand an issue or problem using the case as the specific illustration. The researcher, who seeks to understand the identified issue through close and extended analysis of the particular as well as requiring in-depth data collection involving multiple sources of information, uses a case study approach. For this study, a case study was suitable for understanding a phenomenon when each classroom had a separate and individual learning community. Case study allowed for theory building using tentative hypotheses that was collected from the accrual of many single instances in order to learn what happened in each classroom as well as in the professional learning teams. A case researcher looks at what is common and what is particular about that case (Creswell, 2007; Hood, 2009; Nunan, 1992; Nunan & Bailey, 2009; Stake, 2005; Stark & Torrance, 2005).

This study was done because of the researcher's intrinsic interest in this particular situation (Stake, 2005). It involved a detailed investigation of individual instructors in their classrooms and respective professional learning teams. As the instructors learnt formative assessments practices, they attempted to use the tools, techniques and strategies with their students. Then as they returned to their professional learning teams, they shared and discussed their experiences in an attempt to fine-tune their practices.

A case study is known to have the researcher select a single entity from a class of objects or phenomenon. In this study, that entity was the instructors

who had chosen to adopt formative assessment as opposed to the rest of the instructors who had not chosen to do so. That entity was bounded physically in the language studies department, engaging those individual instructors and their classrooms. The language studies department was bound by the Arab/Canadian blend of pedagogy, which separated this study from those that might be done in a Western environment. This study was also bound in a temporal manner as it ran through an entire academic year. Further, this investigation involved how that the entity functioned in a cultural context.

Given that the instructors learned a new pedagogical method, it was important to let them "tell-it-like-it is" from their point of view while revealing what was happening to them and their students. This case study entailed data collection tools that assisted the researcher by giving a voice to the instructors. It also allowed the researcher to note if a pattern of behaviour was developing in the instructors' learning that was common with what the research said about student learning.

Since this investigation was bounded in a natural environment whereby all instructors in this study implemented formative assessment practices, a case study approach was necessary due to its heuristic nature that allowed the researcher to track the learning behaviours displayed by the participating instructors. It also allowed for the natural movement of boundaries, which suited the needs of this study because the emphasis was on professional improvement rather than evaluative decision-making (Heigham & Croker, 2009). As the instructors were observed in their classrooms, they returned to their groups to share their experiences in an iterative and heuristic way.

Finally, the involvement of the researcher in this study was very interested and was enmeshed in the professional learning groups' discussion of formative assessment strategies; therefore the case study approach was vital to that intrinsic involvement. As well, it was necessary for this study to acknowledge the influential nature of the context in which it occurred by blending a case study with an ethnographical approach to research.

2.4 Narrative.

In a narrative approach, the researcher gathers stories, artifacts, documents, and letters from a natural setting similar to other qualitative methodologies. However, a suggested difference from other approaches is that the artefact collection is put into chronological order. The researcher may often find the stories told by the instructor are not put in the correct order, and therefore the researcher must re-story them and discuss the order with the instructor (Clandinin & Connelly, 2000).

Narrative research is typically done with only one instructor, whereas a researcher might tell the story of that person's life (Chase, 2005; Creswell, 2007; Murray, 2009). This study not only had many instructors but also required them to explain how experiences worked for them rather than tell a story about those experiences. Those involved did not tell a story but, instead, worked collaboratively to learn a new teaching practice and, from

time to time, required guidance from the resident expert. While the instructors documented their learning through a reflective journal, this study required more data collection tools in order to thoroughly cover all aspects of their learning process.

2.5 Phenomenology.

A phenomenological approach involves describing the meaning of a concept or phenomenon experienced by several individuals. The researcher describes what the individuals have in common and develops a composite description of the essence of the experience; what the instructors have experienced and how they have experienced it. Intentionality is a key focus of phenomenological research with an aim to elucidate the person's experience and what that means to the individual (Finlay, 2009). Phenomenology has a strong philosophical component to it and the researcher needs to "bracket" her own experiences or previous assumptions so as not to influence the outcome of the study (Creswell, 2007; Titchen & Hobson, 2005). It must begin with "a perspective that is free from hypotheses or preconceptions" (Lester, 1999, p. 1).

Even though many collection tools such as interviews, conversations, instructor observation, focus meetings or analysis of texts are used to complete a thorough investigation in a phenomenological study, the researcher must allow the phenomenon to present itself by not thrusting any preconceived ideas upon data collection (Finlay, 2009; Lester, 1999). Learning formative assessment with colleagues in a professional learning team could be considered a phenomenon because the instructors in this study shared what they experienced and how they experienced it with each other and the researcher. There were, however, other aspects to consider such as: what did they learn; how have they learned; does their learning look the same as students; and how did the students impact the engagement in formative assessment? Hence, forethought of the instructors' learning behaviours took precedent in this study which directed the researcher in finding answers. Finally, when a researcher is performing data analysis, she will allow the themes to emerge through what is being said by the instructors, while this study had pre-existing codes that directed the analysis.

2.6 Grounded theory.

Grounded theory approach moves beyond description to generate or discover theory. Theory development is grounded in the data collected from the instructors who have experienced the process. It uses axial coding paradigm to draw the theory from the data as well as a zigzag process of data collection. This means that as soon as the researcher has collected some data, she begins to analyse it and then returns to the instructors with new questions founded on the data to help share the axial coding. This process continues until the researcher feels the issue has been saturated (Charmaz, 2005; Corbin & Holt, 2005; Creswell, 2007).

To some degree that description suited the needs of this study, in that an iterative process allowed the researcher to move back and forth from data col-

lection and analysis to producing reflective questions for the instructors to include in their journals. What prevented it from being suitable for this study, however, was the initial hypothesis that has arisen from the literature review. The literature revealed there were stark similarities between the strategies inherent in formative assessment practice and the new tenets found in a professional learning community. Therefore this study required that a criterion of characteristics be developed in order to judge whether there was an interrelationship between formative assessment and professional development that demonstrated similarities in the processes of learning. Theory could not emerge from this study, but instead the results were either confirmed or denied.

2.7 Concluding thoughts on ethnographic case study.

The blend of ethnography and case study qualitative approaches for this study was necessary to accommodate the unique and particular nature of the natural environment in which the data was collected. While neo-ethnography does not have any "firm external rules and guidelines" (Nunan & Bailey, 2009, p. 218), a case study involves in-depth coverage, multiple units of analysis, and is stratified and purposeful so the blend of both approaches created a unique balance for a unique environment.

2.8 Review of the questions.

- What is the process of learning within a professional learning team engaged in learning about formative assessment?

The investigation into formative assessment drew forth the following conclusion. When students are exposed to formative assessment practice, they experience a higher degree of success because they develop metacognitive skills by:

a) engaging in self/peer assessment;
b) receiving descriptive or elaborative feedback from their teachers;
c) developing critical thinking skills through the open-ended questions their teachers pose; and
d) understanding their gaps in learning so they can turn their weaknesses into strengths.

In order to assist the students' learning process, the teachers must listen and respond to their students by planning for changes to their teaching. The direction of their adjustments is meant to encourage their students' learning by reflecting and evaluating what is going on in their classroom. This type of classroom practice, the research says, improves student learning of the outcomes (Black & Wiliam, 2003; Colby-Kelley & Turner, 2007; McKay, 2005, Popham, 2008; Rolheiser & Ross, 2000; Shavelson et al., 2008; White, 1998).

A review of the literature identified that strategies used in formative assessment practice are similar to those promoted in offering effective profes-

sional development. Strategies employed in a professional learning team include making the learning sustainable through self-reflection and evaluation, collaboration that promotes effective feedback, and returning to the classroom with a revised approach to their teaching (Caine & Caine, 2010; Chappuis, et al., 2009; Darling-Hammond & Richardson, 2009; Diaz-Maggiolli, 2004)

- How does the process of learning in a professional team align with the classroom implementation of formative assessment practice?

An investigation into extant literature suggested an interrelationship exists between engaging in the practice of a professional learning team and implementing the practice of formative assessment in the classroom. Characteristics of both professional learning and formative assessment such as reflective and evaluative practice applied to:

a) the students in the classroom;
b) the teacher directing the class; and
c) the teacher as a professional learner.

This study investigated how the instructors behaved when they collaborated in a professional learning team and what they had to say as they engaged in the learning process. Their voices were communicated through their involvement in a professional learning team which was recorded and transcribed as well as through their journal writing. In order to determine an existing relationship between the instructors' learning and what happens to learners as they learn in a formative assessment environment, the characteristics displayed in Table 3.1 act as a guideline.

Table 3.1 Characteristics of Formative Assessment and Professional Learning

The literature states that students experience the concepts presented on the left when their teacher practises formative assessment. The teacher experiences the concepts presented on the right when they engage in a professional learning team. One concept is directly across from the other showing the relationship.	
Formative Assessment – Student Perspective	**Professional Learning – Teacher Perspective**
Metacognition	Metacognition
Self-assessment	Self-regulation
Peer assessment	Colleague critical analysis
Teacher/peer feedback	Colleague feedback
Critical thinking through questions	Critical thinking through questions
Interaction (student/student; student/materials; student/teacher)	Interaction (teacher/teacher; teacher/formative assessment; teacher/student)
Knowledge acquisition	Knowledge construction
Increased motivation	Increased initiative
Increased autonomy/confidence	Increased teacher efficacy

- What impact does the culture of the students have on the instructor's engagement in formative assessment practice?

It must be acknowledged that culture played a significant role in this investigation. As described in Chapter 1, when the students in this study were faced with formative assessment strategies or tools, they did not always know how to approach them or respond to them. Given that the learning experiences of the students in this study had been more traditional their awareness as active participants in the learning process was contrary to what was expected of other students. Typically, students in industrialized countries are more used to active learning because they have been engaged in constructivist learning theory. For example, when using open-ended questions, the students in this study did not always understand how to respond using a logical decision-making process. This was due to the didactic rote learning they had experienced. A passive question that their former teachers might have used would require a yes/no response rather than a more constructive question of "why do you think…" or "what makes you say…"; the latter required students to understand the question in order to answer. Therefore it was crucial to acknowledge culture as a variable to the outcome of instructors' learning.

2.9 Cultural context.

A major factor in ethnographic research is that the observer instructor may be seen as an outsider to the social system under study (Johnson, et al., 2006). However, that was not the case in this study. Due to the nature of the professional learning teams and the researcher's position as facilitator/mentor, there was no wonder about what was "going on" nor was there any perception of outsider intrusion. The culture, however, did play a significant role in this study because of the make-up of the classroom. As indicated previously, the particularity of the study was present in the classroom where a difference of pedagogy exists.

Generally at the college level in a North American institution, it is recognised that most, but not all students, would be considered andragogical in their approach to learning. Therefore the instructor would create a learning environment that might include problem based or project-based learning activities. With a movement such as adopting formative assessment practice, also referred to as Assessment for Learning (Stiggins, 2005a), playing a significant role in many schools in industrialized countries, the students are more likely to be prepared for critical thinking, decision-making, and an evaluative kind of responding. However, such was not the case in this Middle Eastern institution. The students at the CNA-Q were more used to an instructive pedagogical approach because their teachers had always been the experts who presented the right answer, rather than providing an environment where the students could explore resources to discover the right answer (Zellman, et al, 2009).

Since there was a blend of Arabic students whose learning experiences had been passive in nature and Canadian instructors whose training encouraged

active engagement in learning, that difference was recognised as it was a fundamental factor in the analysis.

3. Selection of the Instructors

Common in qualitative studies is the use of non-probability sampling. Blackstone (2012) has identified four types: purposive samples, snowball samples, quota samples, and convenience samples. For this study, purposive type sampling was used because it identified specific characteristics that were considered to be important to the research. In contrast, convenience sampling can be more haphazard in its random selection of instructors (Blackstone, 2012).

For the purposes of this study, staff at the College of the North Atlantic-Qatar was selected because they suited the criteria of being English language instructors who were willing to take on the challenge of learning a new approach to their teaching practice, thus satisfying the specific characteristics needed. The willingness of staff members was seen as a convenience sampling due to the self-selection process of responding to an expression of interest (Appendix A) as well as being easily accessible to the researcher. On the other hand, their experience with working in another culture for an extended period of time was essential because they understood the students and challenges in teaching them that already existed. Therefore, targeting this group of instructors was not random but had been chosen in a meaningful, purposeful way.

In response to an expression of interest, nine instructors accepted the challenge of learning about and implementing formative assessment. The instructors were native English speaking female Canadian instructors and each one held an undergraduate and graduate degree (although not necessarily in education) along with certification in teaching English as a foreign language. All had been teaching for more than ten years. The students in this study were those of the participating instructors and they took on a subsidiary role by informing their instructors as to the appropriateness of the classroom activities and their learning progression. The classes were predominantly Qatari nationals; however, some classes included a mix of Middle East nationalities. Some classes included mixed genders, while some classes included only male Qatari nationals. The ages of the students ranged between 18 and 26.

4. Ethical Issues and Consideration

Given that this research was in the field and the instructors were known to the researcher, ethical clearance was obtained from both the Office of Research and Higher Degrees of the University of Southern Queensland and the Office of Applied Research at the College of the North Atlantic-Qatar to ensure anonymity and confidentiality of the instructors. As CNA-Q was considered a Canadian-Qatari institution, it fell under the Tri-Council Policy Statement of Ethical Conduct for Research Involving Humans, which required that instructors give free and informed consent. Therefore instructors were asked to sign a letter of consent that stated, for the purpose of this

study, what their role as instructor was to be, the responsibilities of their commitment, a request for permission to use any data generated, and their anonymity would be preserved at all times in any reporting of the research or any subsequent papers (Appendices B & C, D & E respectively).

Each instructor agreed to take part in a professional learning team, understood they were required to keep a journal of their learning and enter responses to various situations posed for reflection. They also agreed, once they felt comfortable with their knowledge of formative assessment and had planned activities for their students, that the researcher would observe their classroom implementation of formative assessment strategies and/or tools. To ensure full consent, acknowledgement of instructor obligations and anonymity requirements by the researcher was written in a letter of consent for their signature. The letter of consent invited the instructors to volunteer for the study; outlined in detail their involvement (with further detail attached to the letter); their time commitment; that any data collected would be held in the strictest of confidence; how and where the data would be stored; their anonymity was guaranteed; and finally the study was approved by the University of Southern Queensland and College of the North Atlantic-Qatar ethic review boards (Appendix D).

The letter of consent had to be amended which required further signatures giving further details that included where and how the audio files of instructors' discussions would be stored. Any reference made to the instructors in this dissertation has been done so by altering their names in order to protect anonymity. As well, an extension into another semester was requested from the Office of Research and Higher Degrees of the University of Southern Queensland and Office of Applied Research that gave the instructors more time for practise and reflection (Appendix E & F, respectively).

5. Methods of Data Collection

This study investigated the learning process that staff experienced when they participated in a professional learning team in comparison to what researchers had to say about using formative assessment as a process of learning. The theoretical framework of this study directed attention to certain aspects of student learning in a formative assessment classroom and professional learning in the teams that use similar strategies. These strategies were identified and used as a way of answering the research questions regarding professional learning. Therefore the focus of this study consisted of studying behaviour that might demonstrate effective professional learning. It employed the methods of data collection needed to allow the participating instructors an opportunity to demonstrate their learning in its entirety.

This research required the collection of in-depth information about individual instructors' behaviour while they learnt, collaborated, and used formative assessment practice. Therefore, the data collection tools needed to be able to gather an assortment of information. The tools chosen included instructor reflective journals (instructor perception), audio recordings of focussed discussion groups (observation of instructor-instructor interactions

and individual instructor's perceptions and recollections), and observer recordings of classroom implementation of formative assessments tools/techniques and interactions. Selecting three forms of data collection was meant to not only cover depth but also the breadth of data to ensure a comprehensive view of professional learning was realised.

As well, by using various methods of data collection, triangulation was accomplished. Triangulation is a method used by researchers to assist in validating the research by evidencing it is true (as in, it reflects a real situation) and certain (as in, there is evidence to back up the findings) (Guion, 2002). This line of thought follows Miles and Huberman's concept of internal validity (1994). Heigham and Croker (2009) recognise that data gathered from one source need not corroborate but instead expand on data gathered from another. Therefore, to internally validate the research, the findings must show that independent measures reveal the same or similar information. Pertaining to this research, the phenomenon being studied had three methods of data collection, thereby adding to the internal validity through the concept of method triangulation.

5.1 Reflective journals.

Journals are meant to enable the instructors to track changes to their teaching practice and should be maintained continuously throughout the research process (Freeman, deMarrais, Preissle, & St. Pierre, 2007). In this study, all instructors as well as the researcher were required to keep journals to record their thoughts and feelings by using both descriptive and interpretive sequences. While the former includes accounts of activities and reconstruction of dialogues, the later ensures that feelings, speculations, explanations of activities and reflections on summaries (Altrichter & Holly, 2005) were inclusive. The distinction between the types of recordings was necessary for the interpretation of the data.

Instructors completed a Quality Teaching Self-Assessment Reflection that acted as a basis for determining their strengths and weaknesses in their teaching practice. The development of this reflective questionnaire was based on the work of Tschannen-Moran, Woofolk Hoy, and Hoy (1998) and Dellinger, Bobbett, Olivier, and Ellett (2008) who investigated and created statements to address the teacher as a person. As well, Stronge, Tucker, & Hindman (2004) have researched and written about qualities of effective teachers, so there were statements in the questionnaire that addressed their classroom practice. This self-assessment reflection was styled using a Likert type of response scale for easy analysis by the instructors and provided a beginning point on which to compare their experience using formative assessment practice. The instructors were to do a pre- and post-reflection to ascertain any differences before and after their engagement with formative assessment.

The instructors recorded their own experiences with formative assessment in relation to student response and, colleague input, and then interpreted those experiences. Learning how to use formative assessment in their classrooms

was part of the information provided to them in the professional learning team. When keeping a diary, entry consistency was extremely important to allow patterns to emerge and was so noted to the instructors involved. To assist the instructors in writing their reflections, guidelines were provided based on a five-step procedure developed by Nunan and Bailey (2009) and was used when instructors are completing their journal writing. This procedure enhanced the focus on any change to the instructors' practice through context, focus and periodic analysis of entries. As well, this procedure encouraged the instructors to write both descriptive and interpretive sequences to ensure a full rich description of their experiences (Heigham & Croker, 2009).

Keeping a journal provided an opportunity to reflect on how they were progressing and allowed for an examination of classroom activity. Reflecting upon one's teaching practice was a critical element of being an effective teacher. Writing reflectively assisted instructors in constructing new knowledge of content, theories, processes and practices (Lyons, 2006) as they journal their experience with formative assessment. Reflective engagement provided opportunities to ask thoughtful questions about best practice, core values, and to make concrete plans to improve (Roberts, et al., 2010). Reflection was an important aspect of learning how to implement formative assessment and it was further fostered through a structured professional learning team.

5.2 Focussed discussion groups - professional learning teams.

Important to the learning process is co-construction of knowledge. The audio recording of the instructors' discussion focussed on their engagement with formative assessment and what they experienced when implementing its tools and strategies. The recordings provided an opportunity for the researcher to collect data that offered precise information of the instructors' learning and demonstrated patterns of behaviour during their interactions. Calderon (2011) believes focussed discussion groups are a valuable tool that allow the instructor observer to become an observer-instructor who can gain valuable data while imparting knowledge about the groups' discussions.

The professional learning teams offered a rich opportunity for collecting data by recording their meetings. Through the recording of meetings, the researcher was able to discover patterns of learning behaviour from each instructor. Patterns were demonstrated by the synergy and dynamism generated within the group and how the instructors positions themselves in relation to each other as they process the strategies and develop the tools involved in formative assessment; as well as in deciding how they used the strategies and tools in their classrooms (Kamberelis & Dimitriadis, 2013).

Through the audio recordings, the researcher was able to ascertain the impact the instructors had on one another as far as knowledge construction was concerned because they provided feedback to one another and offered suggestions for improving their individual artefacts. Patterns of behaviour

emerged through the groups' interactions along with how individuals used that interaction.

5.3 Observations.

Structuring the observations was essential to providing accurate data that focussed only on the strategies of formative assessment being implemented in classroom practice. Therefore the researcher in this study used an observation scheme based on the work of Nunan and Bailey (2009). The observations were scheduled in advance in order to provide the instructors with the necessary time for preparation. Scheduling of the observations was done during the professional learning team meetings when the instructors felt they were ready. They had the opportunity to review the observation sheet beforehand so they were assured that the focus of the observations was on specific tools and strategies of formative assessment and not on their performance of other classroom duties.

Collection of data was done manually through field notes using diagrams and predetermined categories of behaviour, talk and use of formative assessment tools. Immediately following the instructors' observations, they received feedback from the researcher, which focussed on their use of formative assessment strategies, techniques and tools, and also included suggestions for their reflection. The feedback received from the researcher following an observation was then taken into the instructor's discussion group for further input from their colleagues. The researcher also used data collected in this way as field notes.

5.4 Student focus group.

The researcher facilitated a structured focus group with students. This was a good way to explore their experiences and viewpoints and elicited responses to pre-determined information. Using the Constructivist Learning Environment Survey as a guide for the discussions, the questions elicited information from students on their learning experience. The CLES was selected because it is founded on the concept of students as co-constructors on knowledge (Nix, Fraser, & Ledbetter, 2003) which was a fundamental concept of formative assessment.

5.5 Concluding thoughts on data collection.

Case studies centre on description, inference and interpretation, and in utilizing the aforementioned collection tools, data was grounded in the research to allow for theory to be constructed through the collaborative discussions in the professional learning teams and classroom interactions with students. Table 3.3 provides the corresponding appendix for each data collection tool.

Table 3.3 Appendices

Section	**Collection Tool**	**Appendix**
5.1	Reflective journals	G

	Five-step procedure	H
5.3	Observation sheet	I
	Feedback sheet	J
5.4	Questions-student group	K

6. Method of Analysis

Qualitative data analysis tends to be more interactive, recursive and iterative than quantitative data analysis which represents a distinct stage within the research process (Onwuegbuzie & Daniel, 2003, p.6). Data analysis of an ethnographic case study must pay attention to the emic perspective of the observers and the study's instructors. Nunan and Bailey (2009) point out that "emic analysis incorporate the instructors' perspectives and interpretations in the descriptive language they use" (p. 197). With that in mind, this study sought to understand the learning process of the instructors through close and extended analysis of the phenomena occurring in the discussion group, then as it was taken into the classroom, and finally as it returned to the discussion group by detailing rich, real and uniquely human material (Heigham & Croker, 2009).

There was also an "etic" perspective in this study, however, as a result of the theoretical framework that was based on literature. This framework created a set of existing criteria on which the questions were founded. Therefore selecting directed content to analyse the data was suitable to this study for two reasons. First, it provided an effective means to analyse the transcribed dialogues from the professional learning teams' meetings and interpretation therein. Second, it provided for the contextual nature of the unique culture identified in this investigation.

Case studies centre on description, inference and interpretation, therefore directed content analysis was used to extrapolate through predetermined codes. These codes were derived from using an etic approach in order to validate the analytical construct that was based on the literature. Ethnographically, the researcher can analyse the data for a description of the culture-sharing group (Creswell, 2007) that defines the context. The analytical construct was a categorical analysis of patterns or characteristics. It was associated with the instructors' process of learning and their interactions, which was realised in the following through instructor/formative assessment, instructor/student, and instructor/instructor interactions.

Directed content analysis was employed in this study to determine if there were any perceivable changes in instructors' classroom performance when they used some aspect of formative assessment as a process of learning with their students. If it happened that change occurred, what might those changes look like? The theoretical framework was revealed through the literature review in Chapter 2. Similarities emerged between the learning process of students, who were exposed to formative assessment practices, and the new approach to professional development that appeared to adopt the same pro-

cess of learning for instructors involved in a professional learning community. Therefore a decision to use directed content analysis as a way of analysing the instructors' discussions, journal entries and observations ensured that analysis could be based on a predetermined set of attributes drawn from the literature.

It needs to be acknowledged that, traditionally, content analysis has been applied with a quantitative view of counting manifest textual elements of content. With this application, results can be arbitrarily limiting because it excludes accounts of syntactic or semantic communication that is embedded in information that cannot be counted. When that occurs, results lose meaning because data is reduced to numeric forms of duration and frequency (Berg, 2001; Zhang & Wildemuth, 2009). The shift to directed content analysis, however, made this approach to data analysis useful in this context because it was a content-sensitive method that was flexible in its research design (Elo & Helvi, 2007).

Definitions for directed content analysis include relying on the replicable and valid inferential information extrapolated by the researcher from written, verbal or visual communication messages (Berg, 2001; Elo & Helvi, 2007; Krippendorf, 2010; Prasad, 2008). It is an approach that is empirical, systematic, and objective. It can be a methodologically controlled analysis of texts within their context of communication that relies on making inferences to describe the phenomena being studied. Directed content analysis goes beyond merely counting words or extracting objective content because it does not make rash quantifications and allows the researcher to explore meaning underneath the physical message (Elo & Helvi, 2007; Schilling, 2006; Zhang & Wildemuth, 2009).

In this study, the content for analysis included a transcription of the instructors' discussions while in their professional learning teams. Also included were the journal writings of the instructors and the observational notes written by the researcher. It was based on a theoretical assumption that was characterized by identifiable attributes that assisted with the development of codes or categories in which to focus the analysis.

Content analysis was recognised by Hsieh and Shannon (2005) and takes directed content analysis one step further by formulating a more structured process. They claim that when there is existing theory or research which is incomplete or would benefit from further investigation, operational definitions can be created based on the identified key concepts or variables of that existing research. To relate that claim to this study, existing attributes of both formative assessment and professional development were acknowledged and were used to guide the analysis.

Many authors of directed content analysis make reference to using either an inductive or deductive approach when analysing content (Berg, 2001; Elo & Helvi, 2007; Hsieh & Shannon, 2005; Krippendorf, 2010; Mayring, 2000; Schilling, 2006; Zhang & Wildemuth, 2009). Inductive analysis is identified when the researcher immerses herself into the data to allow themes or

categories to emerge through careful examination and constant comparison. In contrast, deductive analysis uses a categorical scheme or initial coding based on research findings. Then, the structure of the analysis is operationalised based on previous knowledge. A deductive analytical approach is intended to address questions that have been generated from theory. Berg (2001) notes that in 1987, Strauss claimed that researchers might even use a combination of both. A combination of approaches was suitable for this study. Deductively, there was a theoretical assumption drawn out from the extant literature and from that, the researcher developed questions and compiled a set of criteria to assist in answering all the questions. Once the initial analysis occurred, and themes emerged, however, the analysis took on an inductive approach.

Content analysis relies on the researcher to make inferences as she sifts through the data interpreting the content within the analytical construct of the study. When discussing inferences that are an intricate part of content analysis, Krippendorf (2010) refers to abduction. He avers that abductive inferences proceed from the particular found in the text and moves to different particulars that provide answers to a set questions. Given that statement, this study required a combination of inductive and deductive inferences, and inferences drawn were not directly observable, thereby making abduction the logical approach to making inferences. For example, this study began with a body of data (text) along with a hypothesis (theoretical assumption), therefore the analyst applied bits of common knowledge (from the literature review) to make fair guesses about the meaning of the data (Krippendorf, 2010).

This study used a directed content analysis to analyse the data and its process was delineated through four phases based on the work of Schilling (2006). Each phase was built on an explicit set of rules known as criteria of selection in order to meet the needs of reliability and to validate eventual findings (Berg, 2001). Table 3 defines each phase of the process.

Table 3.2 Phases of Analysis and Definitions

Phases:	**Rules that were followed**:
1 - Transcribes the instructors' meeting discussions.	Only the first two letters of the instructors' names are used to protect confidentiality; Dialect is included - i.e., use of 'cause', personal noise responses (grrr) , laughing; Background noises of instructors included - i.e., taking notes, paper shuffling, etc; Distracted discussions **NOT** included but acknowledged - i.e., change of textbooks, curriculum problems; Researcher responses (notes) to instructor discussions through analytical memos.
2 - Prepares working with the raw data	Identifies explicit contextual information; Directs analysis through a) theoretical assumption; b) attributes underlying formative assessment and professional development; c) clearly established context; Codes a system to relate the attributes to the communication content.
3 – Defines, relates and refines codes	Analyses of the communication content allows the natural flow of communication; Categories emerge based on the previously identified attributes; Codes refined based on Mayring's (2000) concept of giving codes

	definitions and assess them against existing codes.
4 - Condenses instructors communication content	Further analysis of the communication content using the refined codes.

7. Trustworthiness of the Data

Onwuegbuzie and Daniel (2003) recognised errors in both qualitative and quantitative research. They acknowledged that validity can be a concern as its definition in the educational community is ambiguous. Generally validity is understood to be the "trustworthiness of inferences drawn from data" (Eisenhard & Howe, 1992 as cited in Freeman, et al., 2007, p. 644). Trustworthiness is considered to be the standards set by the researcher to ensure a study has been conducted competently and ethically (Heigham & Croker, 2009). In reference to this, research validity involved the question of whether the conclusions of this study were justified by the data collected and analyses thereof. Trustworthiness was demonstrated in this study through the following procedures: a) meticulous preparation of data collection tools, b) appropriate disclosure of the study and involvement of instructors, and c) using rules for data analysis.

7.1 Validity.

This study had internal validity with respect to the selection of instructors. Their participation was considered purposive sampling because they belonged to a set criteria required for this research. However, only those instructors who were interested in learning about formative assessment volunteered to participate. As a result, having so few instructors brings forward a question concerning how well the Department of Language Studies population was represented since there are more than 130 instructors on staff; consequently this led to a problem with external validity.

External validity addresses the reliability of this study to other contexts. As noted previously, this study had particular aspects such as the cultural differences in classroom pedagogy that determined there was no need to be concerned with external validity. Particularization was a concept related to the context of the study. It was extremely important because if one wanted to take insights from a case study, try to adapt them or compare that information to a wide variety of research, it would become more difficult due to the contextual nature of the bounded case.

On the basis of particularity, which is related to the boundedness, this study focussed on the particular in-depth, not on finding out what was generally true of the many (Nunan & Bailey, 2009). While the questions, methodological approach and data collection tools might be replicated in another environment, these results may not coincide with the results of this study due to the differences in the contextual cultural behaviour of the instructors and their students.

It must be acknowledged that as an instructor observer the researcher in this study was subject to the observer's paradox due to the intrinsic involvement in the professional learning teams. The researcher's involvement may have resulted in changing the authenticity of communication, thereby changing the very thing that was meant to be observed in its natural environment (Nunan & Bailey, 2009).

7.2 Reliability.

There is a claim that the reliability of observation findings can be questionable due to the preconceptions of the researcher making the information gleaned from that observation untrustworthy. It is essential for results to be free from bias and integrally reliable so the educational community has adopted the use of triangulation to help reduce methodological errors in research (Onwuegbuzie & Daniel, 2003). Triangulation was a method of quality control and this study used various forms of data collection such as audio-recordings of group discussions, observations of instructors and feedback, as well as instructors' journals to address that issue.

Transferability or comparability is a concept that involves the readers of a study. The readers of this study would determine if it is congruent with what they would want to do or if there is a connection between this study's context and their own. Preparing codes helped to ensure reliability allowing other researchers to replicate the study because they would understand the conceptual foundation through the codes.

Analytical construct is also important because readers can interpret their own findings based on their own context. Therefore there is a possibility this study could be replicated in another institution in the Middle East as there are similar situations where they have Western instructors using Eastern curriculum and pedagogy and who may be teaching English as a foreign language. Again it should be noted, however, that this study was an ethnographic case study that was an in-depth investigation of a single case by an instructor observer, which would make producing similar results extremely difficult.

7.3 Generalisability.

Generalisability is the "relevance or applicability of findings to other similar settings" (Miles & Huberman, 1994, p. 174). It was acknowledged this study may lack generalizability due to its contextual nature of: a) having second language learners, b) the student learners' pedagogical experiences differ to that of their instructors teaching experiences, and c) the cultural differences between Arab and Canadian backgrounds. While the tools and procedures of this study might be replicated, it was recognised results may differ due to the unique contextual nature which was an important characteristic of ethnography. As well, attention was paid to the fact that there were predetermined characteristics of learning so as not to have an undermining effect on the results that could in turn affect the generalisability of this study. By using an intrinsic ethnographic case study to get a deep understanding of this particular case itself with its cultural peculiarity, however,

emphasis could not be placed on generalisability as the culture influenced the behaviours and values of the instructors (Heigham & Croker, 2009). Also, it can be argued that generalisability is a quantitative concern which is a different rule that does not fit into this research (Richards, 2003, as cited in Nunan & Bailey, 2009, p. 207).

8. Data Representation and Interpretation

The professional learning team discussions were transcribed using rules (described in Phase 1 of the Analytical Framework) to ensure consistency. Beginning with the analytic memo process, it revealed inductive themes that were displayed using a concept map (Figure 5.1, Chapter 5; Section 3.1.3). Immediately following is Figure 5.2 which demonstrated a re-formulation to visually depict the inductive categories.

The codes are presented individually with their accompanying definitions and coding rules. Each has an explanation of how they are applicable to the study with examples of statements selected to support its relevancy. Some codes are also supported by statements made through individual instructors' journals. All representations of the instructors' interactions in the professional learning teams have been placed in table format by selecting dialogic statements relevant to each of the codes (Appendices L and M).

In representing the learning process, selected data represents what the instructors' learning process looks like and specifically, how they co-construct knowledge. Illustrations containing pertinent conversations have been used that embody their interactions.

9. Limitations

Limitations that are often associated with case study and ethnography methodology were considered in the planning of this study. The following outlines considerations given to this research.

Experienced educator, W. James Popham (2008) recognised that "teachers themselves are a widely divergent variable" (p. 16), that they are particularistic due to their idiosyncratic experiences. A significant intricacy in doing observations is the complexity of human behaviour. Involved were the various interactions among instructors, varying pedagogies and the subjectivity of the researcher who was actively engaged in making sense of behaviours and interpreting the meaning of observed events (Jones & Somekh, 2005; LeCompte & Goetz, 1982). Often what the instructors' construction of what is real and interpretations of the observer do not match. Therefore reliability in this situation becomes conditional on the design of the observation tool as reliability is concerned with replicating scientific findings (LeCompte & Goetz, 1982) which also lends itself to the validity of the research.

The researcher in this study acknowledged a limitation due to the emic nature of her involvement. She relied on an emic perspective in both the data collection and data analysis. There is a possibility the data collected has

been "too strongly filtered through the researcher's lens" (Somekh & Lewin, 2005, p. 17). There is also a possibility that the data analysis was not as objective as it could be as the researcher incorporated instructors' perspectives and interpreted them through her own experience in using formative assessment and her own experience with the students in the study (Nunan & Bailey, 2009). Therefore, it was necessary for this researcher to be cognisant of the emic perspective involved while analysing the data collected.

It is recognised this study may lack in generalisability due to its contextual nature. Factors include: a) second language learners who are culturally different, to their Canadian instructors, and b) the instructors' pedagogical approaches are divergent to what the students have encountered before. However, authors have questioned the necessity of using the term generalisability because it may be outdated (Nunan & Bailey, 2009). Many researchers find generalisation can be a stumbling block so they have opted to regard the particularity of the case study as more important since it "helps instructors find connections between research results and the particulars of their own classroom realities" (Nunan & Bailey, 2009, p. 172).

Section 4 of this chapter acknowledges ethical considerations in doing this research. By the very fact that the instructors' knew they were being recorded brings into this research the concept of observer's paradox. Observer's paradox suggests that any observation of authentic communication, be it by the researcher, videotaping or even tape recording, will influence that communication, making it less authentic (Gordon, 2012; Heigham & Croker, 2009; Nunan & Bailey, 2009). Authors writing about observer's paradox, which was first recognised by William Labov in 1972, claim that being observed can change the observation in its natural occurrence. At the same time, those authors say instructors can become used to being observed.

Furthering the work of Labov, current authors concur that instructors will appear to forget they are either being observed or recorded in some fashion (Gordon, 2012; Heigham & Croker, 2009; Nunan & Bailey, 2009). This study used both observation and tape recording. As a colleague of instructors, I was viewed as having kinship with them because I previously used formative assessment tools and strategies in my classroom which resulted in having the same or similar frustrations as the participants themselves. For example, I knew it could be difficult to use a self-assessment tool because students were really not clear on its purpose. They did not appear to be interested in taking ownership of their learning because they had been trained to expect the teacher to show them what is correct. In this instance, as the researcher, I was able to build a common trust and understanding by immersing myself into the research context (Nunan & Bailey, 2009).

As well, during the classroom observations, even though the instructors knew I was observing their use of the formative assessment tool they had developed, which might change their behaviour, they were unaware of the details of the observation (Heigham & Croker, 2009). The researcher was able to ensure no judgement was being placed on their performance; it was merely to be a learning experience for them. Gordon (2012) suggests that in

order to reduce the effect of a tape recorder as a potential "contaminant", the researcher may consider disregarding the first few minutes of a recording. In the case of this study, most often the first few minutes of the meetings featured instructors chit-chatting about their week and/or current events within their department, thus reducing the impact of the observer's paradox.

The researcher acknowledges another possible limitation to this study. I was the lone developer and analyst of the codes and categories. Therefore in terms of inter-rater reliability, there was no one to validate my interpretation. Since this study relied on a category system that was a derivative of theory and/or prior research, it added to the reliability of the investigation and conclusions if independent coders could identify categories separately and then come to an agreement (Schilling, 2006).

It was possible to create a reliable study using directed content analysis due to its inherent process of structure and defining of rules/dimensions, which included the concept of intra-rater reliability. The analytical framework was designed to include four phases. Phase 1 included rules for transcribing the professional learning teams' recorded discussions. Phase 2 developed codes drawn from the literature while Phase 3 provided for the refinement of the codes. Finally, Phase 4 condensed the data into manageable information by selecting relevant statements to represent the instructors' interactions. These phases established rules and definitions by re-visiting the context in which this study took place and the theoretical assumptions therein. It could be argued, however, that this process was a weakness rather than strength.

10. Role of the Researcher - A Personal Note

As the researcher in this study, I was required to take on the role of facilitator of the professional learning teams, by initially providing them with structure and guidance. As the instructors began to implement their formative assessment tools, however, the role changed to being an observer and mentor of both the professional learning team and in the classroom. As researcher, I came into this study with 12 years' experience teaching Middle Eastern students, however, my career in the Middle East started as a content teacher of elementary students then as a teacher in a college. Therefore, through my experiences, I understood that the Arabic students' learning was more dependent on the instructor than that of their Western counterparts. As such, I knew it was really important that these students be introduced to concepts such as self-assessment, using a very consistent, precise and scaffolded method.

Formative assessment is meant to encourage students to become more independent and my experiences taught me that when using formative assessment strategies as part my classroom practice, it was necessary to be determined to stay on course and not waiver from the methodology. With constant persistence, my students eventually accepted that type of teaching style and they walked away with a sense of pride and accomplishment.

Therefore, I, as researcher, was in a position to act as observer/instructor/ educator, which allowed me to share knowledge and background experience

in this area. I was also able to lend support by guiding the design and direction of the study in response to the on-going analysis of behaviours and provided assistance to colleagues.

11. Chapter Summary

Chapter 3 reviewed qualitative methods in order to clarify and support the approach used in this study. It explained how the selection of an ethnographic case study was done by bringing forth reasons as to why it is suitable to this contextual situation. This chapter also explained the research design by reviewing the questions and seeing how they were derived through the literature review. It identified the commonalities found when formative assessment is used as a process of learning and professional development is approached through a professional learning team.

As well, Chapter 3 reviewed the types of data collection tools used and how they best suit the needs of gathering information that lead to devising answers to the questions posed. Cultural context is significant to this study and this chapter explained how that is pertinent in the case. Finally, the chapter ended by detailing the study's vulnerability and established how it recognises said vulnerabilities while including the steps taken to ensure credibility is maintained.

The next chapter will direct the reader through the foundation for the analysis approach and provide insight into the direction the study took.

CHAPTER 4 Data Analysis

1. Chapter Overview

Chapter 4 explains in more detail how the framework of the data analysis process suits the contextual nature of this study. The framework allows for a social anthropological approach which focusses on individual perspectives and interpretations of the world of the instructors' through the use of both audio taping and structured observations (Berg, 2001; Miles & Huberman, 1994). This chapter presents a detailed description of the context and analytical constructs in which the study was done to provide in-depth understanding of how the analysis proceeds. It also offers, in some detail, the structure under which the findings were made available.

2. Approach to Data Analysis

Krippendorf (2010) defines content analysis as being a scientific tool that uses reliable and replicable inferences founded on a researcher's understanding of a phenomenon. Content analysis is also a technique that examines artefacts of social communication (Hsieh & Shannon, 2005). This technique was useful for interpreting data collected through transcriptions of the professional learning teams' meeting discussions. The content analysis approach worked well in this study because it was interested in the behavioural regularity of everyday life, language use, and the relationships therein to explain the way people operated in a particular setting (Berg, 2001). Content analysis alone, however, was not enough to guide the analytical process for this study. In order to interpret data extensively required a process that was guided using keywords and codes based on a set of characteristics that could identify certain learning behaviours. Therefore directed content analysis was implemented because it required using existing conceptual categories that could be applied into the context of the study (Humble, 2009). For the purpose of analysis that focussed on human communication, the data used in this study consisted of transcribed conversations of the focus discussion groups, a compilation of instructor journal entries along with detailed feedback of instructors' observations; all of which served as the textual source in this study.

3. Context

Krippendorf (2013) explains that "context is always someone's construction" (p. 38) and the context explains what the researcher will do with the data. He also says context is the conceptual environment that explains how the text came to be. As Dey (1993) so aptly points out, meaning and interpretation depends on context. Therefore it is necessary to explain in rich detail the environment in which the text originated and how, for the purpose of analysis, it correlates to the literature and the questions formulated; both result of extensive research into extant literature.

Prior to the onset of this study, I, as researcher, conducted an investigation into the literature on formative assessment and professional development. The investigation revealed similarities in learning experiences between stu-

dents, whose teacher adopted formative assessment as classroom practice, and teachers who engaged in professional learning communities. Studies indicated that formative assessment practice had proven to be a successful approach to student learning. It appeared that experts in the field of professional development were recognizing that to be true as well. They began studying and writing about what was needed to deliver effective professional development. Ergo, the creation of professional learning communities required teachers to: a) reflect on and evaluate their classroom practice, b) collaborate on topics of interest to them in order to provide constructive feedback amongst themselves, and c) share their existing knowledge or even construct new knowledge in areas that would improve their classroom practice (Colbert, Brown, Choi, & Thomas, 2008; Leadership and Teacher Development Branch, Department of Education & Training, 2005; Lyons, 2006; Roberts, et al., 2010; Snow-Renner & Lauer, 2005; Wylie, Lyon, & Goe, 2009). These strategies of collaboration, reflection and feedback were the very catalysts that were helping students become successful in achieving classroom outcomes (Brookhart, 2009; Darling-Hammond & Richardson, 2009; Heritage, 2007; Jenkins, 2010; Popham, 2008).

The extant studies I was able to access on formative assessment practice and professional learning communities verified that improving learning on the part of both the students and teachers was naturally leading to an improvement in the quality of education at that school. No studies, however, included a comparative investigation regarding the similarities in learning approaches; nor had there been any research on whether the teachers themselves actually felt any change or improvement in their approach to teaching when they learned about and implemented formative assessment strategies.

Chapter 1 provided details describing the context in which this study took place. To recap on that, this study was done in the English language department of a technical college where national Qatari students learn English for specific purposes in preparation for their programs. Before entering the Canadian college, students were exposed to a more traditional approach to teaching that focussed on rote memorization and restating rather than constructing or discovering knowledge (Akkari, 2004; World Bank, 2007; Zellerman, et al, 2009). The instructors in this department, however, were Canadian whose teacher training took place in Western institutions that provided for a more active, communicative approach to language teaching. To recruit instructors for this study, I sent out an invitation to participate and those who volunteered were brought together under the auspices of adding to their repertoire of teaching methods by discovering how to use formative assessment as an approach to language teaching.

In preparation for the study, I developed a professional learning package for the instructors use to help them learn about formative assessment and understand how one could adopt it as classroom practice. The learning package was based on the work of Susan M. Brookhart entitled, "Exploring Formative Assessment" (2009). This book is designed to assist teachers in learning the strategies involved in implementing formative assessment as classroom practice. It references articles all published in the Educational Leader-

ship series published by the Association for Supervision and Curriculum Development and provides reflective questions at the end of each section to encourage thought, discussion and understanding of each strategy. It also provides classroom connections which gave the participants an idea of how they could use that particular strategy in their own classrooms. In particular, the strategies the instructors focussed on included: sharing goals for students' leaning, listening to students, providing effective feedback, asking the right questions, student self assessment.

For the purpose of data collection, the instructors worked through the learning package in groups to understand the concepts underlying formative assessment. They also implemented various techniques, tools and strategies in their daily classroom practice. Two groups, of four and five instructors, were created based on the availability of their teaching schedules and they met on a bi-weekly basis. I, as the researcher, acted as an instructor observer providing guidance on what a particular strategy or technique might imply to classroom practice by: a) answering questions the instructors have, b) expanding on a particular concept for the sake of clarification, or c) giving suggestions on how formative assessment could be used in their classrooms. All suggestions given by the researcher were based on what authors had written and partly on my own classroom experiences. However, in order to allow the instructors to take their own direction, I stepped back during their discussions to take an observer role.

It was also important for the instructors to be provided with a comfortable, trusting learning environment in order to foster their risk-taking and level of sharing. It was necessary to assure the instructors that what they said or did in their professional learning teams would not to be shared with others unless permission was sought from the group or individual involved.

Instructors in the professional learning team relied on one another to alleviate the time commitment imposed on a teacher, who is involved in ongoing professional development. Therefore, at each meeting, one instructor was asked to take the lead by being responsible for reading an article from the learning package. That instructor presented information to the group that involved a particular strategy of formative assessment, such as giving effective feedback, for example. Discussion then followed concerning the strategy of effective feedback in order to help clarify points, reinforce understanding, or identify practical aspects of using that concept effectively in the classroom. Together the instructors constructed new knowledge based on their discussion of what it meant to use effective feedback and how they saw themselves giving feedback to their students.

During their meetings, some instructors took notes on the discussion to assist in their learning and understanding; others wrote directly in the article highlighting points they felt were relevant to their classroom situation; still others just sat and listened but contributed regularly. Some instructors entered the meeting having already read the article and were able to provide anecdotal scenarios based on their own understanding of the concept, or they shared past experiences providing a practical link to the article.

Each professional learning team met ten times throughout the course of one academic year, with the year consists of three semesters. The meeting room was small and cozy with two walls of shaded windows. It was located away from the language department offices so there was an air of freedom to discuss without fear that any of the topics chosen by the instructors could be overheard. The lights were usually left off which gave the room a more relaxed feeling and there was a large table surrounded with comfortable ergonomic chairs. Most often, the meetings took place during the instructors' lunch break and they often brought in their lunch.

The recording device was always kept in the middle of the table and if the researcher was not available for a meeting, a designated instructor ensured recording took place. Although authors have identified that a recording device can alter interaction (Gordon, 2012), the device used in this study was small and unobtrusive. The recorder was always in the same location, and the instructors became accustomed to having it there. As well, I was able to assure the instructors in advance that whatever was said in the teams would not be used for any other purpose beyond this study and their input would not be judged in any way.

During the first semester, the instructors focussed on reading and learning while the second and third semesters the instructors were positioned for developing formative assessment tools and trying them in their classrooms. As the instructors began to feel comfortable with their knowledge of formative assessment and the assessment tool they created for use in their classrooms, they attempted to introduce it to their students and I, as researcher, observed the application thereof.

To ensure an effective observation occurred and one with which the instructors felt at ease, I developed a detailed form (Appendix F). The form outlined the techniques and strategies of formative assessment based on what authors consider to be an effective classroom environment (Stronge, et al., 2004). The form also focussed on the characteristics of what using an identified strategy would look or sound like. The instructors were able to review, reflect and discuss the form in preparation for their observation. During the observations, this form allowed the researcher to target the instructors' areas of interest along with identifying other formative teaching techniques that she was using without her being aware of it. Using an observation form gave the instructors a level of comfort with having me in the classroom because the form and its characteristics targeted the purpose of the observation. Thus, the instructors were assured their performance was not being highlighted, only how they used formative assessment strategies.

From the observation, I provided written feedback after an instructor presented her assessment tool to their class. Each instructor who had applied formative assessment strategies in the classroom had a chance to reflect on her presentation prior to meeting the other instructors in their group. The instructor then took the feedback from the researcher back to their professional learning team meeting for discussion. During the meeting, they received feedback from their colleagues that include providing suggestions for

changes or improvements to their artefact. In sum, each instructor had a chance to reflect as they prepared their lesson plan, as well as during and after the discussion with the group. Following the meeting, the instructors returned to the classroom using the feedback received from the researcher and their colleagues for another try.

The instructors also kept journals of their experience in learning formative assessment practice and when trying formative assessment strategies, techniques, and/or tools with their students. Occasionally they reflected on questions posed by me, as researcher, which came from some of the points that arose during the professional learning teams' meeting or issues that arose during the observations of the instructors' classroom practice.

Relevant to this study was the nature of the two cultures. Canadian instructors and Qatari students constructed a social reality in which the instructors had to teach and their students had to learn. It was a unique environment having its own peculiarities and anomalies. On a regular day in this language classroom, the instructors faced challenges requiring they adjust their presentation due to religious and local cultural restrictions. For instance, they needed to be careful not to make reference to certain words or actions that might be a natural part of Western society such as male/female relationships, not including materials in their lessons that have a picture of a pig, or not making any reference to Israel or anyone or thing that might be of Hebrew origin. While on that same day, the students might have needed to pray or had a family obligation resulting in tardiness, causing them to miss crucial direction or instruction pertaining to the day's learning lesson. These types of adjustments were always forefront in the minds of the instructors and had to be accepted as part of their classroom reality. For the instructors in this study, already having to reconcile their teaching to the Arab religious culture was demanding enough. Having to include concepts such as feedback was an added challenge.

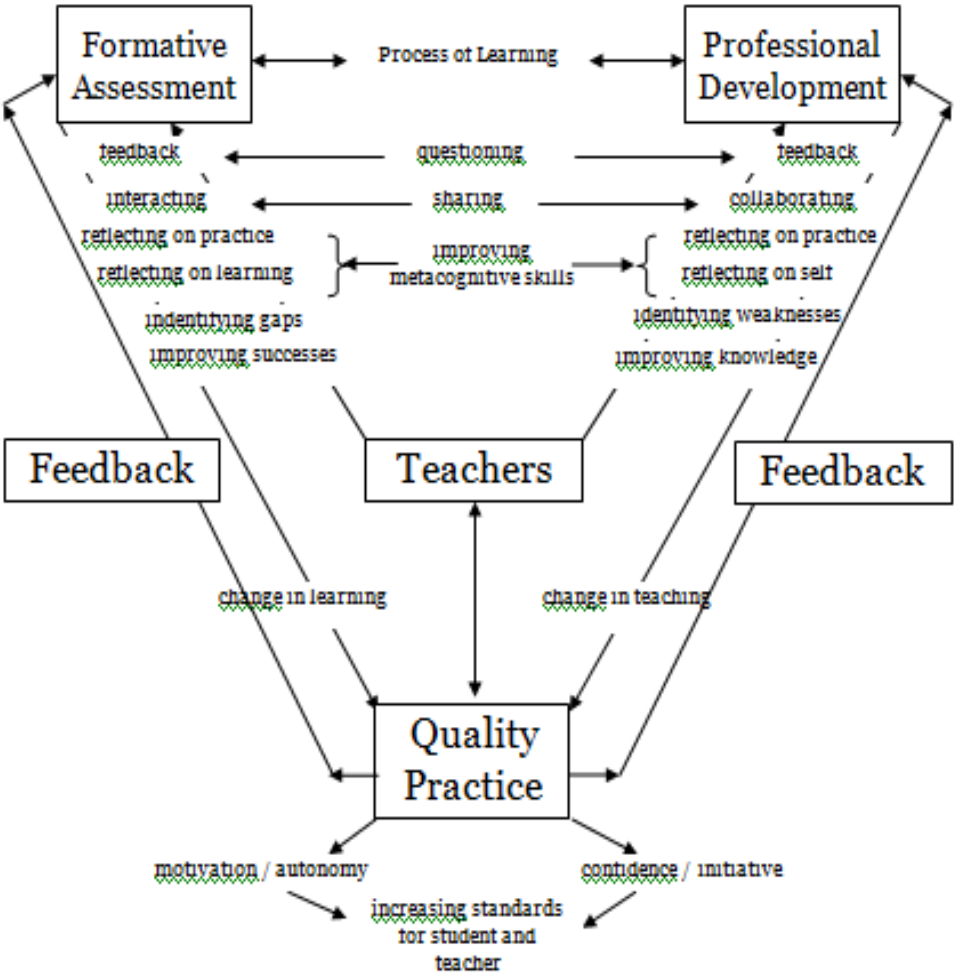
4. Analytical Construct

Following the investigation into the literature on using formative assessment as a process of student learning, and what authors contend with in regards to the new approach to professional development, a question emerged. If there is an apparent improvement of student achievement when their teachers are adopting formative assessment practice as a process of learning, what effect might that have on the teacher who is implementing it? In order to investigate the idea that the teachers' practice might be affected in some way, it was necessary to dissect the learning process for all of those involved; students and teachers alike. Therefore, following the literature review, questions emerged that targeted the learning process and whether it was similar for both teachers and students. Those questions were designed to address the instructors' responses to their learning formative assessment and were addressed through inferences drawn from texts. The texts in this study included the instructors' transcribed discussions, their journals, observations and the student focus group discussion.

Berg (2001, p. 239) suggests that interpreting texts depends in part on the theoretical orientation taken by the researcher. Chapter 1 outlined a theoretical assumption that recognises formative assessment practice as being constructivist pedagogy. It has attributes that parallel the learning process of effective professional development when it is designed as a professional learning community. The questions of this study, queried whether the learning process of the instructors' classroom practice might align with the classroom implementation of formative assessment practice. The creation of those questions was a result of the literature indicating that the learning processes for teachers, who engage in a professional learning community, appear very similar to the learning process for students, who engage in formative assessment. Therefore, I was led to make the assumption that if student learning improved then perhaps teacher practice would improve from learning about formative assessment and subsequently using that process in the classroom.

As a result, it was necessary to identify what an effective classroom looks like in order to determine if any change was to take place. Figure 4.1 represents a conceptual display of the similarities in learning attributes between students who experience formative assessment practice and what teachers experience in a professional learning team; both are said to lead to improved teaching and learning.

It is important to note, Figure 4.1 displays the attributes under professional development as being very similar to those under formative assessment. That being the case, if a teacher is involved in learning about formative assessment, endeavours to use its strategies/techniques/tools in her classroom, and then returns to the professional learning team to reflect on her experience, she will go through a similar process of learning as her students. For that reason her teaching practice will improve. It is important to stipulate that assumption here as it lays the groundwork for the investigation and the approach to analysis.



Extant literature discusses the benefits teachers' reap when they engage in collaborative, inquisitive, relevant professional development that is sustained for an extended period of time. Likewise the literature discusses the benefits students' reap when their teachers engage in a process of learning involving formative assessment. Depicted above are the attribute similarities which lead to the theoretical assumption that if formative assessment improves student success then the possibility is present that implementing formative assessment as classroom practice will improve teacher success.

Figure 4.1 Similar Attributes in Formative Assessment Practice and Professional Learning Communities

5. Analytical Framework

Krippendorf (2013) outlined a conceptual framework for approaching content analysis and it was used for this study as a way of ensuring reliability and validity. Table 4.1 illustrates how the framework for this study is in line with his.

Table 4.1 Analytical Framework

Krippendorf's Framework (2013)	**How this study fits into his framework**
Body of text	Transcripts of focus discussion groups, instructor journals and observation feedback reports.
Research questions	Answers by examining the body of text: a) What is the process of learning within a professional learn team engaged in learning about formative assessment? b) How does the process of learning in a professional learning team align with the classroom

	implementation of formative assessment practice? c) What impact does the culture of the students have on the instructor's engagement in formative assessment practice?
Context	Puts the text into the perspective of the researcher.
Analytical construct	Operationalises the analytical process based on examination of the literature review to theoretical assumption made and similarities of attributes.
Inferences	Done abductively due to the absence of any direct observational evidence which is intended to answer the researcher questions.
Validation	Ensures the context and analytical construct are clear and concise.

Schilling (2006) acknowledges the work of Creswell (1998) in identifying that data analysis is not a linear process of stages but rather an iterative one that requires a non-sequential approach. However, while Schilling does not argue that fact, she does advocate that directed content analysis is circular and moves through a series of levels in a spiralling motion. She claims that phases and rules can be recognised in the beginning by establishing a conceptual framework and research questions. Mayring (2000) also supports this view when he avers that a basic idea of content analysis includes rules and categories. Those rules and categories were central to analysis that established criteria for reliability and validity. It is on this premise, that the following analytical framework was developed.

Phase 1 – Transcribes the instructors' meeting discussions.

In defining text, Krippendorf (2013) identifies it means something to someone, that it is generated by some but holds meaning for someone else, and those meanings should not breach the existence of the original text. As well, Krippendorf (2010) acknowledges that analysis traditionally is done by human coders who record and scale down text. In such instances, he suggests the need to use coding instructions in order to maintain reliability. Therefore, I identified rules in order for the transcription of the instructors' discussions to take place. For instance, I used one or two letters to replace the names of the instructors to ensure anonymity, and maintain the instructors' dialect, including utterances, and background noises in order to keep the conversations authentic.

However, to target relevant discussion pertaining to their task, distracted discussion was not included to eradicate superfluous talk. *Illustration 4.1* provides an example of how the transcription was done following the example rules above.

Illustration 4.1

Mo – or send them out of the class...was that an option for you

Me – I could have but at the time I was sort of...you ever feel like you're hit broadside and I didn't know how to respond to the situation and of course, I kept saying sh, sh, ... lol and they were not responding well at all so now I've gone through that and now I know okay this is how we're going to handle the situation

H – it's funny you have to go through it before you figure out how it's supposed to be done

Me – yeah, and the other thing is they all have ask a question. Like I don't...when they say are there any other questions, I don't want them all to say Noooo

H – listen, what was the name of the...was it What a World?

After some more discussion, *Illustration 4.2* demonstrates when the instructors began to discuss items off topic and how it was identified in the transcription. Note that a time reference was included in case the discussion later proved to be relevant to analysis and I was required to return once again to the original recording.

Illustration 4.2

Some discussion concerning the vowels between Arabic and English...the use of Microsoft word to spell correctly...etc. (19:37)

In adhering to prescribed rules, descriptions take on an etic approach to data analysis relying on theory imposed conceptions because, as Krippendorf (2013) explains, the researcher has derived the coding categories from theories of the context in which the study takes place. However, being an instructor observer the researcher has to maintain a balance between an etic (researcher's perspective) and emic (instructor's perspective) stance (Heigham & Croker, 2009).

Being able to participate in the professional learning teams as an instructor observer, I became familiar with personalities, likes and dislikes, challenges the instructors encountered and the frustrations that stemmed from the challenges either in the classroom, department, or institution. My intrinsic involvement gave tremendous insight into the cultural understanding of the groups. Further, I was able to build trust among my colleagues by sharing personal thoughts and/or feelings as shown in *Illustration 4.3*.

Illustration 4.3

Da – I agree with that you know....personally I struggle with the 106 level, I like the higher levels and I find it hard to come down to their level, I really do and I thinks its,...yeah.....specific training for....

However, I did not actively participate in developing or implementing formative assessment tools to share with the group, nor did I discuss any personal techniques used in my own classroom in order to maintain the etic perspective needed to objectively observe and not cause any unfair influences. As stated in Section 10, Chapter 3 and in previous sections, the role of the researcher in this study was to provide guidance and direction on various aspects of formative assessment by acting in the capacity of expert, not to participate as a colleague.

In *Illustration 4.4*, the discussion is about how to use the learning package, with reference to formative assessment tools the instructors could try in their classrooms. Here the researcher (Da) guides the instructors by offering re-

sources such as self-assessment activities from the book, "Formative Assessment Strategies for Every Classroom (Brookhart, (2010).

Illustration 4.4

N – so at the end of every chapter there's these classroom connection options and this is what we're supposed to take and implement in the classroom and then journal on it.

J – right

Li – these are the tools

Da – and I have other resources for tools too so if you come across something, you know like I have a lot of self um assessment ideas and teacher tools and stuff that you could use for… um… tracking the students or for helping the students , giving feedback to the students, that kind of thing. There's a lot for self-assessment and that's a big part of formative assessment to get them to increase their metacognitive skills so they can learn how they learn kind of thing.

La – but we have to... we have to do it carefully

Da – exactly, it's a systematic approach

Phase 2 – Prepares working with raw data.

Like so many researchers who use a directed content analytical approach to data analysis, this study began with a conceptual or theoretical frame (Berg, 2001) that made systematic and objective inferences by identifying the characteristics of the messages. Inferential information could be drawn from data either deductively, inductively or, as Krippendorf (2013) has identified, abductively. Mayring (2000) claims that inference is inductive if it involves formulating a criterion of definition derived from a theoretical background and research questions. Then as analysis is worked through, categories are tentative until data is deduced down creating main categories. On the other hand, he states deductive inference requires explicit definitions, examples and coding rules for each category, which becomes a methodologically controlled assignment. By using a theoretical framework or theory to help predict relationships among variables, an initial coding scheme or relationships between codes was devised for this study.

As introduced in Chapter 3 and explained in more detail at the beginning of this chapter, this study employed directed content analysis, which meant analysis was guided by a more structured process than that which is typical to conventional content analysis (Hsieh & Shannon, 2005). Prior research for this study identified key concepts or variables that operationalised the approach to analysis so coding was able to begin immediately using predetermined codes.

Central to directed content analysis is the condensing of raw data into categories and themes based on valid inference and interpretation. In developing a category system or characteristics of content, this study relied heavily on the existent literature surrounding the use of formative assessment and professional learning communities. The investigation of the literature uncovered that professional learning communities appeared to model the char-

acteristics of formative assessment strategies and techniques. That is to say, studies done on the effects of formative assessment began in the 1990s, while studies on professional learning communities began some years later. As such, the new approach to professional development seemed to have adopted the same process of learning using strategies such as feedback, self-assessment and questioning techniques; thus increasing metacognition for the learners. Therefore, developing a pre-determined set of categories was a natural system to follow with the directed content analysis approach.

Miles and Huberman (1994) assert that coding is analysis and in order to review a set of notes, that analysis involves the need to differentiate and combine data that has been retrieved. They explain that codes are the tags or labels that assign meaning to the descriptive and/or inferred information the researcher has compiled during the study. As well, they assert that coding should be done early and that it be ongoing in order to drive the analysis which leads to re-shaping the perspective.

This study began with the following premise. There is an interrelationship between the experience teachers' encounter when they are learning about and implementing various strategies of formative assessment practice, and the success in students' learning when their teacher is practising formative assessment as a process of learning. Therefore, to direct the first round of analysis, I was able to create codes from the investigation into the literature that might characterise the instructors' behaviour as they discussed formative assessment in their groups and as they practised using the strategies and techniques in their classrooms.

In noting the characteristics of the effectiveness in one's classroom practice, Strong et al (2004) recognise the use of reflective and evaluative practices; teacher education (knowledge of content and pedagogy); creating effective and engaging learning experiences; the teacher as person (how are they feeling about formative assessment practices); classroom management and instruction (sharing goals with students, using effective questioning and feedback techniques, planning, interaction between teacher/student and student/student).

The behaviours investigated in the transcripts of the instructors' discussion groups, their reflective journals and the observations focus on the following categories:

1. Reflecting – teacher = practice
2. Evaluation – teacher = practice
3. Teacher education – pedagogy (as opposed to content knowledge)
    - Sharing goals – students know where they are going
    - Engaging students – active vs passive learning
    - Effective questioning – students required to think and understand
    - Effective feedback – students are aware of gaps and have direction
    - Planning – teacher maps out learning activities
    - Listening to students – teacher directs students to close gaps

4. Teacher as person – interest in improving that is, knowing what makes effective practice – how do those characteristics reveal themselves when teachers are learning/using formative assessment techniques/strategies.

Once the characteristics for coding were established, it was necessary to recognise how they fit together with the questions. Since there were qualities inherent in both formative assessment and the new tenets of professional development that reflected the same learning process, would adopting formative assessment as classroom practice reflect the same learning process for teachers as the literature says the students experience when their teachers are practising it. In order to ascertain if the connection existed in the data I must kept the questions in mind while devising the codes in order to focus the analysis through an etic perspective. The codes that emerged enabled me to begin analysis objectively.

Table 4.2 displays the codes, their corresponding attributes and which subquestion that attribute addresses, in what data source might the code emerge and how each are linked to the literature. The codes are divided into categories and grounded in the attributes addressed in formative assessment, professional learning communities and effective practice. Each of the authors referenced in the table have noted the importance of every attribute identified next to their respective code. Unless otherwise stated, the codes are descriptive.

Table 4.2 Codes in Phase 2 of Analytical Framework

Code	**Attribute and Research Question**	**Relevance of code**	**Data Source**	**Literature Reference**
RFLPr	Reflective practice -instructor with instructor – instructor with student -student with student Sub-questions: a, b	-effective practice -professional learning -formative assessment	-group discussion /classroom /journal	Brookhart, Moss & Long, 2010; Frey & Fisher, 2008; Hall, 2009; Koster, et al., 2008; Lyons, 2006; Roberts, et al., 2010; Cassidy, 2006; Imel, 2002; Cornford, 2004; Dawson, 2008; Klein, 2007; Nicol & MacFarlane-Dick, 2006 Reinders, 2000
EVLPr	Evaluative practice -instructor with instructor – instructor with student -student with student Sub-questions: a, b	-effective practice -professional learning -formative assessment	-group discussion /classroom /journal	
PDGY-Gs	Pedagogy – setting goals -instructor with instructor – instructor with student -instructor with self Sub-questions: a, b	-effective practice -professional learning -formative assessment	-group discussion /classroom /journal	Colby-Kelley & Turner, 2007; McKay, 2005; Murphy, 2007; Ross, 2005; Wang & Wu, 2008 Buck, Trauth-Nare, & Kaftan, 2010;

PDGY-Eal	Pedagogy – engagement in active learning -instructor with instructor – instructor with student -student with student -instructor with self Sub-questions: a, b,c	-effective practice -professional learning -formative assessment	-group discussion /classroom /journal	Lee, 2007; Stiggins, 2005a Black & Wiliam, 2003; Brookhart, 2008; Edwards, 2008; Mandarnach, 2005; Hwang & Arbaugh, 2009; Popham, 2008
PDGY-Ef	Pedagogy- effective feedback -instructor with instructor – instructor with student Sub-questions: a, b,c	-professional learning -formative assessment	- group discussion /classroom /journal	
PDGY-Eq	Pedagogy- effective questioning -instructor with instructor – instructor with student Sub-questions: a, b,c	-professional learning -formative assessment	- group discussion /classroom /journal	
PDGY-Pl	Pedagogy- planning -instructor with instructor – instructor with student –instructor with self Sub-questions: a,c	-effective practice -formative assessment	- group discussion /classroom /journal	Darling-Hammond & Richardson, 2009; Thompson, Gregg, & Niska, 2004; Diaz-Maggiolli, 2004; Doolittle, Sudeck, & Rattigan, 2008; Robinson & Carrington, 2002 Goldschmidt & Phelps, 2009; Henard & Leprince-Ringuet, 2008; van de Grift, 2007; Wood, 2007; White, 1998; Hirsch, 2005; Stronge, Tucker & Hindman, 2004
PDGY-Ka	Pedagogy- knowledge acquisition -instructor with instructor – instructor with self Sub-questions: a, b	-effective practice -professional learning	- group discussion /classroom /journal	
TasP	Instructor as Person Sub-questions: a,b,c	-effective practice -professional learning	- group discussion /journal /classroom	
VoiT	Voices of Instructors **In-Vivo Code** – to highlight direct quotes to do with their interaction of the professional learning team and formative assessment Sub-questions: a,b,c	-effective practice -professional learning -formative assessment	-group discussion /journal /classroom	Saldana, 2009

VoiT	Voices of Instructors **Value Code** – to highlight direct quotes that comes from a value judgement to do with the professional learning team and formative assessment Sub-questions: a,b,c	-effective practice -professional learning -formative assessment	-group discussion /journal /classroom	Saldana, 2009
CLTR	Culture **Attribute code** – to identify where, when and how culture plays a role in the research Sub-question: c	-culture was revealed as relevant through the discussion group transcriptions	-group discussion /journal /classroom	Saldana, 2009

The codes developed acted only as a guide to assist in discovering manifest content that characterised the previously identified similarities between formative assessment as a process of learning and professional development presented through a learning community.

Phase 3 – Defines, relates, and refines codes.

Phase 2 identified codes based on the literature surrounding formative assessment and professional learning communities. It also identified that only manifest content would be used as Elo and Helvi (2007) recognise that latent content is controversial. They acknowledge researchers debate whether hidden meanings can be analysed because it involves interpretation not guided by the study questions. After the first round of data analysis, the purpose of Phase 3 was to revise those codes and provided specific rules in order to further guide the analysis process. In Krippendorf 's (2013) framework, he espouses that boundaries for analysis are important and these rules provided that boundary.

Miles and Huberman (1994) discuss displaying data through a visual representation of information as the researcher/analyst begins to draw conclusions. Phase 2 of the data analysis process identified a set of pre-determined categories and codes based on the attributes identified through the literature review. Discussed in more detail in Chapter 5 is the first round of analysis which led to the revision of the codes. Initially not represented in the codes was the interaction that occurred during the discussions in the professional learning teams. In Chapter 5 a visual representation depicting the outcomes of the instructors' interactions is presented and discussed.

To illustrate the analysis by which the codes were refined, Krippendorf (2004) advises researchers to rely on a framework to identify the prescriptive purpose. In using Mayring's (2000) approach to content analysis through a deductive category application, it requires a more structured process that gives explicit definitions, examples and coding rules for each deductive category.

In order to fully realise the analytical approach used for this study, it was necessary to revisit the context in which the study took place and the theoretical assumptions that provided the foundation for investigation. Saldaña (2009) suggests a researcher do a pilot test on the initials codes in order to ensure all the study questions can be answered and the coding choices are suitable. Table 4.3 illustrates the codes for instructor interaction which became evident upon the completion of the first round analysis of the content. The first round acted as the pilot for refinement of the codes. The purpose of this table was to correlate the existing code to what the literature said about each attribute, while giving an example of the data that was directly related to its corresponding attribute. The table also connected the code/attribute, definition, and data example to a coding rule in order to make the analysis consistent, adding to the reliability and validity of the study.

Table 4.3 Refined Codes in Phase 3 of Analytical Framework

Code/ Attribute	**Definition -** drawn from literature review/context	**Examples**	**Coding Rule**
RFLPr - Reflective practice	Instructor draws on past experience from classroom and prior learning	N - okay, one of the things that I used to use...okay it was with verbs, nouns and adjectives and I just have a coloured , this is 1030, I had three coloured pieces of paper and just a whole pile of cards and basically they would have to sort them into different categories so I'm thinking here with your prefixes and roots ...even some sort of a sorting…	- any reference made to what they did in the past including: classroom (in this job or prior to), attending conferences, workshops, or any other formal education (university courses)
EVLPr - Evaluative practice	Instructor makes decisions on her class practice and choice of formative assessment tool	Me - and then, and then you have your feedback and you go okay they didn't understand this, they want more of this and it's going to take, it takes ten minutes so I find that I don't use my recipes cards as often as I should because I'm coming right to end of my lesson and I really need to put in that feedback from my students	- judgement placed on her own behaviour including: classroom, learning group, with other colleagues
PDGY-Gs -Pedagogy - setting goals	Instructor plans for class: with herself (use of formative assessment tool) and with students (direction of the lesson)	… but the next time I do it, I'm going to get those, like she told you, draw it out of them so is there a topic sentence...why is it the topic sentence as opposed to have them just underline because for most of them, they're going to underline the first sentence regardless if they think it's the topic sentence or not so...	- anticipation of what the instructor intends to do in the future in all areas of teaching and professional learning
PDGY-Eal -Pedagogy	Instructor directs her own learning; takes lead in present-	N - so, my epiphany as I was reading this again, is	- behaviour that displays the in-

- engagement in active learning	ing assigned articles; in preparing the use of formative assessment tool	that we could probably use some of the structure in here to structure some of our own activities as we go forward. So, I guess we were going to talk about two things. We were going to finish and we were going to talk about going forward	structor takes charge of her learning
PDGY-Ef - Pedagogy-effective feedback	Instructor engages in critiquing colleagues classroom activities; encourages/directs students in learning	N - okay that'll be some things for me to think about in terms of....the next go round...as you say to start it earlier. But for example, here does the presenter know the material very, very well, so the person answers yes/no and then I said why do you think this. And yesterday, we talked about I said, if you said yes, why would you say yes H - have you got sample for them to see N - a sample? H - a presentation for them to grade N - we've looked at a couple of samples just to give them sort of the idea of something they have to produce; we haven't actually graded it H - it might be good to grade Da - that is a good idea (all agree)	- the instructor will ask critical questions; make comments on what their colleagues are doing; make suggestions to enhance the work of colleagues
PDGY-Eq -Pedagogy-effective questioning	Instructor engages in thought provoking/reflective discussion with colleagues; encourages students thinking process	…So that's what it is, so looking at where and it doesn't say this but I think when I was reading this, it helps to ask the students, why did you say that answer ...I used that and they've come a long way in that I got some answers...starting to get answers to explain how he came up with that answer or why did you give me that answer and he will say because....so it's working.	- asking critical questions that invoke thought concerning what colleagues are thinking; how they use their formative assessment tool; how they interact with their students
PDGY-Ka -Pedagogy-knowledge acquisition	Instructor acquires knowledge individually through past experience / new content / outside experts; applies knowledge in the classroom	J - I think the results of what we're doing won't really even be seen in the second semester, like even in the classroom ...you know what I did here I realize that now that I have this activity that I will do it next term but now I will prepare	- verbalises where and how the instructor may have learned something; connecting what they've read to classroom practice; making inferences about what they've read;

		something before I go into class. This just happened like this and I was writing things on the board...I was using this formative assessment tool in the board, you know I had nothing prepared and I thought okay well it's for this activity but next term I would like to use it ....like have something before.	
CLTR - Culture	Instructor recognises: students are dependent learners; lack experience; need to be told what to do and how to do it; extrinsically motivated	…they're just not used to it, right and they have to be trained because they've never done this before, they really haven't I don't think	- any reference made concerning their students learning behaviour

Phase 4 - Condenses instructors' communication content.

As noted by Miles and Huberman (1994), data reduction is the process of selecting, focussing, simplifying, abstracting, and transforming data based on a conceptual framework, questions, and a specific data collection approach. It was a necessary part of analysis as it sharpened, sorted, focussed, discarded, and organised a large amount of data into a manageable and controllable amount.

6. Analytic Memos

Saldaña (2009) suggests a first-time analyst should analyse the old-fashioned way, meaning without the use of software. Given there were nine instructors who formed 2 professional learning teams, and each met ten times throughout the length of this study, it was decided that a manual (versus a software application) approach to analysis was feasible and could provide the fledging analyst (me) an opportunity to learn and grow. Saldaña also recommends the use of analytic memos to document and reflect on the coding process and choices made prior to the analysis process. For example, identifying and parallelling the attributes found in the formative assessment process of learning and the new tenets of professional development associated with professional learning communities.

Analytic memos are similar to journal entries in that they allow the researcher to record initial reactions to the data as well as to think and discuss with oneself the nature of the data and the analytical process being used (Saldana, 2009). Analytic memos were used in this study to assist the researcher during the transcribing process to reflect on the choices made for coding. The analytic memo process also led to the development of reflective questions to pose to the instructors in an iterative way.

After doing an investigation into transcribing and coding, Nunan and Bailey (2009) suggest the analyst first listen to the recorded discussion and use "meaning condensation" by taking notes before transcribing. This ap-

proach was initially taken; however, concerns arose after listening to the first six discussions. As I listened and made hand-written notes pertaining to some of the information relayed by the instructors, it appeared that attention to relevant or significant information and data that could be essential to analysis, might be overlooked due to a lack of concentration or proper note-taking procedures. After rereading the notes I had written following this method, it was determined that attention was being paid to trying to write down what the instructors said rather than to think or respond to what they were saying. Therefore, immediately following transcribing each of the meetings as well as in responding to the instructors' journal entries, analytic notes were written to reflect on what the instructors were feeling and doing as they journeyed through the learning process.

Therefore, rather than implementing the meaning condensation process, a choice was made to transcribe word-for-word and write analytic memos following each meeting. In doing it this way, I was able to respond to each by thinking about where the instructors were in their learning and where they were heading. By moving forward in this way, it allowed me to later identify themes that were outside of the characteristics or attributes first discovered during the literature review. For instance, it gave me an opportunity to respond to how the instructors were interacting in their groups or progressing in their learning. I was also able to respond to what the instructors were saying which was later used as reflection for their journals, and lastly, the direction and progression in which their learning was going. As well, this process afforded me the opportunity to plan next steps such as what to watch for during the observations as the instructors began implementing formative assessment strategies and techniques.

7. Chapter Summary

This chapter explained in detail the analysis process used for this study. Based on the work of Schilling (2006), an analytical framework was used to provide the researcher a clear direction and path to follow. The framework presented to the researcher the importance of the interaction amongst the instructors that was not present in the initial set of codes, which led to identifying and defining new codes. The analytical construct provided the reader with the necessary background needed to understand the intricacies of the context in which this study was done. Finally, an analytic memo process method was used that identified two themes that directed attention to the importance of culture to this study and revealed instructor behaviour as being a variable outside of the initial coding scheme. The next chapter will discuss the findings.

CHAPTER 5 Findings

1. Chapter Overview

Chapter 4 identified the data analysis approach used to illuminate the findings in this study. The conceptual framework outlined the rules and definitions that guided the transcription of the professional learning teams. The chapter also identified and refined codes in order to elicit behaviours from the data collected that reflects the learning process of the instructors.

The purpose of Chapter 5 is to elucidate the results of the professional learning team's collaborative learning. It also looks at the instructors' engagement with formative assessment practices given they are immersed in a cultural learning environment where students' learning experiences have never encouraged them to be actively involved in their learning.

This chapter's discussion begins by looking at the analytic memo process. It reveals themes that were not originally considered and thereby acts as the first round of analysis. The chapter then presents dialogic statements made by instructors, gleaned from the professional learning teams' meetings, which target each code during the meetings. All remaining data from the meetings is presented in a table format to demonstrate the interaction, conversations, and reflections that transpired. A summary of each code is also included that elaborates on the code and the statements therein.

The chapter then proceeds to present findings revealed through the instructors' journal reflections. Once again the data is presented in table format and is divided into categories of common areas of discussion. Culture has been identified as a significant factor in this study; therefore, it is presented in a triangulated format representing information assembled from all three data collection tools. Finally, the chapter concludes with a summary of the findings.

2. Introduction

A directed content analysis process was selected for this study because it acted as a progressive method of analysis that assisted the researcher to recognise behaviours as they developed over time. The instructors in this investigation were engaged in constructing new knowledge and applying that knowledge to their existing teaching practice. This process of analysis was developed to categorically find answers to questions that focused on the professional learning of the instructors. The questions under study were as follows:

1. What is the process of learning within a professional learning team engaged in learning about formative assessment?
2. How does the process of learning in a professional team align with the classroom implementation of formative assessment practice?
3. What impact does the culture of the students have on the instructor's engagement in formative assessment practice?

At the start of the study, I was equipped with a set of characteristics that emerged from the literature review establishing commonalities between formative assessment practice and professional learning communities. These characteristics demonstrated learning behaviours of the students and teachers as they worked together to reach learning outcomes. The instructors in this study were brought together to learn a new method of teaching and were expected to try new strategies and activities to enhance their practice. The directed content analysis followed a series of phases, each having rules that identified operational definitions based on the common key strategies of the aforementioned genres of learning.

As noted in Chapter 4, analytic memos were used during the transcription of the professional learning teams' meetings. The memos became a source of reflection on the appropriateness of the original coding scheme. This process led nicely into Phase 3 of the analytical framework, which was used as an opportunity to refine the codes. To demonstrate the effects that the analytic memo process had on the coding, the following description recounts what led to refining the codes.

3. Preliminary Findings as a Result of Analytic Memos

The first round of analysis produced criteria on which to refine and define the original coding scheme. This process also revealed characteristics which were not originally identified in the coding. The following outlines the findings from the analytic memo process.

3.1 Analytic memos.

Transcribing and responding through analytic memos brought forward issues related to working collaboratively in a professional learning team. First, the memos brought forth individual behaviours that could have an impact how the group worked as a unified, trusting and experience sharing team. Then, issues were revealed that evidently needed to be acknowledged, and the next section elaborates on the idea of group dynamics and the attributes associated with their participation in a collaborative learning environment. Finally, the analytic memo process was the first step towards recognising the significance of cultural differences and the instructors' responses to those differences in their classrooms.

3.1.1 Instructor behaviour.

It appeared evident in the beginning the instructors required some time in getting to know one another. Although, they all worked in the English language department, the department had approximately 130 staff so it was easy to stay within a small circle of colleagues and not venture beyond that comfort zone. As a result, the instructors initially spent the first couple of meetings becoming familiar with one another and the task they had before them; understanding the professional learning package and the expectations of working in a professional learning team. It also appeared the instructors worked well together as there was some initial negotiation and cooperation concerning the meeting days and times amongst members in both groups.

With time, however, what emerged was they were in good shape to support one another as the project progressed. Both groups found that what they had in common were the department's general issues, such as curriculum (or lack thereof) and leadership (again, or lack thereof), which opened an avenue for discussion and trust building.

Another group dynamic observed through the analytic memos was how the two groups approached the learning package. Group 2 seemed to lack a strong organised leader, in contrast to Group 1, which had an instructor who immediately directed the learning group through the first chapter. She surmised they should

> read the unit, we answer the questions, we come back, we summarize the unit for everyone and I guess if we have time during the week, we could, for example I could test this, give my feedback and then you guys can decide if you want to incorporate that into your class.

Group 2, on the other hand, appeared to lack a member who was confident enough about the professional learning team idea, understood the expectations attached to the process of collaborative learning, or could explain to others the direction and day-to-day workings of a professional learning team. After some discussion and wrangling with the concepts, however, one participate suggested they look at the reflection questions at the end of the chapter which seemed to set the pace for the group.

When one is working in a professional learning team, there are rules of conduct offered to help all members feel comfortable and confident. For example, what is said in the group is accepted and respected. These rules allowed the members to build trust and, with this premise, they would not be judged on their classroom performance or how they might perceive the learning process. What was common in both groups was they happened to have one instructor member who broke one of the rules by often indicating "I do that" or "I've done that" or "I tried this" when others were sharing their experiences. Such an approach could have limited others' willingness to continue to be upfront with their ideas or share their classroom practices. The analytic memo process was valuable as I was able to identify a potential area of concern thus noting this particular aspect for further analysis.

A couple of possible limitations was initially noted in the analytic memos. The first was that one instructor team member was unprepared for the chapter discussion, which resulted in her steering the group towards discussing curriculum issues rather than formative assessment techniques. That discussion lasted 26 minutes. Another group member, however, decidedly recognised the discussion was off topic and finally reviewed what the article was about, bringing the discussion back on track. I realised at this point that both behaviours spoke to the instructors' learning styles as one's unpreparedness was the opposite of the other's; that the instructor had read each and every article in the package regardless of whether it was her turn to lead the discussion. I also realised that the person who was unprepared for this

meeting was the same person who lacked the ability or interest to reflect on her own teaching which led to the second possible limitation.

This limitation was somewhat related to the previous one. Although, most of the instructors appeared to be very self-aware, there were a couple who never referred to anything that related to their strengths (what went well in class and why) or weaknesses (what could have been done better and how). Instead, they merely referred to what they did in class rather than how they felt about it or how it could be improved upon. I had to question my assumption that everyone had the ability to reflect on their own behavior, one instructor included in her journal response, "I am not sure if the questionnaire reflects exactly who I am as a teacher because it is hard to self-evaluate. It is hard to look at oneself without bias."

3.1.2 Cultural differences in pedagogy.

One of the first points to be gleaned by the researcher came from the professional learning team referred to as Group 1. In their discussion, it sounded as if the instructors felt a great deal of trepidation with taking formative assessment techniques and strategies into their classrooms. They made reference to their students' culture and the apparent inability or unwillingness of them to respond to self-assessing their work or the work of their classmates. It was generally felt by the instructors that knowing the students the way they did (since they had spent one, two, or more years with the Qatari students), they would not be able to embrace higher-level thinking concepts such as self-assessment. Reference was made to the students not being interested in learning per se, but instead were the type of students who would rather just have the answers. An example of this came from one instructor, who said,

> La - My boys - check, check, check; they don't even read the questions; they don't even think...like it's not a matter...I can't even imagine them after working on it for weeks and weeks, them being able to self-assess…I can't imagine it.

She was referring to how her students generally reacted when they were given any type of checklist to assess their classmates' work.

Confirmation of the instructors' understanding of their students' learning was noted by H in professional learning team Group 2 who said in response to a comment regarding the students' learning experiences in Arabic school, "and so it's not about thinking or understanding…it's just about getting it right."

Later on, during Group 1's sixth meeting, another comment referred to the type of learning styles by making reference to the fact that the students were good at memorising. With that recognition, this instructor said she had learned to use patterns and examples to teach writing. N indicated she showed the students samples of different quality levels of writing paragraphs, and often the students memorised the final example. It was her belief that "they're still using some sort of English and a skill to get that writ-

ing down" even though the students were not positioning themselves to learn the skill of paragraph writing. La added,

> When I'm introducing a type of writing, I like to deconstruct one and then reconstruct one together. Then they do one on their own but whenever I do that at least with this group, they just copy the one we deconstructed...like it's not a guide anymore now it's the truest sense of the word model...and they'll just substitute that data for their data so I can't do that...

Adding to that discussion another instructor indicated,

> Li - But I have students who after we get the big fancy paragraph, the 100 percent one...so teacher, if I write like this...I still pass..lol...yes, you will pass with this...you will get a 70...you will pass with this; you will get an 80...but I think the numbers seem to help because I think it's something they understand.

Moreover, another comment made reference to the students' secondary educational learning experiences and how that created a dependency on the teacher as the authority. Li said her students told her their previous teachers "and culturally, I think this is where they've come from....from you know what we understand from their secondary which is they gave them help all the time". She believed that developing higher order skills, such as understanding how to transfer a skill, decision-making or critical thinking to allow them to self-assess their work, was non-existent.

As the meetings progress, cultural references continued to reveal themselves with regards to the students' ability to self-assess. For instance, one instructor doubted that her students would be able to self-assess when she said,

> Me - like we're not even at the reflective stage to say what it is you think the teacher is looking for...it's like, we're at the stage where it's like you gotta do it this way, you gotta do that and just kind of like get on the boat, right...like they weren't even on the boat.

Later in the discussion, it was pointed out that one instructor had given up on a project using self/peer assessment because she wasn't receiving anything useful.

Finally, in reference to the students' ability to focus in the classroom, H stated her students lacked any interest in learning as evident when she said, "They're not going to remember…it's like I've never taught it to them before." The solidifying comment from La was "we have to change the culture of learning."

It was during the process of transcribing the professional learning teams' meeting discussions, that I recognised the trepidation the instructors felt about using formative assessment strategies with their students. They be-

lieved their students were going to have a difficult time responding positively to the concept of self-assessment because of their learning apathy and lack of interest. Such information was noted as I applied the analytic memo process, and by reviewing the analytic memos I became aware of possible limitations to this study. This awareness had thus enabled me to bring into subsequent professional learning meetings the experience I had had with my students and their responses to formative assessment strategies. By choosing ethnographic case study as the methodological approach for this study, I was able to invoke my participant observer stance to provide expertise and knowledge suitable to the role of educator, while at the same time, encourage the instructors to keep trying and not give up too easily.

3.1.3 First round of analysis results.

To illustrate the first round of data analysis, Figure 5.1 depicts a concept map that identifies the categories as they emerged in this study. What had become evident during this first round was the instructors' sharing of information. The professional learning team, as depicted by the group at the top of Figure 5.1, was the focal point by which to make comparisons between the process of learning when implementing formative assessment practice and the process of learning for instructors of a professional learning team. Suffice to say, the recognition of the groups of categories presented the opportunity for revision of the codes.

Figure 5.1 Categories Realised During First Round of Analysis

As displayed in Figure 5.2, categories emerged inductively revealing the collaboration/interaction that took place when groups of professionals decided to work together. Although, conceptually, collaboration/interaction was one of the identifiable characteristics, as noted in Figure 4.1, it was not chosen in the original list of codes. What had become evident was the importance of collaboration/interaction to the process of learning; either stu-

dent related or instructor related. Clearly, without collaboration none of the other characteristics/categories of coding would have had an opportunity to be recognised. As a result, another visual display emerged that assisted with revising the codes.

Figure 5.2 depicts the re-formulation of the initially identified categories and had provided an opportunity to refine the codes so I was better situated to analyse the data. As the analysis proceeded, I realised that a lack of sharing meant less professional learning. As the instructors continued to engage in the professional learning teams, they relied on one another to guide and/or direct the course of the discussions while together in their groups. Addressed in the analytic memos was the instructors' behaviour which had led to refining the original codes. As a result, I was equipped to identify key areas of sharing within each of the codes that had allowed a demonstration of the instructors' behaviour. With the refined codes in hand, I was now able to realise a format for displaying dialogic statements made by the instructors as they conversed in their professional learning teams.

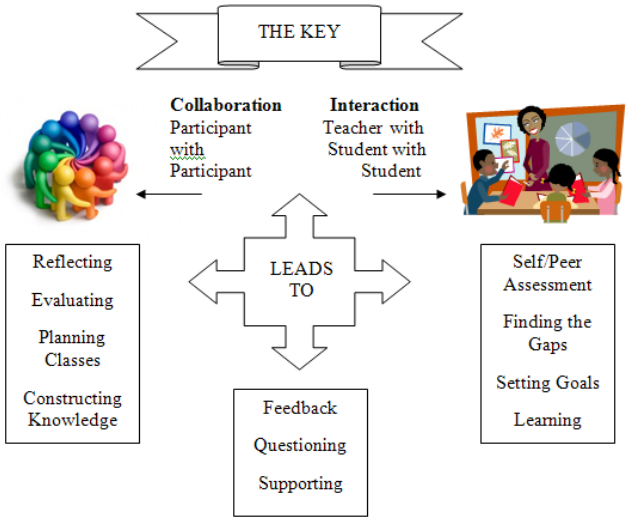


Figure 5.2 Inductive Categories from First Round of Analysis

3.1.4 Concluding thoughts.

The analytic memo process was an invaluable beginning for two particular reasons and, as such, had acted as the first round of data analysis. First of all, through the analytic memo process, I was able to respond to the instructors' discussions by providing them with questions for reflection, discussion and direction. As well, it provided me with a chance to become the observer-participant that Caulderon (2011) stipulates is an opportune time for the researcher to gain valuable data while being able to share knowledge about the groups' discussions.

Secondly, the analytic memo process had become the stepping stone to identifying themes that were not initially brought forward in the literature review. This process had also given me the occasion to review once again the literature and I was able to fill in the gaps that might have been an obstacle further down the analysis process.

The remainder of the chapter consists of the presentation of general findings. The following discussion is meant to contextualise the study findings.

4. General Findings

4.1 Introduction.

The data collected was acquired through four different data collection tools: Journals, focussed discussion groups (professional learning teams), observation/feedback, and student focus group. Most of the data stemmed from the professional learning team discussion transcriptions. There were ten meetings throughout three semesters during which time the instructors kept journals to track their engagement with formative assessment practice. One classroom observation per instructor was done in the final semester and a focus group of students selected by the instructors was held to elicit their perceptions of classroom activities.

Before they began to participate in their professional learning teams, all instructors completed a self-assessment questionnaire to give them an understanding of their individual strengths and weaknesses in the classroom (Appendix G). The intention was so they could respond to the questionnaire in their journals and then to do a reflective comparison at the end. As well, the journals were meant to record any thoughts they may have had on the learning process, when they attempted to use formative assessment strategies with their classes, as well as to record student responses. Although, all instructors were expected to keep a journal, only three actually completed any sort of journal per se that contained data for analysis. Recognising the instructors were not responding to keeping a regular journal of learning, a reflection sheet was prepared using the guidelines for journal writing (Appendix H) which was used in an attempt to coax instructors into writing about their classes. Instructors were somewhat more responsive to that format, four more completed sheets that described a classroom activity and responded to how they felt the activity went and how the students responded.

Most instructors, however, responded to reflective questions that I as participant observer gleaned from the teams' discussions as they met. This format contained some rich descriptions of their experiences in the classroom as well as how they felt about formative assessment, their students and learning in the professional learning team.

The next section presents the codes through discussion and table format. This is followed by presenting the results of the observations and the student focus group meeting. It then describes the learning as it takes place within the professional learning teams and provides scenarios of learning opportunities based on the conversations that occurred during their meetings. Snippets of the conversations are provided to elaborate on the opportunities as they arose. To conclude the general findings section, a demonstration of the learning process is presented that establishes how the instructors interacted with formative assessment practice.

4.2 The codes and the data.

The first question in this study addressed the instructors' process of learning as they engaged in learning and applied newly constructed knowledge. The

second built on the first by providing a way to demonstrate how the instructors' learning aligned with the process of learning experienced by students through formative assessment practice. To do that, codes were created in order to establish answers to the questions. Each code was representative of strategies used in both formative assessment practice and professional learning communities.

This section presents all codes, their definitions and rules identified in Phase 3 of the Analysis Process (Chapter 4). Discussion of the codes begins by identifying how each code fits into formative assessment practice and professional learning teams. This is done to clarify the selection of specific data. Each code describes the notable behaviours and represented by examples of corresponding statements, drawn explicitly from the professional learning teams' discussions. For some codes, corresponding reflection statements from instructors are also present and/or through observation. Following the discussion is Table 5.25 that represents a condensed version of the discussion for ease of reference.

Tables of dialogic statements were drawn from the professional learning teams and represent behaviour relative to the codes. Full details of these tables are located in Appendix L. The tables appear in an ordered timeline of occurrences as the instructors shared their thoughts, ideas and opinions in their respective professional learning teams. Each team had ten meetings, therefore, the tables are designed to illustrate how the discussions developed by identifying the beginning (first three meetings), middle (next four meetings) and end (final three meetings). Specific statements are selected and inserted in each section hereafter which provides an example of the data contained in each of the corresponding tables.

In representing the instructors' personal thoughts, Appendix M displays tables that include comments made by the instructors either through their journals or responding to questions posed by the researcher, as noted previously. Not all codes have reflective comments because the topics of their reflections may not suit the definition or its coding rule.

Each code begins by stating its relevant connection to formative assessment practice and professional learning teams. A brief description of what the code looks like follows to provide the rationale for the selection of the specific statements.

4.2.1 RFLPr - Reflective practice.

Code	Definition	Coding Rule
RFLPr - Reflective practice	Instructor draws on past experience from classroom and prior learning	- any reference made to what they did in the past including: classroom (in this job or prior to), attending conferences, workshops, or any other formal education (university courses)

Reflective practice is a key concept to both formative assessment and professional development. When a learner understands where they have been, what went right or what was unexpected in order to identify gaps in their learning, they are in a better position to grow and perform more astutely to

achieve goals that are set out before them. The instructors were asked to reflect on their practice through the use of journals. Their reflections, however, do not end there as they shared many past teaching experiences with their colleagues and given they were in a trusted environment were able to express how they felt about that particular experience. Li was noted as saying, "The fact that we're coming together with this group and reading the articles, it's kindled the embers of reflection and where can it go."

This code was given a definition and rule following the analytic memo process which only took into consideration the instructors' learning and/or professional experiences as teachers. Further analysis, however, established that the coding rule was not broad enough to cover the areas of discussion. Given the nature of the professional learning team environment, instructors reflected on various personal aspects of their lives as well as their professional spheres. A complete set of statements from the instructors are presented in Tables 5.1 through 5.5 (Appendix L). Specific statements for demonstrating the code follows.

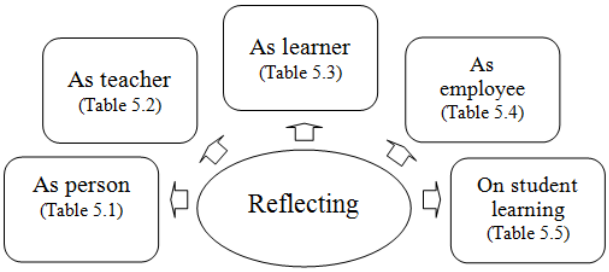


Figure 5.3 Inductive themes – Reflective Practice

4.2.1.1 Reflecting as person.

Reflecting as person is taking a critical look at oneself; being self-aware of one's personal characteristics such as likes/dislikes, behaviours, values, attitudes, thoughts, etc. (Morin, 2005; Myers, 2003). Table 5.1 demonstrates that the instructors began almost immediately to reveal to other members of their group how they saw themselves as people, where they came from through family anecdotes, and things they had done in past lives. An atmosphere of trust and comfort that allowed the instructor to feel safe enough to share their personal feelings was revealed during the second meeting when one member shared with the others that she had a sister with learning disabilities. This disclosure may have helped to ease the others into sharing on a more personal level.

Although most of the discussions throughout the study were around issues having to do with formative assessment, curriculum and students, Table 5.1 reflects some of the more personal statements shared by the teams and demonstrates a level of openness and frankness. For instance, Mo revealed she "was a copy editor and proof reader for years and years and years and when I was proof reading I could only do one thing at a time". That statement reflects one's personal professional life and gives a hint as to her preferential editing style. On the other hand, this statement from N, "I told one guy... because he wasn't putting in periods and I said reread this and see my hand around your neck (everybody laughs) and he put in all his periods!!" demonstrates her sense of humour.

What is demonstrated in Table 5.1 is that the instructors appeared to have more personal information revealed at the beginning as they were getting to know one another. By the fourth and fifth meetings and onward, however, the discussion moved away from the personal into areas more concentrated on formative assessment.

4.2.1.2 Reflecting as teacher.

In 1933 John Dewey claimed that reflective thought is essential for effective practice. Teachers need to regularly evaluate, assess and seek alternative methods of learning to ensure their students can successfully achieve outcomes. The statements in Table 5.2 express the instructors' thoughts about their teaching situations and how they responded to those situations as teachers. An example of what an instructor said about themselves as teacher is,

> N - Can I say something...I've got to tell a little story which I actually wrote in my journal too. First, when we started this maybe a month or so ago now, one of my students in a regular quiz put down this...she wrote this great sentence which used the right tense and the possessive form and everything and the vocabulary. And I remember looking at it and I thought, wow, that's great. Normally, you just mark it right but I highlighted this one and I wrote beside it...this is a great sentence...this is a perfect sentence for...So then I noticed she used it, she started using it in class when I'd be asking, you know, maybe for some other thing but she'd work in this...my uncle's house... but the best thing was that one day the guy sitting across from her used it. So I thought, hey, maybe it was useful...not letting that good thing that she knew how to do...not to just say oh yeah right but to highlight it.

When reflecting on themselves as teachers, during meetings 1 to 3, the instructors restated what they did in their classes. For example, J said,

> We talked about the international dhow show and we talked about the art on the boats and so I was trying to bring it into context, you know I'm not an expert in that either but I thought let's just try and....

As the meetings progressed, however, moving into meeting 4 and onwards, they began to show a deeper understanding of applying the strategies of formative assessment by adding a critique or judgement on their performance. By that time J stated,

> ...you know what I did here, I realised that now that I have this activity that I will do it next term but now I will prepare something before I do in class. This just happened like this and I was writing things on the board...I was using this formative assessment tool on the board, you know, I had nothing prepared and I thought okay, well, it's for this activity but next term I would like to use it...like have something before.

The conversations then moved into giving suggestions on how to use formative assessment strategies. On using effective questioning, H offered to another,

> It helps to ask the students, why did you say that answer...I used that and they've come a long way in that I got some answers...starting to get answers to explain how he came up with that answer or why did you give me that answer and he will say because...so it's working.

The professional learning team discussions on formative assessment practice progressed in three ways: from restating what they did in class, critiquing what they were doing in class, and then providing suggestions to others on how to use formative assessment strategies.

4.2.1.3 Reflecting as learner.

Effective professional learning practices take reflection as one of the major contributing factors to developing effective teaching practice (Cole, 2012). An effective learner cannot actively pursue implementing new strategies into their teaching practice without stopping to think about what effect the strategy has had on one's students and/or to understand how one can move forward. The instructors in this study revealed their position as learners through the statements outlined in Table 5.3. Comments that follow either target an instructor's particular learning style, application of activities, demonstration of understanding, or level of comfort with using formative assessment strategies.

Instructors revealed various methods of learning and what their preference was. For example, N notes, "Because that's how I learned, I had to see the text when I'm hearing things, I get some of it but if I can see the text and hear it as well, it just sort of clicks" in reference to learning a new language. Characteristics of effective learning are also revealed through the above statements.

Recognising one's weaknesses to fill in gaps, making inferences from contextual clues, and asking for clarification are all examples of effective learning strategies. J admitted she learned better when she applied a concept because this helped her to understand; putting the abstract into a contextual environment.

> I'm going to probably do them all anyway because, you know, I just try that. It's not that I don't mind listening to a summary but I feel I'll get more out of it if I actually like, read it and then answer the questions and try myself.

The last statement made in Table 5.3 refers to how the students were good at memorising and this instructor admitted that she too learned in that way but took a step further by putting things in matrix form.

More learning strategies were revealed in the instructors' journal reflections. This was due in part to questions posed by the researcher, but also because

the journals provided a more confidential environment that ensured no judgement was made. Several comments were made ranging from working with others such as,

> We learn so much from each other by sharing our teaching experiences and tasks, etc. that work in classes and ways to approach a lesson that complement or mirror the readings" to more specific learning strategies like, "I like making notes and analysing what worked or didn't work and how I might change it. And I like trying out a different approach. However, relating this to colleagues adds a new dimension; it often offers new perspectives, new ideas which I hadn't thought of. And I learn by listening to my colleagues' experiences.

The instructors' comments regarding their preferences to learning appeared to increase, beginning with the fourth meeting and remaining steady throughout the rest of their discussions.

4.2.1.4 Reflecting as employee.

As time went on, it appeared instructors became more comfortable with one another and revealed that level comfort in sharing their thoughts, opinions and, frustrations about what it was like to work at CNA-Q. Table 5.4 illustrates some of those expressions. Bringing work-related topics to the discussion appeared to just flow in naturally for one of three reasons: a) an instructor felt frustration from the days prior to the meeting, b) how the change to their personally developed materials might have been done in vain because of the instability of their current positions, or c) the curriculum challenges they may have had in that particular semester.

This kind of discussion spoke to the level of openness, or frankness, the instructors felt they could share at the meeting. During the first three meetings, only two comments were made. However, the frequency of occurrence increased during the next four meetings, and only slightly waned in the last 4 meetings. With regards to the instructors' journals, no comments were made in reference to themselves as employees. Instead, they focussed only on themselves as learners, teachers and their students.

4.2.1.5 Reflecting on student learning.

Professional learning needs to be evidence-based and it is through reflecting on how the students are responding to a given situation that informed decisions can be made for future use. The statements in Table 5.5 express insights into the instructors' perceptions and/or experiences with their students' learning.

At the beginning of the study, when discussing their students, instructor comments reflect trepidation in attempting to use formative assessment strategies based on their students' behaviour towards learning. La noted, "I can't even imagine them after working on it for weeks and weeks, them being able to self-assess…" While J followed with,

> ...ah, teacher I can't do this...teacher, I'm not sure. The reason I'm saying this is because at the 106 now, everything they do is something they want to show it to me....is this right? Is this right? Always looking for approval, assurance.

During the middle four meetings, there was still some doubt as to whether the students could adapt to self-assessing their writing because, as La stated, "...they're not used to...like they're just used to writing a sentence and getting immediate feedback...teacher is this right...every sentence…so it's a big deal." The instructors endured, however, and during the last three meetings as they were trying their self-assessment tools with their students, they still had comments such as, "Li…there was not very many wise to their own results and they weren't getting any wiser from their research so it was pretty linear and just facts based."

As well, during these meetings, instructors made several comments on their students' ability to transfer the knowledge from one context to another as N pronounced, "...for me what's frustrating is the lack of connection, they're not getting the connection. I could go in tomorrow and teach persuasive paragraphs and they wouldn't see any difference...they would think I was teaching persuasive all the time." Finally Mo queried the students' attitudes towards learning when she said,

> I think of how much the students want to learn...as much as I adore my class this semester I think there are two of them out of 11 who actually care about being there...no three...one keeps missing class so I forget about him but I think there are other reasons related to that but the rest of them sit there like...you know...I think the difference is normally they'll sit there and go blah, blah, blah in Arabic the whole time, but this class is different they just sit there like this (she makes a gesture of being quiet and uninterested) it's a whole different thing.

4.2.2 EVLPr - Evaluative practice.

Code	Definition	Coding Rule
EVLPr - Evaluative practice	Instructor makes decisions of her class practice and choice of formative assessment tool	- judgement placed on her own behaviour including: classroom, learning group, with other colleagues

Evaluative practice goes hand-in-hand with reflective practice; both are paramount in the new tenets of professional development. In formative assessment practice, self- and peer assessing are key strategies that develop greater metacognitive abilities in students.

The Oxford Dictionary (Hornby, 2010) defines evaluate as forming an opinion regarding the value of something after thinking about it carefully. Contained in Tables 5.6, 5.7 and 5.8 are opinions the instructors had with respect to themselves, their teaching practice and their students' ability to learn. As well, there are many evaluative statements that came through the reflective responses. Although some of these statements are also reflective

of the instructors' learning, they are selected for this code because they are judgements on self and their teaching.

4.2.2.1 Evaluating self.

Table 5.6 contains statements made by the instructors that make reference to how they did things or what seemed to work for them. When the instructors were talking about how they were going to approach introducing formative assessment practice to their students, La said, "I think for me I would need baby steps....from the beginning of the semester starting to change the mindset." This instructor seemed to know how she needed to do things in reference to coaxing her students into accepting formative assessment practice. She established that it was easier for her to plan small lessons rather than deal with student cognitive dissonance. Yet, J was more open about what she jokingly saw in herself, "That's so nice...I'm retarded because I wish I could do things in color." That comment was in response to an instructors' self-assessment rubric that she developed by using colour coding to present the various categories for assessment. This instructor recognised her limitations when it came to creativity.

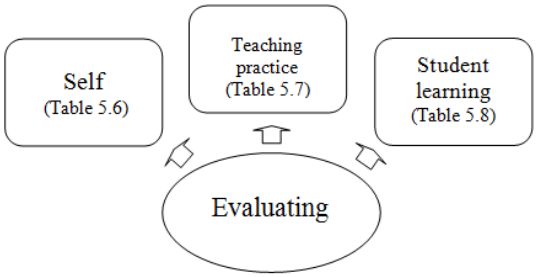


Figure 5.4 Inductive themes – Evaluative Practice

The instructors made some comments about themselves in their reflective responses. On responding to the questionnaire, an instructor revealed she "scored lower on the actual implementation piece. I think it brought home to me that knowing something and actually putting it into practice are two very different processes" indicating she recognised the need to focus on how she does things in the classroom. The following comment made by another instructor spoke to her need to be part of a group in order to keep her learning alive. She said, "Being part of this professional learning team was exactly what I needed. Due to a number of constraints, our group didn't meet this semester and I noticed a big difference in my teaching."

While the instructors made evaluative statements on self from the beginning to the end of the discussion group meetings, the statements did not occur often but maintained an intermittent pace.

4.2.2.2 Evaluating teaching practice.

Analysis revealed that when making judgements, the instructors tended to focus more on their teaching practice than either themselves or their learners. As the meetings progressed and instructors became more familiar with formative assessment practice, they tried using the strategies in their classrooms. As a result, they were more able to share their thoughts and judgements about their practice.

Given that the raison d'etre for participating in the professional learning team was to learn a practice to enhance their teaching style, it followed that most of the evaluative comments were on their teaching practices. For example, in referring to her use of feedback, one instructor believed, "I think I offer students a picture of learning targets and I think I give them feedback but I think I need to be more specific with the feedback.," and she had "tried several strategies…with some activities working and others not so much". Another said, "I am thinking and planning more with a formative assessment approach in mind for everyday tasks. I am more aware of ways I can discover if students are understanding, and what will I do or change if they aren't." Finally, one more comment from an instructor who took a more critical look at her teaching practice, "I have not had success with self- or peer evaluation in the past, and I suspect it was because I didn't spend enough time setting it up properly," indicated she knew she needed to give attention to her planning.

4.2.2.3 Evaluating student learning.

There were many comments regarding students throughout the entire group meetings however, only some were selected for this code and presented in Table 5.8. Although many of the comments about students learning were evaluative, they fit more aptly in other codes. During a group meeting, when N was talking about working with her students on paragraph structure, her frustration came through because her students continued to not understand what a paragraph should look like. She said, "Maybe they're not smart…maybe they're just not intelligent…I don't know…I don't get it because I'm not teaching them anatomy…I'm not teaching them how to dissect a fetal pig." To which La responded, "They could do anatomy if it's just memorisation," making a judgement on their learning styles.

Most of what was said about student learning could be defined by culture because the culture of learning within this student population presented a lackadaisical attitude. Another comment made in the very last meeting when the group was discussing an observation was "Li…and you know our students are actually very poor at self-directing themselves and management." Once again, this statement brings into question whether it made reference to the culture of learning or the student learning.

As already noted the instructors made many comments that referred to their students' adaptability to being active participants of their own learning. Those comments began in the first meeting and continued throughout the course of all professional learning meetings.

4.2.3 PDGY-Gs - Pedagogy: Setting goals.

Code	Definition	Coding Rule
PDGY-Gs -Pedagogy - setting goals	Instructor plans for class: with herself (use of formative assessment tool) and with students (direction of the lesson)	- anticipation of what the instructor intends to do in the future in all areas of teaching and professional learning

An essential component of formative assessment is planning. It requires teachers to plan learning progressions which scaffold the concepts and

skills. Those progressions are meant to identify trigger points for assessing how students are progressing in their learning. Formative assessment also requires teachers to track their students' progress, and if necessary slow down, reinforce, or even change their method of teaching to ensure their students understand and are absorbing the concepts being taught.

Although setting goals is not a specific characteristic of a professional learning community, as an instructor or teacher, effective practice dictates that one be organised. They must know in advance where the teaching will go and how the students will be helped in getting there. An expectation for educational practitioners is to engage in professional learning to keep their practice flourishing. As a result, instructors needed to make a plan outlining their professional development.

In sifting through the discussion groups' conversations, goal setting was evident in three distinctive themes: for their own professional learning, for their future teaching practice, and for activities they would try when teaching their students. Tables 5.9, 5.10 and 5.11 illustrate the statements of the instructors regarding those themes.

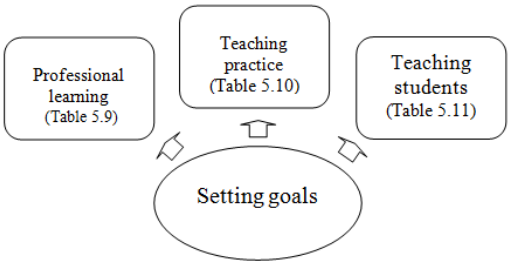


Figure 5.5 Inductive themes – Pedagogy – setting goals

4.2.3.1 Professional learning.

There were not too many specific comments made that reflect the instructors learning direction. However, there were a few as individuals planned next steps in learning. Table 5.9 identifies comments the instructors made about their learning. When discussing how to create effective classroom discussions, Mo was skeptical and stated, "You know it's just not an appropriate pedagogical strategy in my opinion" and began to steer the discussion off-track. This exchange went on for a few minutes and finally, the member who was presenting that day, N, said,

> So I thought that this would be a nice segue into the second part of our discussion which was where are we going to go from here...I thought maybe those five points...we might use them to frame to either make a database or make a listing...techniques that we've talked about up to now...

She had clearly taken charge of planning next steps during this discussion.

Most of the comments in the professional learning teams occurred during the middle and at the end of the meetings reflecting that they began to understand the content and where they needed to go. Planning for their own learning was not the uppermost thought about strategy amongst the team members. Evidence that follows indicates the instructors were more interested in planning for the teaching practice and their students.

4.2.3.2 Teaching practice.

Table 5.10 demonstrates that teaching practice is separated from teaching students as the statements reflect aspects of their teaching the instructors could take away from this college and transfer to another genre. For instance, after a few meetings, H decided she was,

> going to use those (response cards) next time ‘cause they look like they're going to be really good, nice and anonymous, they can hold the card up here ...if it's a stop or I don't understand no one needs to see it. So I'm really liking them.

Her last sentence indicated that because she liked the idea of response cards, she would likely use them in any learning environment.

In discussing the use of student artefacts to represent high, medium or low, J said, “Start with the current teaching practices which is what I think we're doing, our practices and our views...identify what is working now, identify what we need to change, share student samples and I've already started collecting samples now.” This was an idea that could be used wherever she was teaching.

On the other hand, teaching practice was something that could be adapted to the group of students being taught, and this was evident when La recognised that they “…have had a big focus on writing in my courses...that's the thing I want to focus on next semester because that's how they learn the best, I think.” She was showing she would adapt her teaching practice to suit how her students learned.

Table 5.10 also presents those conversations that revolved around teaching practice, and they increased once the instructors began using various strategies or tools with their students. For instance, in the first three meetings, the instructors had no reference to their teaching practice that fit with this definition. The increase in discussion began with meeting four, and represented their level of concentration in what they were learning and in trying new strategies or methods of teaching. The last three meetings included the majority of comments regarding their formative assessment teaching practice.

4.2.3.3 Teaching students.

In Table 5.11, instructors often discussed how they saw themselves preparing and implementing a formative assessment tool they felt would be appropriate and easily understood by their students. During any given meeting, one of the instructors took charge in planning how the professional learning team should continue to move forward. That instructor decided whose turn it was to read or who should present the next chapter. Most often, however, when it came to discussing plans, instructors planned classroom activities that were appropriate for their students.

Most of the planning for teaching students started during the fourth professional learning team meeting. One instructor had just presented an article when she addressed effective questioning techniques, to which La responded,

> So if I just go through and mark....this one's wrong, this one's right, they don't have the chance but maybe I think I might do that for non-assessed, like when we do a practice before a test, I think I'm going to do that because I think it would be very good feedback for them...what did you write for this answer ...why ...and then we could talk about it.

As the meetings progressed, instructors continued to create and try formative assessment tools with their students. La planned for the next writing assessment:

> I am going to do this again because I have another writing piece and I want them to use the same tool...and I will do that, I'll have them in pairs...part of the tool at the end they have to check each other's spelling because it's hard to find your own spelling mistakes so I'll do the whole thing with a partner and I will decide who works with who and they have to do it all together...they'll go through one piece together, then they'll have to go through the other piece together, then they'll have to mark it and do the whole thing and that should help.

Although there were more comments related to teaching practice, Table 5.11 shows how the instructors thought about what they wanted to do with their students.

4.2.4 PDGY-EAL - Pedagogy: Engaging in active learning.

Code	Definition	Coding Rule
PDGY-Eal -Pedagogy - engagement in active learning	Instructor directs her own learning; takes lead in presenting assigned articles; in preparing the use of formative assessment tool	- behaviour that displays the instructor takes charge of her learning

Both formative assessment practice and professional learning espouse active learning as an important concept to advance one's knowledge (Black & Wiliam, 2005; Brookhart, 2009; Caine & Caine, 2010; CUREE, 2011; Gregson & Sturko, 2007; Popham, 2008). Formative assessment requires students to take ownership of their learning by self-assessing the work that they produce. They must decide what was done well and what needs to be done better. Teachers are required to create an environment that encourages students to be experimental, mindful and engaged. In doing so, they provide the tools for students to use that assist them in identifying the gaps in their learning and together they make a plan to close that gap.

As adult learners, the instructors have already shown their intention to actively inform themselves of formative assessment because they have agreed

to participate in this study. Does their participation demonstrate, however, that they are actively engaged in learning by simply offering to participate? In order to gauge a learner's active involvement, specific characteristics were identified for which their engagement can be judged. Active learners usually display behaviours such as engaging with materials, interacting with peers and the teacher, thinking creatively, asking questions, helping others by offering feedback, and sharing knowledge, to name a few.

Analysis revealed that as instructors engaged in learning, many of the aforementioned characteristics emerged, which was more than originally captured in the definition of the code. Figure 5.6 displays the themes as they emerged throughout the meetings.

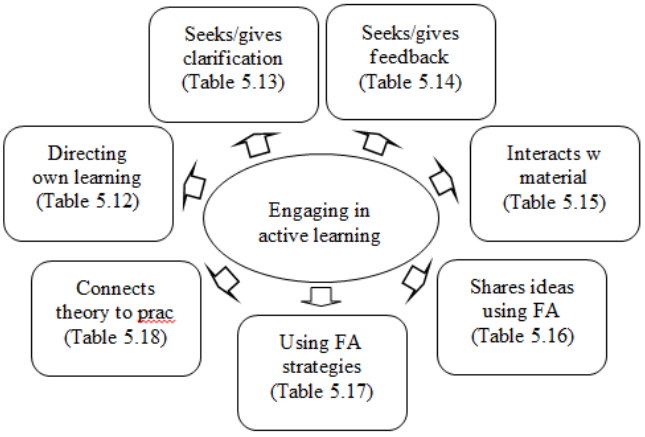


Figure 5.6 Inductive themes – Pedagogy – Engaging in Active Learning

Tables 5.12 through to 5.18 provide the statements for each of the themes that demonstrate instructors' involvement in learning what formative assessment is and how they could implement it into their classrooms.

4.2.4.1 Directing their learning.

As identified in the analytic memos, one group had a clear leader to guide the direction of the professional learning team. However, when it came to directing their own learning, individual instructors focussed on their needs or interests. Table 5.12 has many statements but a good example of focussing on needs or interests came from N, "Can I say something…I've got to tell a little story which I actually wrote in my journal." It was clear this instructor stopped the discussion because she felt her story was important, thus, taking the discussion in a slightly different direction that focussed on her area of interest.

Another example of directing one's learning was identified when La led the discussion by making a suggestion suited to her,

> so if we can figure out some other strategies...have the class mark things themselves or let's do some peer feedback, then I'm interested in that because it might do the same thing as feedback...well, it will do more than feedback that isn't read; I can say that at least." Then of course there was the clear statement which automatically got results, "I thought we'd talk about peer evaluation…

The instructors generally took turns when it came to directing where the learning would go. This characteristic was prevalent throughout the meetings, whether it was to do with understanding a strategy from the learning

package or what they needed to do to better prepare their activity for their classes.

4.2.4.2 Seeks clarification on content, on shared activities.

It is important for learners to ask questions if they are in a situation of uncertainty and Table 5.13 demonstrates how instructors did that. At the start of the professional learning, instructors had more questions. Those questions were generally in regards to the content being learned; whether it concerned strategies directly from the learning package or how a formative assessment strategy activity was used in a classroom. For example, it was not always clear to some participants how a particular formative assessment strategy would work. As such, La asked, "I'd like to know how we could use hinge-point questions in our class because we don't do a lot of content." which is a formative assessment strategy.

Another instructor asked a more specific question on how a strategy could be used in a second language environment. The following was a short discussion that provides an example,

> Me - How would you do this for reading? How would you do this feedback on reading...like say you're doing main idea, like they say I don't get... N - I guess there would be the questioning...what do you understand in this?
>
> D - Yep, questioning to find out what they don't understand." By the end of the meetings, however, most questions focussed on what everyone else was doing in their classes, "So when you say they don't get, what are you referring to…the concept of past tense or the formulation of grammar?

4.2.4.3 Seeks and/or gives feedback.

Table 5.14 demonstrates that in the professional learning teams, as adult learners, the instructors sometimes seek out feedback from their colleagues. This was generally done as the instructors experimented with a formative assessment tool they had designed. For instance, one instructor created a peer-assessment tool that required one student to listen to the presentation of another and write down words s/he was unfamiliar with. She claimed, however, it did not work well. H then asked, "When you gave them the assignment, did you give them those parameters? The reason I ask is, having learnt from them, they have to use five new words, you must use five new words...explain and pronounce…" Not only was this question seeking clarification but it was also giving advice.

Near the end of the professional learning team meetings, the feedback sought was more specific and generally based on classroom activities.

> Me - On a day to day basis…like it could be spelling or grammar…how can we build that in, I mean the questioning we can

> build in but how can we build in the self-reflection and how can we build in the matrix?"

That question was not referring to something that someone did, but rather on what she might do in her classroom.

Feedback sought really began once the instructors commenced trying formative assessment strategies with their students. As demonstrated in Table 5.14, giving or seeking feedback was more prevalent during meetings four through seven, and waned slightly in the last three meetings.

4.2.4.4 Interacts with material.

In a professional learning team the participants are required to read, understand and present a portion of the content they are to learn. Therefore there was more engagement with the materials at the beginning of the professional learning teams' meetings, since that was when the instructors were to read and present the strategies from the learning package. Table 5.15 establishes the difference between interacting with the material in the beginning as opposed to the end of the meetings.

An example of the interaction with material was demonstrated when a group member was presenting an article about the seven strategies that help students understand where they are now and where they need to go. One strategy is to ensure students have a clear and understandable vision; to lay out for the students where the unit will take them or what they will learn during that unit of study. An instructor doubted whether her students could handle that. In interpreting the first strategy the presenting D responded,

> What they also mean is and you don't need to give a plan for a week but also a unit by unit, so when you introduce a unit and I'm not saying our TPP guys are capable of doing this, but I see this being done with my daughter age ten and it's brilliant...before let's say their science unit, the teacher wants to find out what they already know so they get a little sheet saying in this unit...you know, essentially we will learn these concepts...what do you already know....almost like a K/W....like what do you know and then at the end or like some little mini test at the beginning and then at the end of the unit you come back so I think that's more what this...

In a more constructive way of interacting with the material, N said,

> That's one of the things I've been trying to do is trying to be very specific myself...like at the beginning of class trying to say this is what we're going to do today or this is what we're going to talk about and at the end you will know how to make an invitation and how to say if it's accepted or not. I've been trying to be more specific so I relate a little bit in terms of us knowing where we're going or not going.

Interacting with the material continued as instructors implemented the formative assessment tools they had developed for their classes,

N - What I started with my guys every day is make a note page so the date goes up on the board and they started doing this at the end of the class but now they're actually making it at the beginning and through the class so at the last five to ten minutes I say okay, now fill in your notes page. They're done so they can go so I gave them an outline which said I want something...a grammar point, something you learned in grammar…

4.2.4.5 Shares ideas using formative assessment tools/strategies.

Sharing ideas occurred when the instructors were learning about the formative assessment strategies or when they were experimenting with them in their classrooms. As confirmed in Table 5.16, some instructors were able to connect the formative assessment strategies to a previous experience. As one instructor was presenting an article from the learning package she came across an activity she was unfamiliar with and the discussion proceeded as follows: "J – "They use this think/pair/share activity...what's this? La – "Oh, we do that...first to think about the question, then talk to your partner and then talk to the group…"

Discussing the use of formative assessment strategies tended to be one of the situations where members built on one another's ideas, as discussed previously. A short example of that is,

H - As a kind of off-topic, I did try the (response) cards...for some things it was not good...hearing grammar without having to think about it, just responding yes or no...it was too complicated. I understand that because you've two sides of your brain working and your hands gotta work and you have to remember which one it is...is it the check or the x and you got hear it and process it. We were going yesterday 'cause I wanted to just hear it and respond...it was really just too much I would have trouble doing it too so in some other things...

Da - What if they just had the one card then...just the check and whatever was said right just put it up...

H - Aha, why didn't I think of that...that's perfect!

Table 5.16 exhibits statements that reflect instructor sharing. Throughout the meetings, sharing ideas on using formative assessment strategies stayed fairly consistent.

4.2.4.6 Uses formative assessment tools/strategies.

Of course, in the beginning instructors were not engaged in using formative assessment tools or strategies. Therefore, Table 5.17 does not display any statements from the first three meetings. As the meetings progressed, however, they were able to move from the abstract to the concrete. A significant part of learning derives from applying what is being learnt and, beginning

with meeting 4, this section provides many examples of instructors doing just that. By the end of their meetings, instructors were using formative assessment strategies in class, some for a second time.

An example of how Me used a formative assessment strategy with her students is,

> So they all got up and I said okay, fill it out and I had to help them a little bit and then they recorded their voices and they said, I sound so slow or that's not what I wanted. I said can you use the checklist, no they couldn't use the checklist...okay so today we did it this time. I gave them the card only this time they got it...they went up and they put everything on the board...they were really great and I reviewed the language that they should use and they wrote that down with their books open and then they did the speaking and so on Sunday, we'll do the evaluation. I'll just give them the cards and say now evaluate your speaker, did they say three things...because they had all the opportunity to generate it themselves and I wasn't telling them what to put up...I was leading them a little bit but I wasn't telling them...and it made a more lively class.

4.2.4.7 Connects theory to practice.

Table 5.18 displays the final characteristic of engaging in active learning: the ability to demonstrate understanding by connecting theory to practice. This concept occurred more readily at the beginning as the instructors familiarised themselves with formative assessment strategies. As active thinkers, the instructors were able to link what they were learning to similar situations they had done in the past or give ideas as to how a strategy could be used in the classroom. For example, as instructors were discussing a concept presented in a Chapter 2 article about getting the students involved in the learning process, N commented, "Yeah, involved in the whole process. Like having students...I just got it when I was reading Chapter 2, one of the thoughts that came into my head was having the students create a rubric in the class." She suggested a way she could get her students involved in the process.

Although connections waned slightly near the end, there was still an instructor who remained active in relating what was said in the discussion to improving her use of formative assessment. N claimed, "I need to put my ego aside and focus on getting them to really understand...just for themselves...if I could get one student to say...yeah, why is that, I would be so happy."

4.2.5 PDGY-Ef - Pedagogy: Effective feedback.

Code	Definition	Coding Rule
PDGY-Ef - Pedagogy-effective feedback	Instructor engages in critiquing colleagues classroom activities; encourages/directs students in learning	- the instructor will ask critical questions; make comments on what their colleagues are doing; make suggestions to enhance the work of colleagues

In a formative assessment classroom, feedback should indicate what the students are presently doing and what they need to do in order to achieve the learning outcome. In a professional learning team, feedback comes from a peer and is either sought out or given to provide insight on how improvement could be achieved. Table 5.19 provides examples of statements the instructors made that their colleagues could use to improve either their learning or classroom tool.

In the beginning, as the instructors worked through the materials, they gave examples of how feedback was used in their classroom. Once the instructors began trying different formative assessment strategies, they returned to the group to share their experiences with their colleagues; those discussions, provided opportunities for giving feedback.

The feedback in the professional learning teams, however, took on a different purpose. While in the classroom, the teacher provided feedback to students in order to successfully attain a prescribed outcome. The feedback provided in the professional learning teams, on the other hand, was used to build on using a new activity in the classroom. Instructors either co-constructed an idea on how to use formative assessment or they critiqued an activity in order to make it work more smoothly. As a result, feedback in the professional learning teams did not begin until half-way through the entire discussion meetings.

Each time an instructor created and implemented an activity using formative assessment strategies such as self- or peer assessment, they went through a similar process of feedback giving and receiving as demonstrated in Illustration 5.1.

Illustration 5.1

N - now when you come in next week, my group, I think I talked to you guys before about how I wanted the guys to sort of self-assess and peer-assess their presentation and I made up a little sheet to guide them but nobody did it or few or one or two people did it, some people didn't have their presentations ready, etc. So this time I formalised it very carefully and I put marks to it so they're going to get 10 percent. I divided…I learned a little bit from the first sheet, they didn't know who was supposed to answer which questions, because there was a certain amount of self-assessment and a certain amount for the listener, for the peer. So this time I separated that and there's a self-assessment sheet and there's a peer assessment sheet so when you come in, we're going to see if that will fly a little bit better...I gave them a date and I told them you will do it on this date, if you're not there you don't get the marks...if your presentation is not ready, you don't get their marks.

Da - unfortunately, I know we have to do that but giving marks to this kind of assessment defeats the purpose but I know we have to give them some incentive. I wonder if, maybe if you're going to try it next semester, if you didn't start it slowly in smaller chunks and then build up so that this will be the final one so that they get used to expectation that they're going to have to look at their own and they're going to have to look at somebody else's

De - they're just not used to it, right and they have to be trained because they've never done this before, they really haven't I don't think

N - so maybe...well certainly that was a mistake in the first one round...it was just too much coming at them and they didn't know what to do...that was part of it.

There was also, my directions I think were a little bit mixed because I had the two tasks mixed up plus there was no marks and they asked specifically is there marks. So, I hoping this will be an exercise and it will be interesting to have you there to see how it goes and if in fact, they will take it this time. And the other thing I eliminated all together was the assessment at the end when you're listening to presentation and you have to say...was the person making eye contact, da, da, da...5,5,5,5,5...no thought, anything, into it, right so I thought why do it.

Da - the other thing you can do too, is put a little comment box beside to justify...why did you give them 5, what did they do good

N - because they won't fill it because I had that at the end...tell me one good thing you liked...tell me one good thing the person can improve...nothing...everything good, very good, you know so it's like...so we're kind of trying to get them to do something they don't want to do or they don't know how to do or they don't see the value in doing it...

H - what level is it

N - 1070

H - would it be helpful, I don't know, I'll just throw this out as a question...as a policy of our department that these students learn this kind of thing from semester one, simplified form but the concept is there so that they're not doing it at the end of their term, you know

N - I think that would be an excellent idea

H - especially when the research is showing that that's what works

N - and you have to build on it

Da - but as you're going through the class, too, your questioning can also be a build up to this as well because then they answer, you ask them well, why did you do that or somebody else answers...well what is good about that answer...that kind of thing and then they get used to, even orally, in the classroom so that when it comes to written...oh yeah, okay we've done that kind of orally

N - Okay, that'll be some things for me to think about in terms of...the next go round...as you say to start it earlier. But for example, here does the presenter know the material very, very well, so the person answers yes/no and then I said why do you think this? And yesterday, we talked about I said, if you said yes, why would you say yes?

H - have you got sample for them to see

N - a sample?

H - a presentation for them to grade

N - we've looked at a couple of samples just to give them sort of the idea of something they have to produce; we haven't actually graded it

H - it might be good to grade

Da - that is a good idea (all agree)

In a reflection, an instructor wrote they,

agreed that it was hugely useful; the trouble is that it's necessarily one-on-one, which means that while one student is engaged, the other students are left cooling their heels. We weren't sure how to make it work. We loved the idea of having a rubric available to the students in easy to understand language, particularly for writing. We could use the generic one, which would have to be rewritten in student-friendly language. The students could learn to assess their own work and see where it falls short. It also lets them see what's expected of them. Rewriting the rubric is on my to-do list for after Eid. I want to get it done early so the students get used to it. It would also allow them to give peer feedback.

Giving effective feedback was also observed in the classroom during the second and third semester when the instructors were implementing the formative assessment tool they had prepared for their students. Details of the classroom feedback are discussed in Section 4.5, Observations.

4.2.6 PDGY-Eq - Pedagogy: Effective questioning.

Code	Definition	Coding Rule
PDGY-Eq -Pedagogy-effective questioning	Instructor engages in thought provoking/reflective discussion with colleagues; encourages students thinking process	- asking critical questions that invoke thought concerning what colleagues are thinking; how they use their formative assessment tool; how they interact with their students

In the professional learning teams, more often questions was used to elicit clarification on a particular formative assessment strategy or a specific point of interest when an instructor implemented a formative assessment activity as illustrated in Table 5.13 (Section 4.42 Seeks Clarification on content, on shared activities). Statements in Table 5.20 demonstrate, however, questions that go beyond just checking for clarification. These questions encouraged deeper thinking by having to analyse and reflect on a particular situation or student response. An example of the depth of questions, as noted above, is attached to each question in Table 5.20 that identifies the type of response required. For example, a good question that targets an evaluative response is, "Do you think oral is better? Or do you think writing is better…" in their discussion referring to feedback.

The instructors are adult learners and, as such, they are critical thinkers. Therefore, the types of questions the instructors used engaged in discourse that had to do with their teaching practice. The questions effectively used all taxonomy levels from recall to synthesis. These types of questions helped to support and guide the instructors' learning as they applied their formative assessment ideas in their classrooms.

Illustration 5.2 presents part of a conversation the instructors were engaged in concerning one instructor deciding to use self-assessment through an oral interview. As she explained how she would do it, instructors asked a series of questions to elicit more in-depth information about her idea.

Illustration 5.2

H - oh, when I went to the session the other day, I'm going to try this...on self-assessment I'm going to sit down and have a chat with them but...

Me - first the chat...what will you say to them?

H - oh, you know, how did you do? Is there anything that you didn't understand? Is there something that you'd like to talk about next week or now? ...whatever...a conversation with them and I'm going to do it at the end of the classes with them. So one of the things I'm going to do is set up a diary for myself and I don't know if this was my idea or if it came out of the speaker...it has my marks on it so it might have been something I thought of while he was speaking and it's called a diary of praise (or he did) and that's to celebrate...I forgot it, it's some politically correct word... celebrate their accomplishments so to make sure that I don't ignore D because D is quiet and you get three or four every week, I'm going to have a little…just a one pager which ones today and make sure that I do it at the time not after the fact.

Me - what are you going to do? Are you going to say these things to them?

H - yeah, I'm gonna make sure that you got a direct note about ....that's fabulous...no one else has done it like this...that's so interesting ...how good....check, okay that's done

Me - you're going to do it orally?

H - yeah, yeah

Me – well, where are you going to get these?

H - just from their work

De - the boys need that

Me - where are you going to make the list up?

H - I'm going to get my class list, right

Using effective questions with students was also observed in the classroom during the second and third semester when the instructors were implementing the formative assessment tool they had prepared for their students. Detail of how the questions were used is discussed in Section 4.5, Observations.

4.2.7 PDGY-Ka - Pedagogy: Knowledge acquisition.

Code	Definition	Coding Rule
PDGY-Ka - Pedagogy-knowledge acquisition	Instructor acquires knowledge individually through past experience / new content / outside experts; applies knowledge in the classroom	- verbalizes where and how the instructor may have learned something; connecting what they've read to classroom practice; making inferences about what they've read

The final descriptor of effective professional development and student learning is knowledge acquisition. A necessary part of learning is to be able to demonstrate what is gained through one's interaction with content and peers. Most expressions of knowledge were revealed in the first six meetings as the instructors read and relayed what they had read to their colleagues. It has often been said that the way to learn something is to teach it

and that adage was proven true each time instructors met. The following exemplifies a member explaining what a range-finding question is by providing an experience she had with a previous employer. "The range-finding question is where you look at what the students know at the beginning and this helps you to decide where to begin as a teacher, which I find quite useful. We've done that at Concordia, that was one of the things we do before we start each unit is we have these discussion questions that go through the whole unit...like you'll have questions that they'll see throughout the unit and you're asking the questions before and they're discussing it just to elicit...so you can see what they have and what you need to focus on ..."

Table 5.21 provides more examples of the knowledge the instructors acquired as a result of the interacting with materials, past experiences, and classroom practice. Table 5.18 (Connecting theory to practice) also demonstrates the instructors acquiring new knowledge because they could identify in practice how this theory fits into what they were currently doing or had done in the past.

4.2.8 CLTR - Culture.

CLTR - Culture	Instructor recognises: students are dependent learners; lack experience; need to be told what to do and how to do it; extrinsically motivated	- any reference made concerning their students learning behaviour

Given that this study took place in a Middle Eastern country, culture played a significant role. Throughout all meetings, references to the students by the instructors portrayed a range of characteristics that represent their classroom culture. Many of the statements have been placed in other codes due to its relevance in matching the definition of the code. Some comments, however, have been selected for this section because they better represent the culture in which the students exist. More statements regarding culture are also found in Table 5.22 (Appendix L).

A very noteworthy conversation one group had during meeting three acknowledges the mindset of the students with whom the instructors must interact daily. The discussion in Illustration 5.3 concerned giving effective feedback and how it could be done with lower level language students. One instructor suggested they keep the struggling students back near the end of the class while they let the others go, so the struggling students could get some one-on-one time with the instructors. Another instructor responded it would be more pedagogy that feedback, however, a couple instructors disagreed. They felt they could keep the students with similar weaknesses and have them work together.

Illustration 5.3

H - "they do like to help each other and I don't mean in a cheating way...they do like to help each...they do explain and they do it in Arabic... I don't have a problem with it so I found them really good that way...so something to think about. But even if we ...like we have sixteen to eighteen hours in there and so that's eight or nine classes, right? So we can maybe take ten minutes at the end ...even if you only did it at the end of the double block ...every two weeks they'd have you…one on one...they'd have you."

Mo - “and I tell you another little bit of upside to that, H, is that's a very good time to get to the disruptive ones too...it doesn't just have to be about spelling but it's Fahad we need to talk about the fact that you speak non-stop in class…because you would think with their collegiality, the loss of face and being reprimanded in front of their peers would be a problem for them...but it's not...”

N - “yes, we are other....”

H - “and they are the group, they are the tribe”

Mo - “they suddenly get great solidarity”

H - “and they have to...that's how they operate...they have to do it because they are operating in a tribe, right in a very very large family and they have to negotiate everything...they cannot...they will not lose face because that will affect everybody...it affects everybody...so all this negotiating this is where it comes from, right ...yeah, but I couldn't come to the exam...blah, blah and not related at all...and you are supposed to say yes, okay because that's what they do”

It was noted in the transcript that more discussion on cultural differences and how students behaved in class continued but not was transcribed; a time was noted as per the rules for transcription in Chapter 4, Phase 1 of the analytic process. An instructor finally brought the discussion back to feedback when she said,

> H - but on the trouble-maker thing...I'd like to set up a time for feedback but I wouldn't want to mix it up...mix the signals so the student doesn't know if he's coming for writing or is he coming...you know...so if it's established that...you make the trouble-maker wait until you're finished...anyway, so that's it on the feedback...we need to give more, we need to be positive, we need to get them to think about their own mistakes and their own learning and we need to show them what the target was...here's what we were aiming for and you didn't quite get there...you did this, this, and this right now let's look at this so we can make it better. So this thing about doing it again, I think is really important. It's important to me.

Continuing in that vein, there were occasions when instructors made cultural references to their students in their journal writing. One instructor says,

> It is my experience that students in the TPP program, at least at the lower levels, are quite happy that their classmates are successful. They would prefer to see them succeed than to be themselves rewarded for doing it right the first time. I think that is a part of what it is to live in a ‘tribal’ culture.

Many similar conversations took place, during all meetings, in that both teams emphasised the cultural difference between what the instructors were trying to do and how the students would accept it. For instance, instructors

discussed how the students learned and Mo gave an example of how the students could use their skill of memorising when it came to testing situations,

> One student came in ...a woman and what you had to do was speak to the picture and that was monologue task 1 ....she had memorised the whole thing even though she didn't know what the picture was going to be...all she knew is...she had the format and you could tell she went into robot mode and then where she had to fill in the blanks you could see the words go in and the robotic sound came out. It was fascinating. And then the next one was about…let's answer questions about these pictures, she went into robot mode so much and it was that memory....don't involve your brain at all just...

Another comment made in a journal referred to the students' ability to understand that it was okay to have a wrong answer. She stated,

> they need to have their work marked with check-marks; x's are not acceptable. If they have moved a bit from copying from a stronger student, but get something wrong, they will erase the wrong answer and put in the right one. *I think this is one of the biggest hurdles teaching this group of students. Without getting over it, they cannot know to use wrong answers to learn with, and they have a false sense of their own capabilities. Next semester, I am going to do a short video about this. I really think this is one of the issues at the heart of self-assessment and valuing formative assessment.*

Table 2.23 represents the instructor/student interaction that occurred throughout the course of the study. The table speaks to how the learning and national cultures of the students impacted what the instructors' and students' thought and did as a result.

Table 5.23 Impact of culture

Instructor Journal Reflections	Student Focus Group & Observation	Professional Learning Team Discussion
I admit I was a little jaded. I am teaching TPP students, and while I love their joy for life and sense of humour, over the years I have grown tired of their overall lack of academic ambition. The maturity level of the learners I teach is below the level of the learners focused on in the case studies in the readings I really had to think about how to get my learners to develop good study habits and I am not so sure that I always succeed here!!! Since our students are motivated by marks there almost needs to be a grade given in certain aspects of formative assessment. Students need to be weaned away from the "grade is everything" mentality. "Tone" in feedback is very important in this culture that took a while to find out. This is not to say that I was harsh, just that it would have been better to convey disappointment rather than distress. …but to be honest many students just yell out, "Teacher…come look at my paper!!" Qatari students are very team oriented and not very objective or singular in their criticism. I am adapting my teaching styles but students are not used to this here and to be honest sometimes itis easier to mark the ten sentences myself then to have them peer assess…	**Students' responses:** Mohammad in the same class and I don't know something, or I have confused of some words, I ask him and he tell me what's the correct meaning. If the teacher is busy with another student. Maybe cheat maybe...we save the time at at the same time. I correct with my teacher, with my brother and myself. If I better than my friend, I will correct his answer. **Observed behaviour**: As the class was going through the paragraphs, one student wanted to erase what he had answered and correct it. Three were very demanding for assistance from the teacher. Students in one group tended to speak Arabic while they were discussing the task. The students believe they couldn't do the task because of the speed of the monologue.	La - They're not used to...like they're just used to writing a sentence and getting immediate feedback...teacher is this right...every sentence so it's a big deal. Li -I think this is where they've come from...from you know what we understand from their secondary which is they gave them help all the time J - They're very tactile, it's a very tactile culture, I think…oral and tactile. Me - But I think that rubric itself is just so daunting maybe cause it really is an oral culture after all because they're immature… La - We go through that activity where they know exactly what they are being marked on but they still don't care at the end Li - Well this is it, I mean given our learners, if I didn't give a vocabulary quiz, they wouldn't study so how formative can I be? Mo - I find that these fellows are loath to um, to say they don't get it N - How can we do this discreetly because everything in this culture is about saving face… N - "yes, we are other..." H - "and they are the group, they are the tribe" Mo - "they suddenly get great solidarity" H - "and they have to ...that's how they operate ..they have to do it because they are operating in a tribe, right in a very very large family and they have to negotiate everything ...they cannot...they will not lose face be-

Table 5.24 provides the codes, the categories revealed inductively, a summary of the discussion provided above, and how the instructors' behaviour changed over time.

Table 5.24 Synopsis of the **C**odes & Data

Code	**Categories Revealed Inductively**	**Summary of Discussion and/or Reflections**	**Change over Time**
RFLPr - Reflective practice **Definition -** Instructor draws on past experience from classroom and prior learning **Rule -** any reference made to what they did in the past including: classroom (in this job or prior to), attending conferences, workshops, or any other formal education (university courses)	As person (table 5.3)	Trust established Personal feelings shared	Personal talk **changes** to professional
	As teacher (table 5.4)	Specific experiences regarding their teaching	Restatement of generic experiences **changes** to specific criticism/judgement to giving feedback to others
	As learner (table 5.5)	Reveal preferential learning methods	Not many comments in the beginning but **increases** slightly for the remaining meetings
	As employee (table 5.6)	Share thoughts, opinions, frustrations	Comments about work-related issues **increase** with comfort/trust level
	On student learning (table 5.7)	Perceptions and/or experiences with their students	Comments remain regular but **change** from suspicion to proof positive
EVLPr -Evaluative practice **Definition -** Instructor makes decisions of her class practice and choice of formative assessment tool **Rule -** judgement placed on her own behaviour including: classroom, learning group, with other colleagues	Self (table 5.8)	Expresses limitations, boundaries, and needs	Few comments made but **remain** fairly steady throughout meetings
	Teaching practice (table 5.9)	Share thoughts and judgements on their teaching	**Increase** with familiarity of formative assessment
	Student learning (table 5.10)	Share thoughts and judgements on their students' abilities to adapt their learning styles	Comments are **steady** from the beginning to the end of the meetings
PDGY-Gs -Pedagogy - setting goals **Definition -** Instructor plans for class: with herself (use of formative assessment tool) and with students (direction of the lesson) **Rule -** anticipation of what the instructor intends to do in the future in all areas of teaching and profes-	Professional learning (table 5.11)	Decisions are made to prepare for what is to come next	Occurs during the meetings while they are working through the learning package only
	Teaching practice (table 5.12)	Strategies and activities that can be taken with them	Do not occur until meeting four and comments become **more detailed** as they continue to try FA strategies

sional learning	Teaching students (table 5.13)	Strategies and activities specifically used with these students	Planning **begins** in meeting four and **continues** throughout all meetings
PDGY-Eal -Pedagogy - engagement in active learning **Definition -** Instructor directs her own learning; takes lead in presenting assigned articles; in preparing the use of formative assessment tool **Rule -** behaviour that displays the instructor takes charge of her learning	Directing learning (table 5.14)	Instructors take turns leading based on their needs at the time	**Continues** until they have completed the learning package
	Seeks/gives clarification (table 5.15)	Not understanding content concerning FA strategies or how to use a specific strategy	Many statements during the first three meetings involving the materials but **wane** in the middle and end. Turns into helping colleagues with their activities
	Seeks/gives feedback (table 5.16)	Instructors look for or give suggestions to improve their activities	**Little** at the beginning, **increases** during the middle and **wanes** near the end
	Interacts with materials (table 5.17)	Learning strategies and techniques of FA from the learning package	Done **mostly** in the first three meetings; continues but to a **lesser degree** in the remaining
	Shares ideas using FA (table 5.18)	Occurs during learning and experimenting with FA strategies	**More at the beginning** but **consistent** throughout all meetings
	Uses FA strategies (table 5.19)	Determines a way to use a FA strategy	**None** at the beginning, **increases** and **stays the same** through meetings four to ten
	Connects theory to practice (table 5.20)	Linking what they are learning to similar past experiences	**More** prevalent in first six meetings, then **decreases** near the end
PDGY-Ef -Pedagogy- effective feedback **Definition -** Instructor engages in critiquing colleagues classroom activities; encourages/directs students in learning **Rule -** the instructor will ask critical questions; make comments on what their colleagues are doing; make suggestions to enhance the work of colleagues	Giving feedback (table 5.21)	Instructors provide each other with constructive and actionable feedback on activities they prepare using FA strategies; observations indicate the use of feedback with students to encourage their learning progress and to find their gaps	**None** at the beginning, **increases** and **stays the same** through meetings four to ten
PDGY-Eq -Pedagogy- effective questioning **Definition** - Instructor engages in thought provoking/reflective discussion with colleagues; encourages students thinking process **Rule -** asking critical questions that invoke thought concerning what colleagues are thinking; how they use their formative assessment tool; how they interact with their students	Asking questions (table 5.22)	Instructors ask questions that provoke each other to analyse their use of FA tools; observations indicate some instructors use questioning to encourage students to think about their learning and to find their gaps in understanding	Questions are **steady** throughout all meetings
PDGY-Ka -Pedagogy- knowledge acquisition **Definition -** Instructor acquires knowledge individually through past experience / new content /	Learning new content – formative assessment and its strategies and tools (table 5.23)	Instructors demonstrate their learning by doing, connecting, and teaching others	First six meetings instructors **concentrate** on learning new content but that **decreases** somewhat in the last three

outside experts; applies knowledge in the classroom **Rule -** verbalizes where and how the instructor may have learned something; connecting what they have read to classroom practice; making inferences about what they have read			meetings; spontaneous learning occurs **throughout** as instructors give anecdotal recitations of classroom activities
CLTR – Culture **Definition -** Instructor recognises: students are dependent learners; lack experience; need to be told what to do and how to do it; extrinsically motivated **Rule -** any reference made concerning their students learning behaviour	Culture is prevalent (table 5.24)	Instructors identify many characteristics pertaining to students' culture and their learning	Reference to students' culture are made in different ways **throughout** all meetings

4.3 Reflective journals: Common themes.

The reflective journals completed by the instructors focused on their learning opportunities, their students' reactions to the use of formative assessment strategies, and their own feelings as they ventured through this path of learning. While analysing the thoughts of the instructors, it became evident they spoke of similar themes. Figure 5.7 demonstrates those themes.

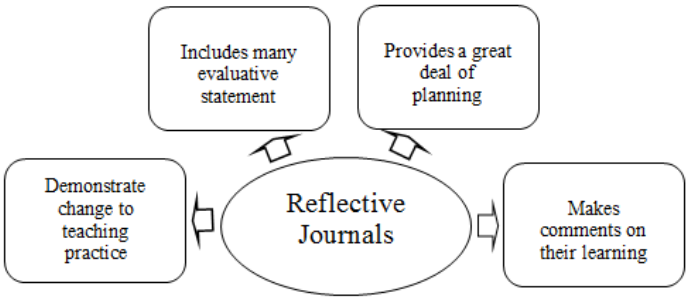


Figure 5.7 Inductive themes – Reflection journals

Most of the data is presented in a table format that is separated into the headings stated above. Some of the statements can be linked to discussions, because what they said during the professional learning team meetings, they also felt later on as they were journalling their learning experiences. Some of the statements can be linked to individual codes because the instructors' reflected specifically on situations that could be categorised under the coding scheme.

Three instructors kept a somewhat thorough journal of their participation in the professional learning teams, while others contributed on a more sporadic basis. They shared very personal comments about themselves such as,

> I think that maybe, at least in my case, the *possibly … teacher's self-image* ….is something that I was glad to read. It's probably not obvious, but I am constantly questioning my own abilities as a teacher. I'm okay with that, although I do get kind of grumpy if someone else does. Still…I realised in trying some of the things discussed at our meetings, and even just in participating in our meetings, that I am not out in left field at all, that I do have quite a few good strengths (organisation and time management …**not**), and lots of ways to try to improve. Mostly, though, I think I do continual and continuous formative assessments, evaluating my students' strengths and weaknesses and re-evaluating my own work.

Table 5.24 illustrates the thoughts from one of the instructor's journal.

Table 5.25 Instructor's Journal 1

Demonstrate Change to Teaching Practice	**Includes many Evaluative Statements**	**Provides a Great Deal of Planning**	**Makes Comments on Their Learning**
I have been working on a couple of strategies, namely scaffolding and concept	On the Professional Learning Team: It is a structured way for me to examine my	We have summary pages at the end of each unit with a number of "my students can do"	I think I most benefit from learning when I have a real need for information and

checking. I chose those based on feedback I had gotten from my observation sessions. I do notice that my level of awareness has arisen. I begin to see how I can do something just a little differently and get more learning 'mileage' out of it. I've increased the amount of peer checking I ask the students to do.	own practice and to contribute to building body of knowledge around particular aspects of teaching and learning with other teachers. I don't think I've exploited the possibilities of involving students in their own learning. But I haven't been asking students to make a plan or devise a strategy for what they could do. I could ask students not just to correct their errors, but to try to verbalise a strategy. I have grown more careful in how I handle incorrect responses.	statements….I'm thinking I can use them as a guide to have a discussion with students about what they think they should be able to do at the end of the unit. We could jointly create a list of 'can do' statements - students could work in pairs…they could explicitly take note of what they can and can't do. I am going to work on delivering very clear summary statements about what we are going to do in each class. Maybe I should also ask more of my students - explicitly ask them what they think they can do to move their learning forward.	solutions. In reference to the feedback received from observation: So, those were front and centre in y day-to-day work and its amazing where I picked up bits and pieces of information. Some were very 'incidental' over lunch or some casual encounter. Others were more deliberate - searching in the library, asking specific questions and arranging peer reviews. I am trying to write out in student language, the goals of each lesson.

The instructors made bold statements that indicated they were working towards making a conscious change to their practice. One instructor noted, "I do notice that my level of awareness has arisen. I begin to see how I can do something just a little differently and get more learning 'mileage' out of it." The other said, "I try to get them (the students) to think about writing. I do this by creating samples of stronger and weaker writing and then have them decide why one's writing would get a higher mark."

In making evaluative statements one said, "I, as teacher, know where I'm going but I don't always communicate that to students." In response to herself, she writes, "I don't always consider how I'm doing but I should more though!!! Something to work on next semester…" That statement moved to the planning theme. Another evaluative statement came from another instructor, "I think I offer students a picture of learning targets and I think I give them feedback but I think I need to be more specific with the feedback." She saw this as an opportunity to plan because she went on to say, "Things I want to do: Give students learning targets at the beginning of each unit. Try to find out what they know before we begin the unit. At the end of the unit I want to go back to this: what have I learned. Make students more responsible for their learning."

Finally, as they proceeded through the learning package, they made comments on their learning. One instructor indicated, "I think I most benefit from learning when I have a real need for information and solutions" while the other claimed she "find(s) the discussions with my peers to be the most useful. We all have great ideas and I learn more from hearing everyone's

ideas and experiences." Appendix M provides numerous excerpts taken from the journals.

The remaining two journal entries are displayed in Appendix M as Tables 5.26 and 5.27. Also, in Appendix M is Table 5.28 which contains random journal entries instructors wrote in response to questions posed by the researcher. They are also divided into the same themes.

4.4 Student focus group.

A decision was made to include two students from each of the instructors' classes for a total of 18 students. In planning the meetings, instructors had difficulty setting a time. I, as researcher and leader of the focus group, offered to hold lunch meetings and provided food for the students to alleviate the inconvenience of scheduling during class time or after classes. In the end, there were only eight students involved in the focus group.

The questions for the student focus group were designed to stimulate recall during the interview. The questions were grouped into categories. At the beginning of the interview students were asked to identify where and in what situations they needed to use English. This question was meant to target how English was personally relevant to them. Students identified that English needed to be used in stores or in the hospital. One student in particular acknowledged that since he learned English, he used it in many different situations.

The next group of questions focussed on critical aspects of formative assessment such as self/peer assessing, self-directing their learning, planning, and interaction. When asked if they did work by themselves, with a teacher or a friend, one student responded, "I think we do it by three ways, with the teacher, with a friend and with ourselves. But I think the best way was with myself...to know and to search and little bit helping from teacher, I think it's better." Another student indicated,

> First time, I write assignment by myself and correct with the teacher, after I can write assignment by myself and use the last assignment I write it to write an idea about who can write an assignment and sometime I ask my friend.

A last response was, "Me, first time with my teacher, second time I do it with myself and my teacher, then myself." These answers indicated their teachers had encouraged them to self/peer-assess their work because their responses were natural with no extra thought or questions needed for clarification.

Students were asked what helped them learn. One student believed, "The best way to learn, to get your mistakes and to repair it.", indicating he worked in a classroom where the instructor encouraged her students to find their own mistakes and make corrections. They were asked what they needed help with and two students were able to easily identify their weaknesses, "But for reading I lose focus. I need concentrate. Learning new words.",

while another said, “I think it’s the badder for me is reading. Grammar. Connect sentences with next sentences.” The fact that these students were able to identify their weaknesses meant their instructor had been successful at helping them find their gaps in their learning.

One student still liked using worksheets to get help with his work but another preferred to have competition, specifically to use, “funny strategies, when you do like a competition or watch films” which he said is a good teacher. When the students were asked questions that refer to having a critical voice in the classroom, their answers indicated that they were not used to asking the teacher why they had to learn this, or express how they felt. They felt, however, they could let the instructor know if they did not understand something, “If some person didn't know about that...explain to us or he explain from himself.” The answer was not all that clear but the students felt they were able to express themselves in class.

The students never helped to plan the class, nor did they have the chance to plan activities. It was noted by one student, however, that it was “summer course we can't because a lot of time, it's short.” When it came to student interaction, all students agreed they helped one another in their classes. “I think it’s one of the better ways to sharing” or

> “yeah, I explained how to write this or an assignment or in the...we do a practice in the class and I explain and told him how do this at the same time because the teacher help another or do something we help each other...teamwork.”

It was difficult to tell, though, if the students were taught how to work collaboratively or if that was something in their nature/culture which was previously identified by the instructors as “tribal”.

4.5 Observations.

The intent of the observations was to view the instructors as they applied the formative assessment tools they had created for their students. All instructors had selected to focus on self- and peer-assessment. Two of the observations were done during the second semester because the instructors felt ready to try their artefact with the students. Most were done during the third semester.

The observation tool (Appendix I) included other strategies of formative assessment as well. Described in the codes in Section 4.2 are descriptions characterising the behaviours expected to observe when one is implementing formative assessment strategies. Many such behaviors were observed during the instructors’ lessons. For example, most instructors demonstrated effective feedback. Some offered feedback when the students requested it while others offered feedback as the students worked. One instructor, in particular continued giving feedback using effective questioning until the students corrected themselves. Specific details of giving effective feedback differed amongst the instructors in that some focused on the students’ work while others provided a more criterion based feedback.

A natural component of teaching is to ask students questions, but formative assessment requires that questions engage students in their learning, nurture new insights, and encourages the application of knowledge (Heritage, 2007; Popham, 2008). One instructor directed questions to her students' own experiences in an attempt to connect new content to prior knowledge. Another instructor used questions that emphasised higher order thinking which encouraged the students to explain how they knew something was wrong or why they gave that particular answer. An instructor used questions that gave clues to stimulate recall rather than immediately giving the answer and used wait time to allow the language learner to access the words needed to respond.

Most to all students in each of the classes received feedback from their instructors in way form or another. Most of the instructors' students were not confused during the lesson; however, there were two classes where less than half were confused about the lesson. No students showed any signs of frustration. Two instructors had students who did not need any assistance, while less than half of the students in the rest of the classes required assistance. Finally, all the instructors' students demonstrated they enjoyed the class because each of the classes stayed on task.

5. Professional Learning: What It Looks Like

Once the instructors had become accustomed to the structure of the professional learning teams and were comfortable with one another, their participation flowed easily. They were eager to share ideas that expanded on experiences shared by others. After reading the first article, an instructor shared how she was able to include herself in a conversation that took place while she attended a committee meeting, and in doing so, also shared with the team members the content of the first article.

Sharing of the articles was an expectation built into the professional learning teams. Each meeting, one member had the responsibility of reading the upcoming article and presented it to the group. This was to alleviate the time burden of reading each article. Illustration 5.4 demonstrates how the aforementioned instructor shared her knowledge of the first chapter and how she was able to use it in a real-life situation.

Illustration 5.4

J - "I read the introductory chapter on PD and yesterday I was on one of the sub committees with [redacted] and it relates to technology, innovation in the classroom, or innovation at the college or whatever, I forget the exact 2.24 whatever, and at my table what we were talking about is what are some things we can do to improve the use of technology in the college and that, and I said training, that's my big thing training, training, training. I had just read the chapter and it talked about here on pages 3 and 4 in the chapter it said that for professional development to be worth anything, studies have shown that it has to be sustained, coherent and intensive. Here PD lasting for 14 hours or fewer or less has no effect on learning for the teacher. So it should be programs offering 30 to 100 hours spread over six to 12 months so I said, like you know, I used the example of the Ipad, I don't know how to use an Ipad, okay I don't, and I said if we have a workshop using an Ipad and it's a two-hour workshop or an hour workshop I'll come out with a few things I'll bring it to my office I may use it, I may not but I'll stop at what I really just know maybe

I've learned one or two things but if we don't have something like two weeks later I need to go back and another two weeks later and you know maybe objectives that I have to follow through with guidance it's not going to mean anything to me."

La - come back in two weeks and bring your

J - questions

Li - we're all deadline junkies

J - so right away in the first unit of the first chapter I was like wow, I was able to bring something to the table I didn't know before and I was really excited about that, you know. and I think it's true because it says here that the traditional episodic, fragmented approach does not allow for rigorous, cumulative learning and absolutely because I had stuff like you know lanschool and I used lanschool also as an example when I first got here, we had lanschool training

N - during orientation

L - blurrrrrr lol

The instructors' ideas led to asking one another questions pertaining to the content they were learning, classroom activities, and formative assessment techniques/tools they had taken into the classroom or how their students were learning. Illustration 5.5 is a short example of a discussion that occurred during meeting 2 concerning the quality of work the students should produce and seven strategies that can help to make this clear to them.

Illustration 5.5

Me - …The first one is the student has to have a clear and understandable vision of the learning target and if necessary you can provide them with the written list of the target or you can do it orally. And they look at the guide a scoring guide, is that right?

Mo - yeah, one way you can do this is to show them the rubrics, if you're doing writing you can make a user friendly rubric to walk them through it.

Instructors also lent words of support and/or gave suggestions if one was having difficulties in the classroom with an activity, student, or using the formative assessment tool. Illustration 5.6 is a conversation that occurred in meeting 3 where one instructor was presenting what the chapter said about giving effective feedback and someone connected giving feedback to self-assessment that led to students taking ownership.

Illustration 5.6

H - but they've done that and they say in the mode it depends on the assignment...written, oral or demonstration showing them but they say the best one is having a conversation with the student prompting questions. So you're prompting with questions...you're telling them...you're saying for example...here's a sentence and I can see two things that I know that you know because you've done it right so many times before but for some reason you got them wrong here....what are the two things that you didn't get.

Mo - so have the student self-correct...find his own mistakes

Me - does it have to be done one on one or could you do in class

H - they say one on one or even in groups would work

Me - so we could do it with the class?

H - you could do it with the class yep. But the feedback we should be giving them...I value your learning...your learning is important to me...but it's a little bit hard sometimes when the boys just want to take the answer and it takes a couple of weeks to get that out of them, you know.

D - this is all great and again...I've read about this before...this is what I try to do but again teaching the boys when them...most of them...just want to know if it's right or wrong and they don't want to take ownership but I find this chapter is great...it's about making them ...again giving ownership...making them a part of learning process where our learners are slightly different...

N - or if they won't accept ownership...

D - that's it, that's it! those are the words I'm looking for

The conversations often built back and forth to develop an idea, whether that idea was concerning a strategy presented in a specific chapter as illustrated in 5.7 or whether planning on how they would use that strategy with their students.

Illustration 5.7

De - and maybe you could get them to assess one piece of work they did during the week, something like that you know…

H - yeah, I'll try

De - or a little reflection on, you know any activity you did during the week....how did you feel about it...was it hard, was it easy...that kind of stuff and even those simple questions give them a moment to look back and think about it and it'll be difficult with TPP at the beginning

H - yeah, and I want to try to get them one on one to talk about it and I'm hoping that the numbers will be low enough for us to be able to do that...you can't do it with many so I really hope I can have that opportunity because once you can figure out how they're going to respond to it, then the next time you can do it with a larger group because you got to manipulate or what you've got to change...maybe the form...or I don't know or maybe you gotta make sure you do it at lab time

Me - so, they're gonna look at how well they did that week, where they were in their attendance

H - I want them to look at their work, what they did that week and I want them to really think hard about it...did they come in late, look at their attendance did they come in late and talk about it

N - I thought something similar H, but I was thinking of it note taking, I was going to get them every day, like I get my guys or did, to put the date on and to take notes in that class and at 1070 note taking is really important...so I thought how can I do this even on days when we don't have note taking per say...they don't have a listening activity as such and I thought okay maybe I will just get them in the habit of writing the date on a piece of paper and recording either a new vocabulary word that they learned or something...give them time at the end of every class to record something that they're going and what you're saying in terms of attendance and some of the other things...what was good, what was new to you...yeah, that would possibly

De - but I would start out very small...don't give them a whole thing right away

H - no I've tried that see, it doesn't....it's overwhelming

Both groups decided to select some form of self-assessment as their focus for using formative assessment practice with their students. During meeting 2, one group member stated, "I just got it when I was reading Chapter 2. One of the thoughts that came into my head was having the student create a rubric in class." There was some skepticism, however, when an instructor remarked on the idea of having the students be active learners. "You're supposed to get the students to highlight their work: they mark it in green, yellow and red to indicate the level of help they need. That would be too difficult for my class." Even though the instructors were hesitant, all instructors created and implemented a type of self-assessment activity for their classes. Examples of their artefacts are presented in Appendix N. The following excerpt illustrates how the instructors worked together in assisting one instructor who brought in her rubrics she had created for her class.

Illustration 5.8

Mo - this is something that I did a while ago and I wanted to test drive it in the classroom and I haven't Da I'm thrilled you're coming in on Monday cause I'm going to test drive this on Monday. So I've done two of these, this is the instructional rubric and I have to tell you it's slightly a re-jig of the...it's re-jig so that's an instructional...sort of modelled on what came from here in the book but this was task specific so I don't know whether this is useful or not. Now, here is...there are two user friendly rubrics I've done here and it's really just (paper shuffling) okay let me give you this...this is just something I've done...this is the writing rubric simplified okay and the difference between the first one which is two pages because it spilled over and this one is simply this...this goes from ten to one and this one goes from two to one.

H - So what did you call this one? This bigger one.

Mo - this is the assessment rubric and this is the instructional rubric and I'd like to, with the students, actually I should probably test drive this with the teachers rather than with the students...the students will take whichever one I give to them...should we look at the instructional rubric first and see if it in any way, would be helpful for a student.....maybe it wouldn't…

Short pause as everyone looks

Mo - it's really just the rubric with I, instead of you...it's really just the assessment rubric...it might be too generic

H - I tell you, they look at a lot of words and they zone out and if you had points without sentences, just point form

Mo - that's good to know, then it's optically easier, visually easier

H - oh yeah, they just won't swallow...that's been my experience with it.

Mo - okay, good to know, good to know and you know what, that makes perfect sense to me.

H - we had that conversation before (directed to N)

N - ah yes, that was my...I'm actually working on that right now and that's why I'm really interested in what you're saying about the...I'll have a look at the project ru-

bric as well, but

H - so, the task achievement can be re-written to target the exact task...

Mo - yes, it could be...I have a subject line in the email, I have a salutation. Yeah, you could actually use this as a template, pull it up for every task

The instructors demonstrated their learning throughout the three semesters they spent being involved in this study. The next section provides a picture of their learning process.

6. Professional Learning: The Process

There was a natural flow to the groups as instructors began to use their formative assessment tools with their students. One instructor who kept a journal wrote, "I don't think I've exploited the possibilities for involving students in their own learning." She noted that a team member "said in her experience, students get a great deal of satisfaction by checking off tasks". This instructor created an activity that she took into the classroom; however, she felt it did not go very well. At the start of one meeting, she shared what that activity entailed. Illustration 5.9 presents that discussion.

Illustration 5.9

N - I have to confess that I haven't systematically tried out anything in terms of, maybe that's not true. I have for instance made a check list, like sort of a rubric for my class that we're doing the project so if I were going to chose something that would be it. But it failed dismally.

D - so what happened?

H - well, that's okay...what did it look like and why did it fail?

N - well, what happened was the students have a project, have a presentation to make...they have to do research and then present. And I gave them time in class to do it but I could see that some people were just not using the time wisely and some people sort of said...oh, I know what I'm going to say, I've just gotta put my pictures together but I know what I'm going to say, right? So, I put together this little checklist which would try to focus them in on very specific things in some cases, for example, numbering system like 5 billions, 253 thousand like that's sort of something we've been working on and within their presentation they would have to say those things, so I had a check list...do you know how to say all the numbers in your presentation...write down one or two of the numbers that are there. And then can you pronounce all of the names in your presentation...another one was are you using words that we may not understand, do you explain them and we talked about this....so if you use a word you have to give sort of a little definition or an example or something and I asked them to write down two or three words that they thought our class might find difficult and how they might explain them. So,

D - how did you fail, because from your end it sounds fine.

N - but they didn't do it, so I…

H - what did they not do?

N - some...so I gave them time...I think part of the problem was I didn't structure it after I gave them that I just thought they were going to do it so I said to one class, now you work with your listening partner and they had a sheet and they wrote their name and their listening partners name and they were to go through the presentation

together and the partner and then afterwards they would fill this sheet. But what happened was...not everybody was finished...not everybody was in the same place so some people did their presentation with their partner then the partner kind of went back to his own because he didn't have it ready....it just did not come together as the kind of nice little practice that I thought it would have. So, I going to...I still think it's valuable because I see how many people didn't practice orally their presentation...they said oh, yes I know it and they had sentences written down but then they'd get up there and start reading the sentences. Or they wouldn't remember what they were going to say and they'd have to be looking through to find out where it was so the practice which would have made...they had good information most of them but they just didn't know it well enough and they weren't able to pronounce things well enough and they couldn't present it.

Me - it was a sheet beyond...it was a sheet that needed to come after they got it all together and then they could have done it

N - yes

H - when you gave them the assignment, did you give them those parameters? The reason I ask is, having learnt from them, they have to use five new words, you must use five new words...explain and pronounce, you must have ten slides , you must not have sentences on you slide, you must use notes and so that's the parameters. Then I use that sheet as the evaluator....did you use five new words, did you pronounce, explain...did you use notes and so that's why I'm asking. And it had to be really simple, you know, one line, one mark because once it got complicated it...if it was two lines for one mark...forget it and that's why I was asking what did it look like? I don't know if it's the same.

N - ah, yes, it was not so simple although it was sort of like can you pronounce all of the words in your presentation...write down two that you need to practice, right, so...

Me - you're asking them for awareness?

N - yeah, but then they said oh yes, Miss, we did it but it was sort of like...I think we both....all of us got caught up in the deadlines...like the times...they'd say I've got to do this slide or I can't get research on this thing. The timing is the one thing I can change for the next time and simplifying it...like they did have a list of criteria that they had to meet and I made that little checklist based on that criteria

H - use that checklist...they don't need a lot of extra information because they've already used the parameters for developing the thing so you don't need to go into a lot of extra things...I know because I've done it, I tried to break it down...did you give the give...did you pronounce them...you know...you used notes okay fine, you didn't use sentences, how was your grammar...did you practice it and for god sake, yes or no, one or five that's the answer. You used one new word you got one mark, you used five new words you got five marks that was it.

N - okay, the thing that motivated me to do it in the first place was that they weren't practising. They weren't speaking sentences, they weren't trying to explain to somebody, they were too confident thinking oh, I'll just say it and I'll kind of know and like one of the guys came to me afterwards...one of the over confident fellow...I had so much more to say but I forgot it. And so that whole piece I have to rethink for the second one...what I can do differently to get everyone to the point where they have it finished before the deadline and can practise it a bit before the deadline

H - what about video...taping it so they can look at their own?

N - now I have videotaped these presentations so I can give it to them and say what do you think?

H - so that might be on the formative assessment aspect of it too, what do you think about this?

D - yeah that is…

H - here, check this off yourself

N - ah, yes. (pencil writing)

H - and then when it's over you can ask do you think you did better than the first time, where do you think, why do you think?

N - so I can think about how to use that video instead of just me looking at it and evaluating to make it a formative evaluation

D - and now you can even say to think about this one, what's one thing you thought you could do better and then keep it for the next presentation. So you've said this about the first presentation, now you've done the second presentation, did you meet your goal.

N - so set a goal

D - set a goal or what's the friendly way...two things you liked about your presentation and something you'd like to improve upon

H - that's too Canadian for me

D - that's too Canadian...that's too elementary school...

H - no, you've got five parameters, did you meet them all of them - yes or no and to what extent that's it. Not two nice ones and a bad...they did five things bad ...they did five things badly…improve it or you're gonna fail...lol...we don't mind giving them, you know 40 out of 100 on a quiz .... they're gonna be graded....because it's on paper and it's clear...what is that ... I don't know

N - it's concrete, it's absolute

In response to the suggestion from a colleague to have the students set goals, the instructor noted in her journal, "I haven't been asking students to make a plan or devise a strategy for what they could do – at least not in any formal way. So I think I will try to do this in a more conscious way."

The first discussion took place during meeting 5. This instructor was not about to give up on that activity so she tried it again in the next semester with a new group of students. Illustration 5.10 provides a continuation of the activity as the instructors discuss it meeting 9.

Illustration 5.10

N -The first project everybody put if off until the absolute last minute and I had people who just didn't do as well as they could have simply because they hadn't practised and they were stumbling around for words and reading from the text ...things that they didn't understand. So my thought was, how could I get them to sort of look at this before hand and it's not just the ten minutes that they are up there...it's a whole learning thing. So the first time around, I made a little work sheet for them to sit with a partner and talk about things like....do their presentation and their partner would give them feedback as to what words they didn't pronounce correctly, or stuff they didn't understand. It was all on one page, actually I made

copies,

Me - did they like that

N - no it didn't work very well, the very first one

De - I remember you mentioned this before right

N - yeah, it didn't work well because for one here they couldn't decide who was supposed to answer what on this sheet, because it was all on one page...some of it was for the partner, some for the person so second go round on the second project I made two sheets...one for the person presenter and one for the partner and I made them worth points. And so basically what I did was I took the rubric I use to evaluate them and tried to form questions here.

H - this is a lot easier to fill out, isn't it?

N - yes, now the next stage where I'm going the next time, after Da came in and looked at my....we kind of went through this and introduced these two pages, you and your partner, trying to elicit from them basically, these kinds of questions...what's important. This time I'm going to try to work on the actual questioning part of that and see if instead of giving them the paper, see if they could build it....what would be important, if you're listening to someone what kind of things are important for you and hopefully draw out from them...well, I have to hear the voice loud enough, they have to use words that I understand...those kinds of things. So that they're reflecting about it before they even get this

Da - and they're taking some ownership

N - that's the other thing and I realised this was better than the first one but it was still telling them what I think is important so the next stage I'm going to, before I give this to them at all, I'm going to have a session where we will try to either looking at samples, because we have lots of samples, and try to draw out what are the points that you could help your partner with and what are the points that you could look at for yourself and hopefully, we'll get some of this

Da - but you'll have that in the back of your mind, right so your questions can drag that out of them. They may not come up with this idea but you can coax them in that direction through your questions.

N - now I guess, if I plan to do that, I guess I must think that they're coming up with it is more valuable than me just giving it to them, right.

Illustrations 5.9 and 5.10 demonstrate how one particular instructor brought an idea into her professional learning team meeting. When it didn't work very well in the classroom, she received suggestions from her colleagues. Nearing the end of her journal she wrote, "I do notice that my level of awareness has arisen. I begin to see how I can do something just a little differently and get more learning 'mileage' out of it.

During the collaboration above, instructors were encouraged to use many of the strategies in formative assessment practice with their students. For example, instructors asked effective questions, "What did it look like and why did it fail?" They provided effective feedback, "Use that checklist...they don't need a lot of extra information because they've already used the parameters for developing the thing so you don't need to go into a lot of extra things." The feedback provided new ideas that were not considered by only

one person. Collaboration and support in the team helped this instructor to rethink her activity and find ways to improve it. During the observation done by the researcher, I noted, "The self-assessment tool guides the students by having them critically reflect on their own presentation. Areas of focus were: pronunciation (names, places and numbers), vocabulary and their meanings. During the review, the teacher stressed that the peer assessment was to help their partner and that it was important to be accurate and honest. Given the responses made by the students, it appeared that they knew why they were using the tools and the review directed the students on what they needed to know as they watched and listened to their partner."

The data collection tools have been able to provide a full view of the professional learning process. Figure 5.8 highlights the process beginning with the professional learning team and the materials used by the instructors to the final improved artefact.

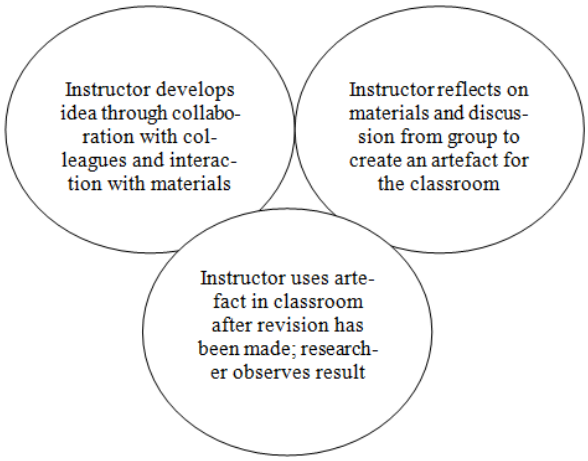


Figure 5.8 Transcripts, Journals, and Observations

7. Chapter Summary

Chapter 5 has presented findings that will hopefully create answers to the questions. This chapter began by describing the results of the analytic process which identified themes not originally considered. The results created a need to reconsider the codes to better align them to the characteristics common to both formative assessment and professional learning communities. This re-alignment assisted in finding data to answer the questions. Following the first round of analysis, data was drawn out to explain what professional learning looks like in terms of collaboration (sharing knowledge, ideas, providing support and feedback).

The chapter then presented the codes that provided evidence best suited to support each code. Most evidence was drawn from the transcribed professional learning meetings' discussions; however, support was also found in the instructors' journals/responses and through the observations. Finally, the chapter ended by reviewing the students input towards their instructors' use of formative assessment practice.

The next chapter discusses conclusion and implications therein.

Chapter 6 Conclusion

1. Introduction – A Long Journey Revisited

I began this study investigating the successes of formative assessment when it is practised as a process of learning. I was excited by the idea that formative assessment practice was proving successful in students' achieving learning outcomes. This led to thinking that perhaps students in the language department where I worked could increase their success if their instructors used formative assessment tools and strategies for teaching English. Therefore, professional learning became the focus of my investigation.

That investigation revealed the strategies used to create professional learning communities are similar to those used in formative assessment practice. I believed a study could be built on those similarities because it appeared that studying the learning process of people who are involved in a professional learning team is a new approach. On that premise, I continued to sift through the existing studies and articles to discover connections between professional learning communities and formative assessment practice. In the end, the literature review established pertinent questions that could direct this investigation to uncover whether the learning processes of those practising a formative assessment environment was similar to those who were engaging in a professional learning team.

Due to the cultural context in which this study took place, an ethnographic case study was used because it allowed the researcher to participate in the professional learning team. This approach to data collection also accepted the social reality of the classroom with its interrelationship of Western and Arabic cultures. Data collection methods created massive amounts of content due to recording the discussions of the instructors and the student focus group, the instructors' journals and their responses to reflective questions, as well as the classroom observations that took place. Therefore, a directed content analysis approach was used because it provided for the creation and refinement of codes to condense the data into manageable themes. This investigation has revealed that the learning process in a professional learning team is similar to the learning process of formative assessment as described by published authors. The remainder of this chapter will present evidence in support of that statement.

2. Discussion and Interpretation of the Questions

In determining answers to the questions, codes were developed to reflect the learning process based on the similarity of the characteristics that describe formative assessment practice and professional learning teams as presented in Chapter 1, Section 3. While the codes were given definitions in many cases those definitions did not encompass the data that was revealed. Subcategories emerged, adding richness to the dimensions first proposed. The discussion that follows includes each code, its original definition and, through analysis, the process of learning that took place.

2.1 Question one.

Question one was designed to take a look at the learning process of the instructors as they engaged in a professional learning team. The question read, "What is the process of learning within a professional learning team engaged in learning about formative assessment?" This question was answered through the data collected representing each of the codes. For example, the learning process of the instructors was demonstrated in Chapter 5, Section 6 by connecting the codes in a final illustration of the team process. An instructor in one of the professional learning teams recalled an activity she had created and tried with her class. She felt it had failed but with support and feedback from her colleagues, she was able to understand the weakness in her activity, redesign it and return to the classroom for another try. This instructor's learning also continued as evidenced by her reflection in her journal of the discussion with colleagues and her plans on how to improve the activity.

The instructors had to learn about formative assessment practice and determine how they could implement its strategies in their classrooms. The literature review revealed many common characteristics on which the codes were generated. A discussion of the codes follows that presents specific evidence in supporting question one.

2.1.1 Reflective practice.

Reflective practice is a conscious effort to think about one's teaching that can provide evidence to support change to the practice (Lyons, 2006; Reynolds, 2011; Rieger, Radcliffe & Doepker, 2013 Rodgers, 2002). It is an iterative process as identified in Chapter 2, Section 3 that was used in the professional learning team to learn, create and refine classroom activities.

The original definition for reflective practice indicated that instructors would draw on past experiences they had from either the classroom or their prior learning. What was revealed, however, were several sub-categories that gave a more detailed picture of the types of experiences the instructors' were willing to share. Their sharing of personal experiences indicated the level of trust that was built over time providing a comfortable environment conducive to effective learning (Strong, et al., 2004).

In the beginning they revealed who they were as people, however, as time passed and they began learning more about formative assessment, their reflections turned to sharing their personal feelings about their teaching. Their sharing did not end there as they gave specific situations they had in the classroom revealing themselves as teachers.

They were also able to discuss the frustrations they felt as employees as well as express their opinions as they reflected on situations they had encountered in their department. That alone provided evidence of the bond of trust they had created within each of their respective teams.

Instructors discussed their students regularly throughout the meetings as they disclosed their perceptions of how their students were doing in class. Students as a topic became easy to share because they realized they had many of the same doubts, frustrations, and few successes when it came to their students' learning. In sharing anecdotal situations that occurred in their classrooms, instructors learned how to better deal with their students and that they were not alone in dealing with the challenges their students presented.

Occasionally their preferences in learning would emerge through specific comments made during the meetings but they more openly discussed how they learned in their journals.

2.1.2 Evaluative practice.

Evaluative practice is used to encourage learners to check their own work so they are better able to identify what they did right or found challenging. This skill assists learners in determining how they can fill the gaps and how to turn weaknesses into strengths in order to move forward (Black & Wiliam, 1998b; Brookhart, et al., 2010; Cornford, 2004; Frey & Fisher, 2011; Lowe, et al., 2013; Marzano, 2010). When the instructors were engaged in the reflective practice, their statements of evaluation established themes that demonstrate the judgements they made about themselves, their teaching practice and their students' learning.

The definition for evaluative practice concerns making decisions about classroom practice and the choice of formative assessment tool. What the instructors sporadically did, however, was make evaluative statements about themselves. They were open in expressing their personal limitations, boundaries and even needs. On a more regular basis, the instructors discussed their thoughts and judgements on their teaching and their students' learning rather than on themselves. The aspect of making evaluative judgements on themselves was not originally included in the rule describing this practice but emerged through the discussions and their written responses.

The definition also took into account the choice the instructors would make concerning what type of assessment tool they would use. All instructors chose to create a type of writing self-assessment tool. Perhaps it was because the instructors were not completely familiar with formative assessment as a process of learning and therefore could not imagine it being used in any other way. They could only envision feedback being given to students through their responses to written work. It was later revealed to the instructors, through the observations and responsive feedback done by the researcher, that formative assessment also includes feedback during class discussions. Through the observation process they realized effective questioning was also an area of concentration that encourages students to take ownership of their learning.

2.1.3 Pedagogy - setting goals.

Strong et al. (2004) identify planning as an important characteristic to being an effective teacher. Teachers need to plan in order to survive their teaching and this was reflected in the number of comments they made during their professional meetings as well as in their personal reflections or journals. They often planned how they would use a formative assessment strategy with their students. For instance, since all instructors planned to use a self-assessment tool so their students could improve their writing, they would discuss the design of it and when they would take it into their classes.

The rule for setting goals is a little broader than the previous ones because it provides for all areas of teaching and professional learning. In this instance, the instructors planned on who would prepare for the next meeting by reading and presenting the article from the learning package. Planning what they would take into the classroom and how they would present it only began when they felt comfortable enough with what they had developed.

Even though recording statements regarding setting goals started later in the study, it held a substantial amount of statements in proportion to the other codes. In both the meeting and journals, the instructors concentrated on how they would like to develop their practice and the statements selected target skills that could be used in any teaching situation. Setting goals for the classrooms were specific to their current students and the activities they had created reflected the needs of these students.

Their planning was clearly represented through classroom observations and somewhat in the student responses. During the observations, most of the instructors were able to visibly demonstrate their knowledge of formative assessment with regards to the artefact they had produced. In fact, a few instructors were confident and self-assured. When the students were asked about peer and self-assessment, they knew what that meant and were able to explain how they used that strategy in their classes.

Some instructors were also able to expand on the use of formative assessment strategies which included giving effective feedback or asking effective questions. Their awareness of using these strategies, however, was a surprise to them when they read the feedback provided by the researcher because they had not consciously prepared that as part of their lesson.

2.1.4 Pedagogy - engagement in active learning.

Both formative assessment practice and professional learning espouse active learning as an important strategy to advance one's knowledge. Formative assessment requires that students take ownership of their learning by self-assessing their work. They must decide what was done well and what needs to be done better (Black & Wiliam, 1998a, 1998b, 2003,2005; Brookhart, 2009, 2010; Heritage, 2007; Popham, 2008). Teachers are required to create an environment that encourages students to be experimental, mindful and engaged. In doing so, they provide the tools for students to use that assist

them in identifying gaps in their learning. Together they make a plan to close that gap.

Being actively involved in one's learning means taking direction, leading discussions and preparing for classes to apply acquired knowledge; as stated by the definition and rule for this code. The definition made reference to a few characteristics while the rule was left rather broad, which turned out to be a positive quality. Upon completing the analysis, many sub-categories emerged which became a significant part of the findings. Characteristics such as directing learning, seeks/gives clarification, seeks/gives feedback, interacting with materials, sharing ideas about using and actually applying formative assessment strategies, and finally connecting theory to practice are all indicators the instructors were readily and steadily engaging in active learning.

In terms of directing their learning, it was generally based on their needs and continued until they felt they had completed what they needed in order to successfully prepare and use a formative assessment tool. When instructors sought clarification, in the beginning it was usually directed at the content of the learning package. Seeking clarification did not stop there, however, because as the instructors started sharing their experiences using their artefact, others would ask questions to better understand how it was used or how the students responded.

Seeking or providing feedback was prevalent in the discussions until the instructors began applying their assessment tool with their students. The instructors who were more confident with their knowledge and the artefact they had developed sought feedback deliberately while a few were not as forthcoming. While they were willing to provide feedback, they were not assertively seeking it.

Of course, all instructors interacted with the materials because an expectation of participating in a professional learning team was to present a chapter or article from time to time. Some instructors were more involved with the materials than others as they chose to read all articles, while one instructor even admitted to not being prepared to present that particular week but proceeded to do so in some fashion. Most of the interaction was done in the first three meetings. Although, instructors were still working through the chapters during the next three meetings, there were fewer comments regarding the material. Instead, their comments turned to the more practical use of the strategy presented in an article.

Right from the beginning, instructors were able to share their ideas about using formative assessment strategies because they were connecting their past experiences with what they read in the learning package. As time went on, they began shifting their attention from past experiences to their present use involving their artefacts. Sharing in this regard remained consistent throughout all meetings.

In determining how they were going to use formative assessment strategies, they presented some skepticism in the beginning. All instructors felt their

students would not be able to adapt to using self-assessment. However, that did not stop the instructors from planning and creating an activity to try in their classroom. By meeting four, instructors were planning exactly how they could use self-assessment and their conversations around this continued until the end of the meeting ten.

The final theme revealed from the analysis active learning behaviour is connecting theory to practice. There were more comments at the beginning when instructors were establishing an understanding of formative assessment; however, consistently throughout the meetings, they linked their learning to similar past experiences. Although this is not a significant portion of their learning, it does indicate their active involvement and engagement with learning.

2.1.5 Effective feedback.

Giving feedback is a process that is based on both cognitive and motivational factors (Brookhart, 2008; Frey & Fisher, 2011; Heritage, 2007). Effective feedback provides information that enables one to close an existing gap or solve a problem in a given situation. It should be constructive and actionable, providing a path towards taking next steps (Greenstein, 2010; Popham, 2008; Wang & Wu, 2008).

The definition and rule for feedback fit the nature of the feedback given by instructors to both their colleagues and students. There were several examples of feedback fostering a learning opportunity for each other. There was no particular need for feedback in the first three meetings since they were not actively using formative assessment in their classrooms. Giving relevant pertinent feedback generally took place when instructors would present an activity they had tried in class. There was an example of an instructor who believed her assessment tool had failed miserably when she took it into the classroom. As a result of that, constructive and actionable feedback assisted her by making improvements that was more successful with the next attempt as she indicated when the group met again.

2.1.6 Pedagogy - effective questioning.

Effective questioning elicits analytical thinking (Popham, 2008). Questions should engage learners in thinking more deeply, encourage reflection on the learning situation, or target the intended knowledge to be acquired. Asking effective questions should elicit higher order thinking skills such as analysing, synthesising or evaluating (Frey & Fisher, 2011). Applying skillful questions in a learning situation should promote formative discourse by focussing attention on content and concepts that are crucial to learning. They should build logically and stimulate reasoning that aids in formulating an answer (Moss & Brookart, 2009).

The definition for effective questioning does not use explicit words that describe what effective questions would sound like however the rule provides for a deeper understanding. The instructors used many types of questions ranging from needing clarification of a term regarding formative assessment to provoking each other into analysing how they used the formative assess-

ment artefact they had created. The questions were not always concerning formative assessment. Oftentimes they would look for support with departmental issues or with teaching students. In one form or another, instructors were eager to ask each other questions throughout all meetings.

2.1.7 Pedagogy - knowledge acquisition.

Acquiring knowledge was consistent throughout the meetings. Evidence of that was through their recital of the material they presented at each meeting and the way they were able connect formative assessment to their classroom practice. What the instructors were learning did not only come from the material but also from each other. When discussing a strategy presented through the learning package, they would often get off topic because what they were talking about would remind one instructor of an activity used in her classroom. There were many opportunities for instructors to benefit from spontaneous learning in this way because they learned a how a colleague used effective feedback or they learned a new classroom activity.

2.1.8 Culture.

The culture of the students was discussed throughout all meetings. The analysis brought to light two categories involving culture: a) the students' learning culture which includes their prior learning experiences and their attitude toward learning and b) the students' social culture which includes their family obligations, religion, and tribal connections. Oftentimes the instructors would acknowledge that culture was an impediment to what they were trying to do; not only with formative assessment but in teaching English to these students.

In references to the students' learning culture, the instructors had come to realize that few of the students cared about learning English. Their learning experiences had been focussed around receiving help from the teachers therefore they felt little enthusiasm for embracing any teaching method, let alone one where they had to actively participate in metacognitive strategies. With the support of their team colleagues, the instructors rallied together to learn how to adapt formative assessment practice to the needs of their students. In the end, all of the instructors were successful in coaxing, cajoling and/or convincing their students to work with the artefact they had developed.

In terms of the students' social culture, any educator who works in Qatar must become accustomed to the demands of the student's family unit. In that regard, there was no real impact on the instructors in this particular situation. The tribal unit, however, would sometimes place a barrier between the instructors' plan for the class. However, in this study, it did not have any significant impact on what the instructors were doing.

2.2 Summary of codes.

The codes as presented above have revealed that the learning process in a professional learning team is similar to the learning process of formative assessment as described by authors such as Black and Wiliam (2003, 2005),

Brookhart (2009, 2010), Gibjels and Dochy (2006), Nicole and MacFarlane-Dick (2006), Popham (2008), and Moss et al (2009). These authors all agree that a formative assessment environment needs to allow for knowledge construction, feedback that assists the learners' direction and self-assessment that leads to increased meta-cognition. The instructors in this study were able to experience the same learning environment with an added bonus of critically working toward a common goal because of their innate nature of being adult learners.

The instructors consistently demonstrated their ability to work together to learn what was meant by using formative assessment as a process of learning. They clearly provided evidence co-constructing knowledge by sharing ideas, experiences and classroom activities that was seen by producing a final product based on what they had learned.

2.3 Question two.

Question two compares the process of learning in a professional learning team to the classroom implementation of formative assessment as described by published authors. Question two read, "How does the process of learning in a professional learning team align with the classroom implementation of formative assessment practice?" Once again, question two was also answered indicating that the process of learning in a professional learning team indeed aligns with formative assessment when used as classroom practice.

In order to extend the theoretical assumption stated in Chapter 1, this study sought to determine whether similarities do exist between instructors learning in a professional learning team and instructors using formative assessment in the classroom. Table 6.1 depicts the relationship.

Table 6.1 Similarity of Strategies - Formative Assessment and Professional Learning Team

Formative Assessment Practice	**Professional Learning Team**
When instructors are involved in a professional learning team, they engage in strategies noted on the left. When they are involved in formative assessment practice, they engage in strategies noted on the right.	
Reflection of their practice	Reflection of their practice
Self-evaluation of learning	Self-regulation teaching
Student learning	Colleague support
Student response	Colleague input
Critical thinking by re-directing their teaching	Critical thinking by identifying weaknesses
Helping student close their gaps in learning	Improving their practice

Similar to Figure 1 in Chapter 1, the above table indicates the strategies needed to perform in a professional learning team and a formative assessment classroom. There is an iterative process of reflecting, self-assessing, collaborating, critiquing and trying again.

Building on Figure 4.1 in Chapter 4, Figure 6.1 presents the strategies used in the both the classroom and professional learning team taking place in Qatar. Where one process reflects (formative assessment) on teaching and their students, the other reflects on teaching and personal learning. Both lead to improved student learning.

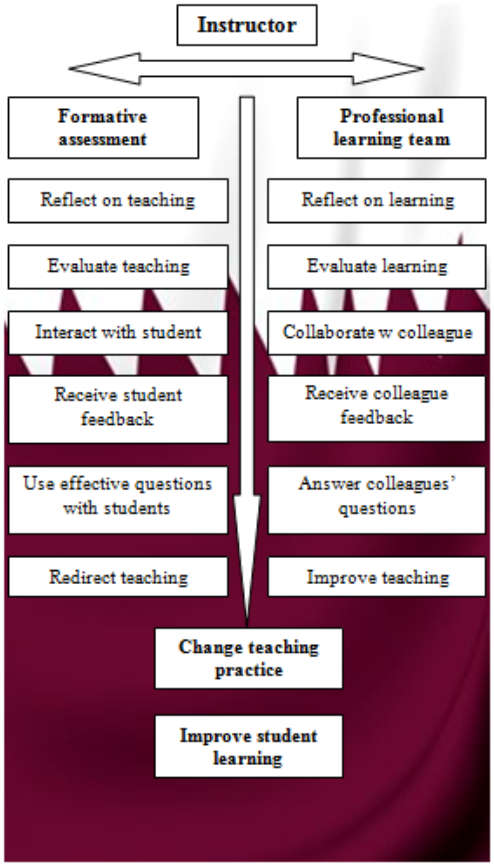


Figure 6.1 Final Depiction of the Learning Process

2.4 Question three.

Question three queries the impact the culture of the students has on the instructors' attempts to engage in formative assessment practice. It read, "What impact does the culture of the students have on the instructor's engagement in formative assessment practice?" From the very first professional learning team meeting to the final one, the instructors referred to the students' willingness to participate in and ability to adapt to a process that requires them to actively learn. The students' culture had a tremendous impact on the instructor in two ways: 1) in the beginning it was negative when the instructors felt there was no way their students would accept or adapt to being active participants of their own learning and 2) in the end it became positive when the instructors began to realize their students could be trained to use formative assessment strategies with the help and support of their colleagues.

The students' attitudes toward learning lacked motivation for the most part. Of course, not all students fit into this category but when the majority of students in a class have little to no desire to learn, it makes teaching and learning difficult even for those students who have a goal in mind. The instructors were all realists when it came to developing and implementing their formative assessment activities. They knew there would be challenges and they made sure the artefact suited the capability and motivation level of

the students. For example, one instructor used a checklist for assessing their writing, making it a quick and easy tool to use, while another used colour, making it a fun and pleasurable experience for the students.

As well, instructors know that as Westerners they were viewed as outsiders. There is a dichotomous relationship between Qataris and ex-patriots. On the one hand, Qataris acknowledge and understand their need for Western expertise, but on the other, they are forced to accept our differences and tolerate it. In that way, there are occasions when the instructors felt the "tribal" unit of "us against you". With that in mind, the instructors entered the classroom skeptical of their students' willingness to accept a new approach to learning.

In the end, the instructors were pleased with the way the students were able to cope and adapt to using the self-assessments tools prepared for them. While the instructors believed, they were involved in a near impossible task to complete, the bond they had developed over the months of working together encouraged them all to see it to fruition.

3. Implications of the Results

3.1 Questions one and two.

I proposed that when instructors are participating in a professional learning team, they would go through the same process of learning students do when they are engaged in a formative assessment environment. There is a parallel relationship between the learning processes of instructors and students when formative assessment is involved. For example, there are three levels of learning in this study:

1. An instructor who engages in a professional learning team to learn the practice of formative assessment experiences a self-assessing of her learning. She creates an activity and presents it to her students. She then returns to the team where she receives feedback that helps her to find the gaps in her learning and teaching so she can improve and return to the classroom.
2. An instructor who is implementing formative assessment to encourage her students to be cognisant of and active in their learning must self-regulate and evaluate her teaching. She must find out what does not work for the students and work towards turning teaching weaknesses into strengths.
3. Students who have instructors practising formative assessment as a process of learning must regularly self-assess their learning, find their gaps and work toward turning learning weaknesses into strengths.

The learning processes for reflective practice, formative assessment and professional learning teams are displayed in Figures 2.1, 2.2 and 2.3 (respectively) which represents the reflection and reconstruction of a concrete experience. The process of reflective learning has now been realized through the analysis of the data collected. Engagement with the professional learners,

however, has proven to be a significantly more valuable iterative process due to the trust that was built amongst the members, allowing for an open, honest and sharing discussion.

Questions one and two looked at the learning processes of the instructors in two ways: in the classroom and in the team. The results revealed that instructors experience the same process of reflection, self-assessment and evaluation. If an instructor were to pursue, the implementation of formative assessment practice on her own, she would work through the same process of learning as an individual who participated in a professional learning team. However, there is one key and perhaps major difference: the feedback received.

When working alone in a formative assessment classroom, the instructor receives feedback from her students which informs her on the learning needs. That triggers a change in her presentation. When engaging in a professional learning team, however, feedback from the other practitioners is offered which provides greater opportunity for critical thinking and opens up avenues of suggestions based on the experience of her colleagues. Figure 6.2 represents the amount of feedback received when participating in a collaborative environment versus working alone. For instance, in the professional learning team, an instructor who has created an activity does so with feedback from her colleagues as well as the students when she implements it in the classroom. The feedback from the students tells her it did not work, while her colleagues in the professional learning team tell her why it did not work, thus providing feedback in a much more powerful way.

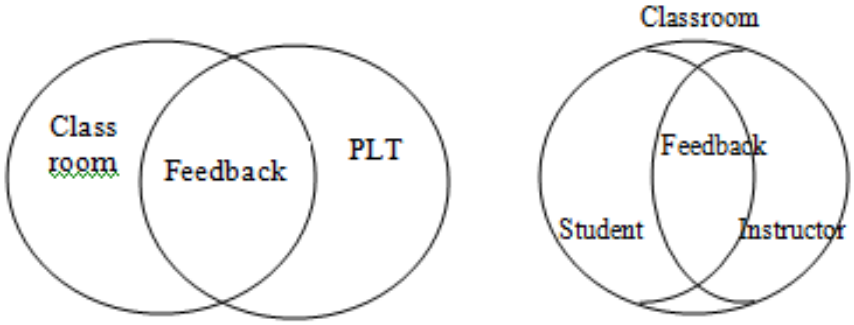


Figure 6.2 Feedback - Professional Learning Team vs Formative Assessment

The major discovery in this study (as illustrated above), is collaboration is key to professional learning. Central to the learning process in this study is sharing: sharing knowledge, understanding and experience, and personal and professional anecdotes without which there would be significantly less learning.

3.2 Question three.

It has been well established that culture played a significant role in this study but to what extent has it impacted the outcome? While the instructors did create and implement a self-assessment tool for their classes, might they have been more successful if the recipients had been more motivated or

willing to dive into their learning more enthusiastically? There were two instructors who never really put forth the effort into reflecting on their learning or engaging with the material as their colleagues did. It is not clear if their attitude was brought on by the students' culture of learning or their inability to adapt to the change of practice given they already had to adapt to the culture.

Even though there was a pedagogical difference between the students and instructors, for the most part, many of the learners were able to overcome that difference. It is interesting that while the culture had been identified as an oral culture, the instructors chose to use formative assessment for written work. Based on this culture being oral, it is possible the strategies of effective questioning or giving oral feedback might have been a more appropriate and successful route to take suggesting that future research could be done in this area.

In Chapter 1 questions were posed concerning the road blocks the instructors might face because their learners lacked motivation and their prior learning experiences taught them to be passive learners. The end result, however, was that no matter what obstacles were put in front of the instructors, they persevered and forged ahead with their own professional development.

4. Limitations

This study was purposefully designed to use ethnographic case study methodology due to the possible and resultant impact culture has had on the instructors. Selecting this approach did allow for the social reality to emerge and even though the students' learning and environmental culture was present throughout the study, the instructors were able to fulfill the learning cycle as representative of learning in a professional learning team.

This study could be transferred into another environment using the same approach to both methodology and analysis because the data collection tools used could yield productive results in another cultural environment. Discussion would still take place, participant reflections would exist and the observations could be done using the same tool as in this study. What would be interesting, however, is the discussion from the student focus group. Due to the non-responsive nature of the students to participating, the focus group was limited to only eight students. In an environment where students were eager to participate, the numbers could double or even triple in size. Thereby making it possible for the data collected to be much richer, including descriptive recollection of using formative assessment tools and strategies in the classes.

The fact that there were only three instructors who participated in journal writing could be seen as a limitation to the results. While more instructors provided reflective responses when posed by the researcher, if more instructors had participated in keeping a journal, this part of their learning process could have revealed more information.

5. Significance of this Study

In adding to the existing body of knowledge, this study has looked at the process of learning of those who are implementing formative assessment while engaging in a professional learning environment. It has been concluded that the learning process in a professional learning team aligns directly with the learning process involved in formative assessment practice. It has been further established that collaboration among those participating in a professional learning environment has the added benefit of providing significantly more feedback into the learning process which resulted in deeper understanding of formative assessment.

Trust played a significant role in the professional learning team which was not considered in the beginning stages of the study. While the collaborative nature was recognised as one of the characteristics of a professional learning community, the extent to which it would impact the instructors was not. The bond that developed among this particular group of instructors added value to their level learning. It is not known if the trust created among this group was an anomaly based on the ex-patriot community and the cultural phenomenon of "us against them" or, if investigations in a western environment using the same procedures as this study did, would produce a different result.

As well, this study has provided insight into using formative assessment practice in a Middle Eastern culture. It was established the pedagogy practised in this culture relied heavily on rote learning and memorisation. The instructors in this study were able to successfully implement strategies that encouraged these students to learn in a more active, participatory and critical manner.

6. Future Directions

There is great potential in taking this research in various directions. I have returned to Canada and am working in another English language environment. It is possible to reenact this study with, once again, Canadian instructors. However, this time the students are out of their comfort zone by having to deal with the Canadian culture besides learning. Questions one and two of this study could remain the same, but question three might change to: What impact does the Canadian culture have on the students' engagement with formative assessment practice? What impact does the students' culture have on their ability to adapt to formative assessment practice?

Although more and more studies are being done that include informing teachers of formative assessment and understanding the results of their implementing its practices, there is still little research on the learning process of educators in a professional learning community. Further research would determine information on their learning outcomes and whether engaging in a professional learning community actually has the lasting effects that published author such as Diaz-Maggiolli (2004), Darling-Hammond and Richardson (2009), Caine and Caine (2010), Low et al (2013) say that it has. As well, investigations engaged in practising formative assessment or assess-

ment for learning at the tertiary level are still in their infancy therefore further research is required to establish greater knowledge and understanding.

It was also interesting that all instructors in this study selected the same approach to formative assessment. A question such as: When instructors engage in formative assessment practice, how do they decide to approach it? might provide a deeper understanding of why they choose to practice one strategy over another. It is unlikely the result would have changed in this study because the instructors would still have gone through the same iterative process, but it may have provided more insight into learning what the impact of formative assessment might have had on one's teaching practice.

7. Last thoughts - A Personal Perspective

The literature review uncovered the nature of empowerment when one is participating in professional learning. Professional development can be a source of empowerment particularly to those living and teaching in the Middle East. There were times while teaching in the Middle East when I personally felt a sense of powerlessness in terms of what I could do in the classroom or with the constraints under which I had to live. It was when I had opportunities to participate in professional development, such as attending and presenting at international conferences that I was able to regain my enthusiasm for returning to a foreign life and foreign classroom. I knew that learning was the one area of my life I owned and could control.

I could see my colleagues also felt the same sense of powerlessness, both in the classroom and otherwise, as demonstrated by their grumblings during our team meetings and/or around the lunch table. For example, while one could plan classes using cooperative group techniques, students often did not know how to conduct themselves in that type of environment because they were unfamiliar with it. Even if we tried to slowly introduce a constructive learning environment by starting with groups of pairs, keeping the students focussed to complete the task could be a challenge because the students simply did not understand the purpose of learning in this way.

As noted by Bogler and Somech (2004), professional development is only an empowering experience if it increases teacher professionalism and is authentic to serve the needs of increasing student achievement. This study was able to provide such an environment. It did empower the instructors to persevere and understand that no matter what environment they lived in, they could always count on their learning to give them a sense of personal strength and pride. An instructor summed it up perfectly: "My favourite part of the experience was being in the discussion group because I found a safe and comfortable place to bounce ideas off of each other. I found this more useful than attending a session at a conference because we could really discuss, try, reflect and ask each other for suggestions." This study set out to investigate the learning process of instructors and provide evidence that it aligns with formative assessment practice. The statement from that instructor, suggests that it does.

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Appendix A – Expression of Interest to Staff

Are you open to trying new things? Willing to experiment with new methods? Help your students achieve success? Then perhaps participating in a professional learning team (PLT) is for you! I would like to invite you to participate in a study to investigate the relationship between formative assessment and professional development and its impact on the quality of education in a second language learning environment.

A PLT is about sharing knowledge, trialing new strategies/techniques in the classroom and discussing with colleagues how the students responded so you can make the most of their learning experience and an opportunity for you to grow professionally. For this PLT, you will learn about the intricacies of formative assessment: plan for it, use tools/techniques that motivate and promote active learning, and keep track of students' strengths and weaknesses to help them become autonomous learners.

If you would like further information as to what is involved or want to become a instructor in this study and an active member of a PLT, please email darlene.liutkus@cna-qatar.edu.qa. The study will begin in September and last for two semesters. This research is part of my doctoral studies and is fully recognised and supported by the Dean of Language Studies and Academics. Your participation will be a recognised professional development opportunity and you will receive a certificate of participation indicating such.

Appendix B – Ethical Approval - USQ

University of Southern Queensland

USQ Human Research Ethics Committee

Progress/Final Report

Where an electronic signature has been provided only email an *electronic copy* of this report to ethics@usq.edu.au. Otherwise, please provide both an *electronic copy* and a *hard copy* to ethics@usq.edu and Ethics Officer, ORHD, S Block.

Principal Researcher	Darlene Liutkus
Address for correspondence	P.O. Box 24449 Doha, Qatar
Name of Project	Transforming the classroom: investigating the use of formative assessment and professional development to enhance the quality of classroom practice
Ethics Approval No.	H11REA146.1

1. Type of report

Please tick the relevant report category:

☐ Annual

■ Final

2. Current status of the project:

■	Data collection phase of project completed:	June 28, 2012 ---------- ---------- Date
☐	Data collection has not commenced, but will in the future	---------- ---------- Date
☐	Data collection phase of project ongoing until:	---------- ---------- Date
☐	Extension of ethical clearance sought until:	---------- ---------- Date
☐	Project commence, but abandoned on:	---------- ---------- Date
☐	Project not commenced and no longer required:	---------- ---------- Date

3. Conducted as per the approved protocol:

Has the research been conducted in accordance with the approved protocol?	Y / N
If no, have the variations been previously submitted for approval	Y / N / NA

If no, provide the details of the variations and the reason why this has not previously been submitted for prior approval:

4. Request for amendment:

Would you like to submit a request for amendment to this project?	Y / N

If YES, please fill out the *request for amendment* form found on the ethics website and attach

5. Complaints or concerns about ethical conduct:

Have you received any complaints or concerns about the ethical conduct of this project?	Y / N

If yes, provide a summary of the issues and the action taken by the research team

6. Unexpected ethical issue management:

Have you become aware of any adverse events or other harms to research instructors, not anticipated in the approved protocol?	Y / N

If YES, provide a summary of the issues, the action taken by the research team, and a justification for why the protocol should be allowed to continue

7. Security of data:

Please confirm the security of the data collected and the conditions governing access to this data

All data collected through questionnaires, interviews, observations, my research diary, the diaries of the instructors and the transcription of the recorded discussions are kept in a locked cabinet inside a locked office that requires a pass card to access. The audio recordings of the instructor group discussions are secured on a flash memory drive complete with password access and the flash memory drive is also located in the aforementioned locked office.

8. Results of the research:

Has the research achieved to date the results anticipated in the approved protocol? Y / N

Please provide a brief summary of the results achieved to date. Include any publications or other outputs arising from the research project

I am at the first cycle of qualitative data analysis and after my initial response by way of analytical memos I feel I am on my way to having a well-balanced collection of data. I will be using some of the materials created by the instructors at a presentation at the upcoming TESOL Ontario Research Symposium in Canada scheduled November 10, 2012. Of course, any materials used will be strictly based upon instructor approval.

9. Other ethical issues:

Are there any other issues about the conduct of this project that you would like to bring to the attention of the HREC? Y / N

If yes, please provide details

10. Declaration

I confirm that the information included in this report is accurate. I also confirm that, to date, this research has been conducted in accordance with the approved protocol and with the principles contained in the National Statement.

---------- ----------/----------/----------

Signed

Appendix C – Ethical Approval CNA-Q

COLLEGE OF THE NORTH ATLANTIC QATAR

P.O. Box: 24449
Doha-Qatar
E-mail: info@can-qatar.edu.qa
Website: www.cna-qatar.com

Main Campus-Duhail
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Darlene Liutkus
Faculty of Language Studies and Academics
College of the North Atlantic-Qatar

September 14, 2011

Darlene:

Thank you for submitting your application for expedited ethical review of your planned research on "**Extending Best Practices: investigating the use of formative assessment in language studies to enhance the quality of education**". Your application was considered by the College of the North Atlantic-Qatar's Institutional Review Board on September 13, 2011. The following documents were reviewed:

1. Ethical Review Application Form
2. Consent of Teacher Participants
3. Appendix A – Professional Learning Team
4. Appendix B – Research Diary
5. Appendix C – Peer Coaching
6. Questionnaire on Teacher Self-Efficacy & Quality Teaching
7. Questionnaire on Student Opinion of Learning
8. Reflective Journal/Diary Notes
9. Observation Activity Record Sheet

The College of the North Atlantic-Qatar's IRB approves this study from an ethical point of view.

Approval is given for a period of one year.

Please inform the College's IRB when the research has been completed. If you are unable to complete your research within the one year validation period, you will be required to write to the IRB to request an extension or you will need to re-apply.

Any adverse events or significant change which occurs in connection with this study and/or which may alter its ethical consideration must be reported immediately to the College's IRB, and be accompanied by a description of those events and/changes. A determination on such a matter will be forthcoming within a two week period after notification of any events and/or changes.

Approval is given on the understanding that the guidelines for ethical research practice, as outlined by Canada's Tri-Council and Qatar's Supreme Council for Health, are adhered to.

We wish you every success with your research program.

Sincerely,

Michael Long

Michael Long
Chair, Office of Applied Research and Innovation

Appendix D – Letter of Consent

CONSENT OF TEACHER INSTRUCTORS

Date

Dear Instructors:

I am writing to invite you to participate in a study to investigate the relationship between formative assessment and professional development to teaching efficacy and its impact on the quality of education in a second language learning environment. Your participation in this study will involve participating in a professional learning team (PLT, see appendix A for detail), keeping a research diary (see appendix B for detail), responding to a questionnaire on teaching self-efficacy and undergoing peer coaching (see appendix C for detail). Your commitment to this study would be invaluable and would include attending a PLT meeting every 2 weeks for a period of 2 semesters. Semi-structured interviews will be part of the PLT process and would not require any further time. Participation will be on a voluntary basis. Questions posed in the interviews and research diary will aim to have you reflect on your classroom practice and on your learning experiences during the implementation of formative assessment.

The purpose of this study is to understand the transformative potential of professional development in relation to the implementation of formative assessment. The Language Studies department envisions it will reflect quality program development and innovative teaching/ learning/assessment that embrace best practice in the field of language learning. This study is an avenue to pursue that vision and your participation is both valuable and greatly appreciated. I do not foresee any risks or discomfort from your participation. Anonymity with respect to any data collected is guaranteed; any oral or written information you supply during the study or expressed during a PLT meeting will be held in confidence and unless you specifically indicate your consent, your name will not appear in any report or publication of the research. Once the research is complete, your data will be safely stored in a locked facility and only I will have access to this information. Confidentiality will be provided to the fullest extent possible by law.

If you agree to participate in the study, please indicate your acceptance by signing on the line below. If you agree, then wish to withdraw from the study at any time, for any reason, you are free to do so. You are also free to refuse to participate. Your decision will not influence the nature of your relationship with me, others in the language studies department or the College of the North Atlantic-Qatar either now, or in the future.

If you have any questions regarding the implementation of the study or about your role in the study, please feel free to contact Darlene Liutkus, either by telephone at 4495-2544 or by email darlene.liutkus@cna-qatar.edu.qa. This research has been reviewed by the Institutional Review Board, College of the North Atlantic-Qatar and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines and the Supreme Council of Health guidelines for the State of Qatar. If you have any questions about this process, or your rights as a instructor in the study, please contact Dr. Michael Long either by telephone at (974) 495-2236, or by e-mail (mike.long@cna-qatar.edu.qa)

Thank you,

Legal Rights and Signatures:

I _____, consent to participate in *Extending Best Practices: establishing the use of formative assessment in language studies to enhance the quality of education* conducted by Darlene Liutkus. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Instructor

Signature _____ Date _____

Principal Investigator

Signature _____ _____
Date_____

Appendix A – Professional Learning Team

If you are interested in enhancing your classroom repertoire and increasing your students' achievement and motivation, then read further!

A professional learning team (PLT) takes academic learning away from the institutions who only offer 'drive-by' or 'shotgun' workshops and gives the opportunity for learning to the teachers themselves. They are the means by which teachers can learn, change and/or improve their pedagogical theory and practice. They build on the concept of knowledge as practice whereby teachers learn and build knowledge together as they elicit teachers' tacit knowledge that can be shared and critiqued. Through a learning team, teachers have an opportunity to collaborate on inquiry-based topics that allow opportunity to learn for understanding and for real-world performance.

A PLT can be started on any particular topic and is similar to communities on practice in that it is a group of people who meet regularly to learn how to do something better but a PLT is more structured in that they meet regularly, they commit to contributing and collaborating in constructing knowledge, they take on team roles in order to keep the meetings consistent and smooth running. Teachers in a PLT have the opportunity to learn new methods of teaching, apply in the classroom what they've learned and reflect on how it went or if anything could be done to improve or make that method better.

For the purpose of the study, the focus for the PLT would be formative assessment (FA). FA involves planning, close attention, consistent tracking and regular adjustments by both the instructors and/or their students. It assists teachers and students in recognizing existing gaps in knowledge so the students can become successful achievers. Using FA strategies and tools encourages students to become autonomous learners as they begin to understand how they learn which can result in increased motivation.

Appendix B – Research Diary

A research diary is an introspective method of collecting data and is one of the tools I will be using in this study. As a diarist, you will keep an account of your experience in relation to working with PLT and the application of formative assessment strategies and classroom tools in your classroom practice. You will respond to your own teaching and learning; report on affective factors and include your own perceptions of what is going on with your learning and teaching that is typically inaccessible to an external observer.

The interest of the study is focussed on the learning process of a group when put in a collaborative, committed, voluntary professional development situation and its impact on teacher self-efficacy. Your research diary will not be

the only form of data collection but will take an integral part in triangulating the results with interviews, observations and completion of questionnaires.

Appendix C – Peer Coaching

Classroom observation is an integral part of coaching. The task of the observer is to record the presence or absence of behaviours/tools/techniques selected on the basis of teachers' needs. It is important to lay the ground when doing observations. Collaboration in the PLT will be based on confidentiality, trustworthiness and will foster a culture of comfort and security.

The coaching can be done in three stages. In the first stage, teachers in the PLT will confer prior to the actual observation to agree upon which FA tools and type of feedback will be used. Preparation will help clarify goals, specify success indicators and establish a personal learning foci and processes for assessing the lesson observed.

Once teachers have made those decisions, a classroom observation sheet will be created so the observer can concentrate on those specific behaviours. A recording method using identified codes per behaviour/tool/technique will be devised to ease the recording of the movements and interactions of the class instructors.

Finally, a post observation reflection will take place during the next scheduled PLT meeting. Engaging in this process will lay the groundwork for future success.

Appendix E – Amendment to Letter of Consent

AMENDMENT TO THE LETTER OF CONSENT BY INSTRUCTORS

Date:

Dear Instructor,

As a follow-up to your initial letter of consent I would like to ensure that you are fully aware and freely consent to the procedures required for data collection purposes. During the course of this study, you are asked to instructor in a professional learning team that will include recorded discussion, complete a research diary reflecting on your learning and teaching experiences, participate in interviews that will focus on your learning and teaching experiences, undergo classroom observations and participate in peer observations.

Anonymity with respect to any data collected is guaranteed; any oral or written information you supply during the study or expressed during a PLT meeting will be held in confidence and unless you specifically indicate your consent, your name will not appear in any report or publication of the research. Once the research is complete, your data will be safely stored in a locked facility and only I will have access to this information. Any electronic data collected will be password protected, stored on CD and completely removed from any other external memory devices. Confidentiality will be provided to the fullest extent possible by law.

If you have any questions regarding the implementation of the study or about your role in the study, please feel free to contact Darlene Liutkus, either by telephone at 4495-2544 or by email darlene.liutkus@cna-qatar.edu.qa. This research has been reviewed by the Institutional Review Board, College of the North Atlantic-Qatar and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines and the Supreme Council of Health guidelines for the State of Qatar. If you have any questions about this process, or your rights as a instructor in the study, please contact Dr. Michael Long either by telephone at (974) 495-2236, or by e-mail (mike.long@cna-qatar.edu.qa).

Legal Rights and Signatures:

I _____, consent to participate in Extending Best Practices: establishing the use of formative assessment in language studies to enhance the quality of education conducted by Darlene Liutkus. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Instructor

Signature _____ Date _____

Principal Investigator

Signature _____ _____ Date_____

Appendix F – USQ Ethical Approval of Change

From: Ethics [ethics@usq.edu.au]
Sent: Monday, March 26, 2012 10:01 AM
To: Liutkus, Darlene
Cc: Carole Haeusler; Anne Jasman
Subject: Request for Amendment
Attachments: USQ_Request_for_Ethics_Amendment.PDF

Dear Darlene

The Ethics Chair has recently reviewed your application for amendments to approved project Transforming the classroom: investigating the use of formative assessment and professional development to enhance the quality of classroom practice [formerly HaaREA146 – Extending best practices: investigating the use of formative assessment in language studies to enhance the quality of education] as stated in your memorandum dated 5 March 2012. The requested amendments have been endorsed and full ethics approval has been granted.

Your amendment approval number is **H11REA146.1**

Ethics approval for the project expires on **5 July 2012**.

The standard conditions of this approval are:

(a) conduct the project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments made to the proposal required by the HREC
(b) advise (email: ethics@usq.edu.au) immediately of any complaints or other issues in relation to the project which may warrant review of the ethical approval of the project
(c) make submission for approval of amendments to the approved project before implementing such changes
(d) provide a 'progress report' for every year of approval
(e) provide a 'final report' when the project is complete
(f) advise in writing if the project has been discontinued.

For (c) to (e) proformas are available on the USQ ethics website: http://www.usq.edu.au/research/ethicsbio/human

Please note that failure to comply with the conditions of approval and the *National Statement on Ethical Conduct in Human Research (2007)* may result in withdrawal of approval for the project.

You may now implement the amendments. I wish you all the best for the conduct of the project.

Melissa McCain
Ethics Committee Support Officer
Office of Research & Higher Degrees
USQ, Toowoomba Campus
Ph +61 746312691 | Email melissa.mccain@usq.edu.au

Appendix G – Quality Teaching Self Assessment

QUALITY TEACHING SELF-ASSESSMENT REFLECTION

This questionnaire is designed to help you gain a better understanding of teaching self-efficacy and how it relates to quality teaching. There are no correct or incorrect answers. It is intended to help you to identify your strengths and weaknesses in terms of personal qualities and instructional organisation.

INSTRUCTIONS: Please indicate your personal opinion about each statement by placing a ONE in the appropriate response at the right of each statement.

Key: 1=Strongly Agree 2=Moderately Agree 3=Agree slightly more than disagree 4=Disagree slightly more than agree 5=Moderately Disagree 6=Strongly Disagree							
		1	2	3	4	5	6
1.	I involve students in assessing their own work.						
2.	I understand my students.						
3.	I improve academic performance of students.						
4.	I maintain student confidentiality.						
5.	I am responsive to my students` needs.						
6.	When a student is having difficulty, I am usually able to adjust instruction to his/her learning.						
7.	I treat others with respect, even in difficult situations.						
8.	I get to know all my students as individuals.						
9.	I speak in an appropriate tone to others.						
10.	I actively involve students in developing concepts.						
11.	I learn from my past experiences in the classroom.						
12.	I want to see my students succeed.						
13.	I successfully maintain a positive classroom climate.						
14.	I use strategies to engage my students as learners.						
15.	I listen attentively to student questions and comments.						

16.	When a student gets a better than he/she usually gets, it is because I found better ways of teaching that student.						
17.	If one of my students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.						
18.	I can get through to most difficult students.						
19.	If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.						
20.	I provide students with specific suggestions for improving learning.						
21.	I plan activities to accommodate the range of individual difference among my students.						
22.	I implement teaching methods at an appropriate pace to accommodate differences among my students.						
23.	I use allocated time for activities that maximize learning.						
24.	I effectively manage routines and procedures for learning tasks.						
25.	I clarify directions for learning routines.						
26.	I maintain high levels of student engagement in learning tasks.						
27.	I utilise teaching aids and learning materials that accommodate individual difference among my students.						
28.	I work one-on-one with students when needed.						
29.	I maintain a classroom that is fair and impartial.						
30.	I plan my lessons to specific learning objectives.						
31.	I communicate to students the purpose and/or importance of learning tasks.						
32.	I plan evaluation procedures that accommodate individual difference among my students.						
33.	I redirect students who are persistently off task.						
34.	I ensure all my students participate in the class discussion.						
35.	I communicate to students the specific learning objectives of the lesson.						
36.	I provide students with specific feedback about their learning.						
37.	My teacher training program and/or experience has given the necessary skills to be an effect teacher.						

38.	I reflect on dilemmas I encounter in the classroom.						
39.	I solicit a variety of questions throughout the lesson that enable higher order thinking.						
40.	I arrange my classroom so it is welcoming to students.						
41.	I monitor students' involvement during learning tasks.						
42.	I adjust teaching and learning activities as needed.						
43.	I manage student discipline/behaviour efficiently.						
44.	I provide a positive influence on the academic development of students						
45.	I like to motivate students to perform to their fullest potential.						
46.	I admit my mistakes.						
47.	I involve students in developing higher order thinking skills.						
48.	I maintain a classroom environment in which students work cooperatively.						
49.	I accept responsibility for decisions I make in the classroom.						
50.	I plan my lessons for the whole semester.						

Self Assessing Quality Teaching

INSTRUCTIONS: Transfer the number marked for each question to the corresponding spaced provided below. After transferring all the numbers, add them by the category and calculate the average. Finally color the bar graph cells to show the average in each category.

Personal Characteristics	Classroom Management & Climate	Instructional Organisation	Instructional Implementation	Interactions with Students
2. _____	4. _____	17. _____	6. _____	1. _____
3. _____	7. _____	19. _____	10. _____	5. _____
9. _____	13. _____	21. _____	14. _____	8. _____
11. _____	24. _____	23. _____	16. _____	15. _____
12. _____	29. _____	25. _____	20. _____	18. _____
38. _____	33. _____	30. _____	22. _____	26. _____
42. _____	34. _____	32. _____	27. _____	28. _____
44. _____	40. _____	37. _____	31. _____	35. _____
46. _____	43. _____	41. _____	36. _____	45. _____
49. _____	48. _____	50. _____	39. _____	47. _____
Total = _____	Total = _____	Total = _____	Total = _____	Total = _____
Average = _____	Average = _____	Average = _____	Average = _____	Average = _____

Profile of Quality Teaching Indicators

1=Strongly Agree					
2=Moderately Agree					
3=Agree slightly more than disagree					
4=Disagree slightly more than agree					
5=Moderately Disagree					
6=Strongly Disagree					
	Personal Characteristics	Classroom Management & Climate	Instructional Organisation	Instructional Implementa-tion	Interactions with Students

Appendix H – Guideline for Reflective Journal

Reflective Diary/Journal

To help get started with keeping a diary/journal of your teaching, provided below is some suggestions you can follow:

Step 1 – Document what happened: the date, the lesson, strategies/tools used, all of the facts surrounding the situation

Step 2 – How did you feel: about the lesson as a whole, your use of the strategies/tools, your students' responses

Step 3 – Give an honest objective assessment of what happened: take a step back, if your peer observed, what did he/she have to say

Step 4 – What can you take from the lesson: analyse what happened, what was good/bad, what were your strengths/weaknesses, add any new thoughts

Step 5 – What improvements can you make: would something different work better next time, did your peer have any suggestions, did your students give you any ideas

Step 6 – Make a plan of action: how will you make any necessary changes, what can you keep the same/what can you change

Step 7 – What will measure your success: include how you will know that you achieved your plan of action, what will the lesson look like, how will you feel

Remember: your journal doesn't have to be a narrative; point form will do. Any thoughts or feelings can be recorded at any time. If you use any pseudonyms or abbreviations, please be consistent and provide an index for use by the researcher.

Appendix I – Instructor Observation Sheet

Observation Activity Record Sheet

Date: _____

Total Observation minutes _____ Observer Name _____

Beginning Time: _____ Location: _____

General Setting and Context Description

The observer will record the activities of the classroom using a combination of check boxes and written notes. Begin observing and marking when the instructor indicates the lesson has begun. Check all that apply.

1. Content/Context of Class Lesson – ESAP stream & Level

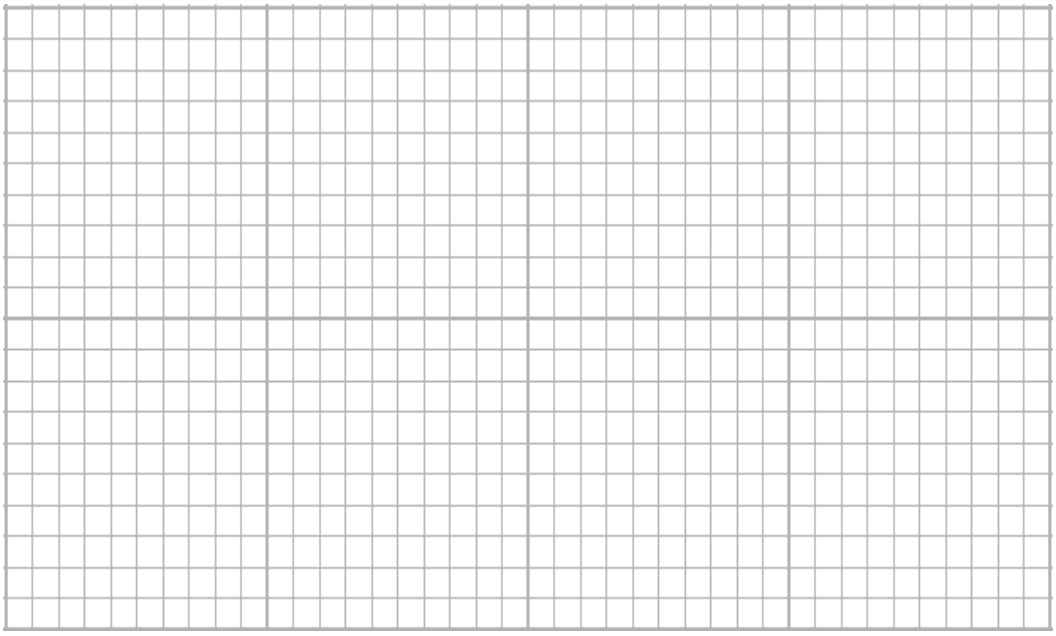
Business Administration	□	Level _____
Applied Technology	□	Level _____
Technical Preparatory Program	□	Level _____
Common Language Platform	□	Level _____

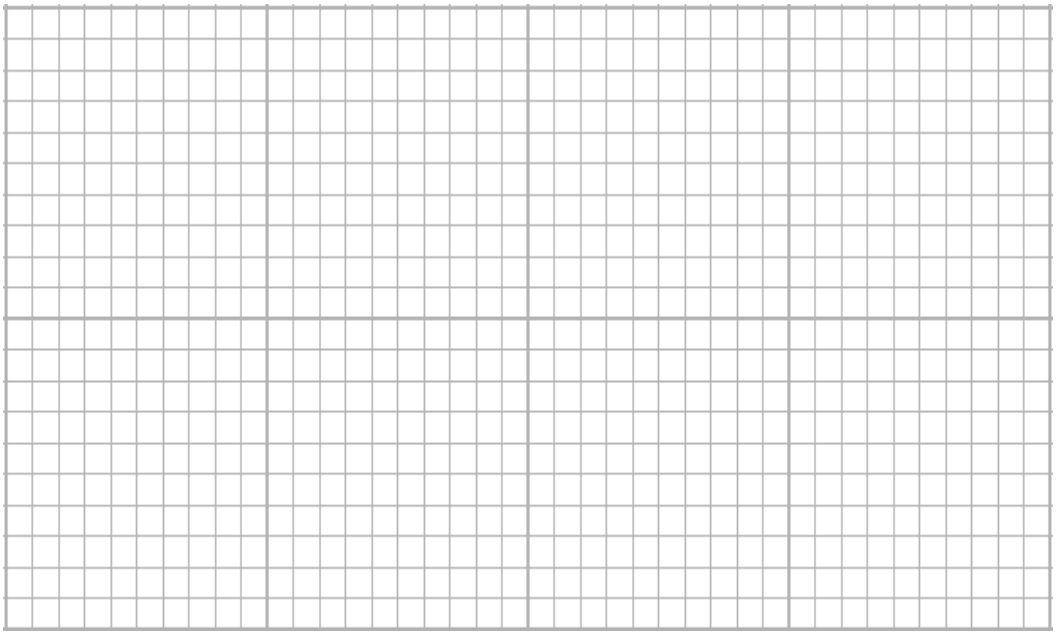
Class Management/Instructional Organisation & Implementation

Individuals working alone	_____ minutes
Pairs of students	_____ minutes
Small groups (3+ students)	_____ minutes
Whole class	_____ minutes

Comments**: What is today's lesson about?**

Classroom Organisation & Interaction with Students – Two tables are provided to use to track Questions/Feedback / Moving from Class Work to Group Work / Student Interaction





2. Tools and Strategies for Assessment during Instruction

Feedback	□
Self-Assessment	□
Peer-Assessment	□
Questioning	□
Voting Cards	□
Electronic Response System (Clickers)	□

3. Criteria for Effective Feedback

Strategies can vary in:	**In these Ways:**	**Tallies & Comments**
Timing	When given	
	How often	
Amount	How many points made	
	How much about each point	
Mode	Oral	
	Written	
	Visual / demonstration	
Audience	Individual	
	Group / class	
Content of Feedback can vary:		
Focus	On the work itself	
	On the process student used	
	On the student's self-assessment	
	On the student personally	
Comparison	To criteria for good work	
	To other students	
	To student's own past work	
Function / Valence	Positively describes	
Clarity	Clear to the student	
Specificity	Students know what to do	
	Errors identified but not corrected	
Tone	What the student will hear	

Comments:

4. Criteria for Effective Self / Peer Assessment

Purpose	Students know why they are using self/peer assessment	
Criteria	Students understand what they need to look for	
Feedback	Teacher give students feedback on quality of self-assessment	

Comments:

5. Criteria for Skillful Questioning

Engages students in learning	□	
Elicits display of student thinking	□	
Nurtures new insights	□	
Encourages application of knowledge	□	
Promotes making connections	□	
Assesses learning	□	
Guides learning	□	
Encourages higher order thinking	□	

Comments:

6. Attitude – Motivation – Engagement with task.

Students staying on task –		Students needing assistance –	
All	□	All	□
Most	□	Most	□
Half	□	Half	□
Less than half	□	Less than half	□
Students receiving feedback –		Students displaying frustration –	
All	□	All	□
Most	□	Most	□
Half	□	Half	□
Less than half	□	Less than half	□
Students appearing confused –		Students enjoying themselves –	
All	□	All	□
Most	□	Most	□
Half	□	Half	□
Less than half	□	Less than half	□

Questions: What are you working on today? What are your learning about _____ while

you are doing this? Can you tell me what a good _____ look like?

Appendix J – Instructor Observation Feedback Form

Observation Feedback Sheet Date: _____

Total Observation minutes: _____ Observer Name: Darlene _____

Class: _____

Instructional Organisation:

Class (min) _____ Pairs (min) _____ Groups (min) _____ Individual _____

Activity:

Classroom Organisation/Management/Climate and Interaction with students

Instructional Implementation:

Feedback:

Self/Peer Assessment:

Questioning:

Student Engagement:

Suggestions:

Appendix K – Questions for Student Focus Group

Drawing on the following categories, I will use stimulated recall during the interviews that will yield insights into thought processes concerning teaching and learning as it can draw interesting conclusions about processes of classroom decision-making that could not be elicited through the questionnaires alone.

Student Categories: Personal Relevance of English; Critical Aspects of Formative Assessment; Critical Voice in Classroom Interaction; Shared Control of Gap Filling; Student Interaction

Personal Relevance of English

1. Tell me how English is used in other parts of Doha.
2. Do you ever use English when you are not at the College?

Critical Aspects of Formative Assessment

3. When the teacher gives you an assignment, do you do it by yourself, with a friend or do you want your teacher to help you?
4. Did you ever have to correct your friend's work? How did you feel about that/What did you think about that? Did you like it?
5. When you learn English, what are you really good at? What do you need extra help with?
6. What helps you to learn English?

Critical Voice

7. Did your teacher let you ask why you have to learn this?
8. Did your teacher let you say what you think or how you feel?
9. Did your teacher want to you let her know when you don't understand?

Shared Control

10. Did you ever help your teacher plan what to learn about? In what way?
11. Did you ever help your teacher decide how well you are learning? How do you do that?
12. Did your teacher let you help decide what activities to do in class?
13. Did your teacher let you correct your own work?

Student Interaction

14. Did you talk to other students about how to make corrections? Which kinds of activities?
15. Did you explain to other students how to do something? Can you give an example?
16. Did you ever ask other students to explain something to you? Can you give an example?

Appendix L – Data Collected – Focussed Discussion Group (PLTs)

4.21 RFLPr - Reflective practice

Code	Definition	Coding Rule
RFLPr -Reflective practice	Instructor draws on past experience from classroom and prior learning	- any reference made to what they did in the past including: classroom (in this job or prior to), attending conferences, workshops, or any other formal education (university courses)

Table 5.1 As person

Beginning	"a sister who had multiple learning disabilities so I've done a lot of reading on her type of behaviour" "I um am a newly minted CELTA graduate...I took the CELTA training this August.." "really even in elementary school…thinking back when I was in elementary school, I'd be too scared….I'd be too embarrassed to hold up the card"
Middle	"but if they haven't been educated, trained in the concept of assessing someone and assessing themselves by the time they get to this lady over here with menopause...lol...I was just thinking this is what happens when you reach an age...I'm not taking it anymore...sit down .."
End	"I want to find the person who came up with the word rubric and I want to shoot 'em ...her it was a woman...." "my daughter know how to do this because this is what they do in teacher's college now, they train teachers to do formative ...."

Table 5.2 As teacher

Beginning	"... like lots of times and not always lots of times...we have in our heads where we want them to go but I don't know if we communicate that, you know, in terms of objectives....they don't' know....they're just kind of sitting there doing whatever we've .....".
Middle	"....it's doesn't have to have any sort of motivational thing at all except that we're going to get through these things. I find when I do that people kind of ....it frames it a little bit for them....it kind of puts people in the picture...because sometimes I have jumped around from one topic to another and somewhere about half way through someone will say...well, Miss why are we talking about this and I realize I haven't set it up" "yeah, I've done that before with my TPP302 ...showed weak examples and strong examples...and we looked at it and said okay, what's wrong with this, what's wrong with that and then ...." "I do it sometimes if we're taking up answers...okay so Li you do number one and when you're finished you decide who will do number 2 and they go around the room just so that it's not my job always. And it's just a little bit more language that's coming from them instead of from me." "Because I did the same thing and I had a checklist and I knew my class was kind of weak but we were doing a review for the exam and I said, okay here's your topics, you get these topic cards and then you check yourself off on this list and they did their topic card and they were totally useless." "I had one class and I had lots of checklists and I'd say okay, whenever you do

	the writing, you make sure...do you have a title, do you have a topic sentence, do you have a conclusion...that's the first thing that you check...right I have that...then does every sentence start with a...then they'd check their capitals and their periods and then they'd go and they would just check that the verb matched and I said chances are if you've done all of that, your writing will be excellent. Now, those students came...they wrote the most amazing things on the final exam...I mean they were just really good..." "I have been trying to do something very similar with my listening piece and I tried the other day ...so we do a group listening and I realised it allowed some people to just sit back ...they don't have to do anything so I decided I would do the group listening first, then I would given them individual...they go and listen to it and fill in what they didn't get, then I give them the text and I ask them to highlight in the text the answers for their piece...there were some, like you were saying, I really feel that they need that to see and hear the text, some of them were really into it and they were going back and forth, back and forth and making sure they were hearing and there were others who just didn't care less"
End	"usually I format it for them and then they picked out a video and they wrote three questions and then they had a lesson, they gave a lesson so they were in control, they were really in control of what they were doing so by the time they came to the end, they were teaching the class." "I'm thinking of these grammar exercises that I did ...they had to identify the tense and then they had to make yes/no questions and 5 wh questions....now I'm thinking I got them to do this on the board and I got them do this at their seat and I liked it at the board because I could monitor them all at once and I can use the speaking ...the questioning techniques then...I can get them together in peers to check each other's work and I'm thinking yeah, that's very doable but how am I going to get them to see the rubric like a marking rubric because some things we do in our class are either right or wrong..." "so I thought how can I do this even on days when we don't have note taking per say...they don't have a listening activity as such and I thought okay maybe I will just get them in the habit of writing the date on a piece of paper…" "So my thought was, how could I get them to sort of look at this before hand and it's not just the 10 minutes that they are up there...it's a whole learning thing. So the first time around, I made a little work sheet for them to sit with a partner and talk about things like...do their presentation and their partner would give them feedback as to what words they didn't pronounce correctly, or stuff they didn't understand…And so basically what I did was I took the rubric I use to evaluate them and tried to form questions here."

Table 5.3 As learners

Beginning	"it's like use or lose it, that's, I mean look at how many things you've had and you've lost it because you didn't use it."
Middle	"So this chapter is a little bit frustrating...it's good, I know it's good stuff but if we are going to do this, we have to change the culture of learning." "so, my epiphany as I was reading this again, is that we could probably use some of the structure in here to structure some of our own activities as we go forward." "....I'd like to know how we could use hinge-point questions in our class because we don't do a lot of content..." "and it doesn't say this but I think when I was reading this, it helps to ask the students, why did you say that answer" "so when you say with the summative...I don't understand...we can't test the learn-

	ing, you said?"
End	"...the formative assessment that happens as we're learning so I think I would rather come when I'm teaching something next time rather than...you know teach my mind about this because it's been opened; the world is bigger now…the world of formative assessment has grown…" "and what's the advantage of peer assessment?" "I'm still not comfortable with this so it's feeling artificial for me…" "they're good at it and it's concrete and it's academic but I don't know if it's that...and I tend to ...myself this is the way I learn so this is the way I go into kind of like matrixes and learning it like this…"

Table 5.4 As employees

Beginning	"Because we've been given that new assessment and we're supposed to meet as a team and then one curricula person is supposed to take this forward… "that's the difficulty with CLP...so we do all of this rubric and assignments and in January...it's all changed...even if you switch....it's the same like when we taught together it was the same curriculum and now we have all Top Notch next semester, it's going to be something completely different."
Middle	"but I think one of the biggest issues is the materials that we use and if we had in-house materials that were properly...so like the skills were integrated and related to topics that are maybe more salient to them that there might be more motivation or interest." "...and I think helps with assessment when you've got materials that represent and better represent your clientele." "...this is another issue we talked about...if we're going from class to class...like I change into another level...I was just put in 106 ...if I'm not in 106 again, it's really hard for me" "I put a lot of thought into mine and we're going to have a discussion to drop the midterm....to add more formative assessment and to drop our content so we really are skilled based as a real bridge because they're still going to have to write the CAEL because it's such a hypocrisy of what we're doing and the CAEL is the real exit test and we're not building the skills and it's all the way down to the CLP" "I gotta ask you something before you go and it's getting your opinion and I've been at it since 2009...in the writing assessment 20% has been allocated to put capital letters and periods and you don't know how much that bothers me and they get 20% ..did they write an email and that's 40%...how can you fail it? ... It is crazy and apart from going out to the assessment team and shooting them, there's no way it will get changed." "I felt totally underestimated as a professional, I felt insulted and I heard that from a lot of people...because hello...we've been doing this....but maybe you're right, maybe there should have been two groups the more seasoned, the people who have been here..."
End	"…then [redacted] sent out an email, like when we had a meeting in CLP and he said my emphasis is not on using computer skills in the classroom because we used to try to teach computer skills through the use of English, right and he said we're focusing on English and if you can use the computer to do it, that's fine. So, it meant that all the work we had done ....to integrate English in the computer skills was just thrown out." "....it's all over the place and so it's no wonder these students can't talk in func-

	tions, no wonder they don't know their grammar and no wonder they can't even adequately talk in thematic language because we don't do any tasks, we're just plowing through this book and getting them to do these readings that the teachers have made up that have no corpus. And they say just plug the holes...but we haven't got holes, we've got gaps man and the biggest gap is that we don't have a philosophy." "just the general calibre of student, even I've only been here 2 years and the 1050 I had in my first semester here who are in 1070/1080 now they were just...for some reason it's the same work, it's different material, different content but it's the same stuff, they're just not getting it...I don't get it...." "a teacher had this book and he offered to give it to me and I never took it..it was called Coherence and it was about visual coherence and it also talked about organisation coherence and it's interesting because we're talking about our program and assessment coherence and we would have to say that our program is not coherent because what they ask, and then what they test and then what they use from the textbook are not coherent."

Table 5.5 On student learning

Beginning	"and they don't even mark it wrong. They'll erase the answer and then mark it right and it's because it's not that they're cheating but they think yeah, I got it right and I understand it…" "formative assessment can be helpful in encouraging the students in taking some responsibility for their own learning which in TPP is an enormous task but what we aspire to." "I find that these fellows are loath to, um, to say they don't get it and they're having trouble…" "…students just look right at the mark." "and so it's not about thinking or understanding it's just about getting it right." "I've read about this before ...this is what I try to do but again teaching the boys when they...most of them...just want to know if it's right or wrong and they don't want to take ownership but I find this chapter is great…" "one of my questions when reading transfer of knowledge was how do we get our students to transfer knowledge because given the model and then they see a different question on the final...and they're like ...what do I do....ah, take what you've learned and apply it....show me sample teacher so it's really frustrating when you know they get the grammar, they understand it but you give them a different type of question…"
Middle	"…I find the students aren't big on discussing in groups and stuff…" "no, I give them a sample now because I've spent ....it's not a waste because it's learning but I've spent so much time trying to get them to create something...they're just not there for whatever reason the lights just aren't going on…" "how do we get our students to transfer knowledge because given the model and then they see a different question on the final...and they're like ...what do I do...." "I also think that because they're immature, I tend to think they're stupid."
End	"…so over the last 3 three weeks I've been going over with them the opinion paragraph and I think.....I even asked them today ...they're not seeing it as a continuation if Miss N does something on Monday with opinion and then she does something on Tuesday, they don't get it that it's a continuation...they think it's something totally different so they're forgetting that they have to state their opinion in

	the topic sentence even those that's what we did on day 1, it's now day 10…" "So I think this is something that because writing is such an onerous task for them always, I've got to try and to get them to talk more and write more because when they hear themselves when you get them to just reread and this was the problem when I started to mark their written again time, their drafting to get them to finish a draft so I could give and then they'll write a better one…" "…for some reason it's the same work, it's different material, different content but it's the same stuff, they're just not getting it…I don't get it...like even today...it's like what is a topic sentence, I'm like guys, this is 1030 stuff..." "on the flip side, it could be their survival mechanism .....they've learned ....they've adapted or evolved to learning in different ways...cause you see it in class and they can't...like the word 'the'...they'll say tahee but they know that it goes in front of a single noun so it's insanity really I don't know how else to describe it… they word the 'the' you'll hear them saying when they're not reading it 'the apple' or whatever and they'll write it but when they see it, they don't recognise it, I guess but they can answer the question...I don't know what it is, I don't know what the short circuit is ...there's something....there's a connection not being made.....interesting" "just getting people in that mode of looking at someone else's work from the perspective of how can you help that person improve it rather than, I'm going to copy from this person, right because that seems to be the mindset in some of my earlier classes" "yeah, they're not used to this so they have to be trained" "So my thought was, how could I get them to sort of look at this beforehand and it's not just the 1 minutes that they are up there…it's a whole learning thing."

4.22 EVLPr - Evaluative practice

Code	Definition	Coding Rule
EVLPr -Evaluative practice	Instructor makes decisions of her class practice and choice of formative assessment tool	- judgement placed on her own behaviour including: classroom, learning group, with other colleagues

Table 5.6 Self

Beginning	"...I'm going to say something about the CELTA...like I don't care what…what any of us has studied in school...it's what works and doesn't work in the classroom. I get tired of this ...this course says do that so I'm to the level of teaching now where I'm confident I know they said that but does this work or not work in my class. Right, I mean I don't need this authority saying do like this. So what has worked for me...though, I for years for 15 years now, I always throw my plans up and I find that works very well…"
Middle	"-okay that'll be some things for me to think about in terms of....the next go round..."
End	"Because we're talking about a fairly formulaic final business report that also is incorporated in other writing so that was very much a learning for me to see that okay it's not really a peer evaluation tool…" "The first week worked like a charm, worked beautifully cause I remembered the next weeks, some days I remembered and some days I didn't…"

Table 5.7 Teaching practice

Beginning	"and then you have your feedback and you go okay they didn't understand this,

	they want more of this and it's going to take, it takes 10 minutes so I find that I don't use my recipes cards as often as I should because I'm coming right to end of my lesson and I really need to put in that feedback from my students."
Middle	"I have for instance made a check list, like sort of a rubric for my class that we're doing the project so if I were going to chose something that would be it. But it failed dismally." "...so I gave them time.....I think part of the problem was I didn't structure it after I gave them that I just thought they were going to do it" "And so that whole piece I have to rethink for the second one...what I can do differently to get everyone to the point where they have it finished before the deadline and can practice it a bit before the deadline" "Great, so I thought I didn't do anything but it seems I did." "what's happened with me is I thought like this is not working....what I'm saying here is not what they need to hear." "....well certainly that was a mistake in the first one round...it was just too much coming at them and they didn't know what to do...that was part of it. There was also, my directions I think were a little bit mixed because I had the two tasks mixed up plus there was no marks and they asked specifically is there marks." "I think a good way to start is with vocabulary in context questions because that's the only time I do this consistently"
End	"....so the whole class was in disarray so I felt ...well maybe it did happen because I remember at one I was thinking we were talking about how we did exercises and I was doing these exercises and maybe the reflection....I mean certainly it must have had some baring cause remember at one point I was thinking, hah, I can't even get through to them to talk about...like we're not even at the reflective stage to say what is the it you think the teacher is looking for ...it's like, we're at the stage where it's like you gotta do it this way, you gotta do that and just kind of like get on the boat, right...like they weren't even on the boat .....so I felt ...when you guys were doing all this reflective stuff, I felt like sh-- my class is so weak and it really hit me again" "I felt like I didn't do enough with that but I could see that I could have built it in a lot more...like I could have built it in earlier in the program." "but they really enjoyed it and that was then the reflection was necessary so I would like to do earlier that kind of control" "I knew that this was better for my students, I knew it was going to get them ready for the grammar, I knew it was going to get them ready for the test and I knew that it really opened them up" "I put in a thing called my scores for them to put in the front of their binders but it's difficult to remember to get them to write it in...you have to remember to get them to write it in." "I would like to next term have them really truly help me with it now that I have handle on what to do with it in the classroom… I found I couldn't do everything even though I had the ideas in my mind I couldn't do it…" "well I think now, I would use it right from the very beginning but I used it at the end of the term…" "yeah, it didn't work well because for one here they couldn't decide who was supposed to answer what on this sheet, because it was all on one page...some of it was for the partner, some for the person so second go round on the second project

	I made 2 sheets...” “no, it didn't work very well, the very first one… it didn't work well because for one here they couldn't decide who was supposed to answer what on this sheet, because it was all on one page...” “right and then that's when I should be asking okay what are the parts of topic sentence and clearly if they don't know that, I just have to scrap that for a second and then go back to the basic of a topic sentence…” “so I thought okay before I really get angry, because at this point it's frustration because they're smart kids ....so I thought okay my methods obviously aren't working if they're still asking me what to put in the topic sentence so what I did was…”

Table 5.8 Student Learning

Beginning	“I feel very strongly that they do need that plan up there especially those TPP boys just to focus on their learning. “
Middle	“they don't understand when they read something if it's in the past, the present or if it's referring to the future…” “they just maybe don't know the names, they don't know the meta language of grammar” “I've spent so much time trying to get them to create something...they're just not there for whatever reason the lights just aren't going on so now I've opted to show them a sample and some of them will, like you said, plug it in...some of them will sort of change a few words...like you said, it helps them and they don't have the sample when they're writing the final example so whether they memorize it or whatever, they're still using some sort of English and a skill to get that writing down.”
End	“you know we all have seek and find readers, right?” “...we said how are we going to build in peer assessment in small activities such as questioning techniques and I talked about this which is something I did at the end where students have to identify the tense and they write the yes/no question and then they write the 5 wh questions...okay let's be honest, sometimes this is way too difficult, even the yes/no questions are hard...my class is really low.”

4.23 PDGY-Gs - Pedagogy: setting goals

Code	Definition	Coding Rule
PDGY-Gs -Pedagogy - setting goals	Instructor plans for class: with herself (use of formative assessment tool) and with students (direction of the lesson)	- anticipation of what the instructor intends to do in the future in all areas of teaching and professional learning

Table 5.9 Professional learning

Beginning	“So right, it's only expected for me to read chapter 1 and for me to give you guys enough information so that you don't necessarily have to read it but you can.”
Middle	“I think we need to pick one or two things and then try them...that's about as much as we can do and maybe we should all chose a different one and then we can compare notes and we'll have more experience” “Mo - where do we go from here. Is there a unit 7? H - I'll do 7”
End	“We have a very short term...we only have 2 months so what are we going to do...like how are we going to do this so that we can do....god knows who I'm going to get in my class and how can we do this so that we can do small things

	where we can practice this without making big projects or what you do you think" (in planning next semester) "we said okay let's try to get to meet this time and talk about something sort of concrete that we're going to put in place for next semester, relative to formative assessment, am I right? Okay, so now, the suggestion was that we'll all have thought about it and we'll have some idea in our head. Me do you want to start?" "I'm going to do something on Thursday that's not the book. Write that self-assessment and have a chat… and I'm going to make sure that there are games included"

Table 5.10 Teaching practice

Beginning	
Middle	"I'm going to do the same thing for the midterm for their writing...have some samples and have them grade the samples of writing which preps them for the midterm and the speaking... in the same way you can also do the same thing with the speaking...why is this going to get a better mark" "I would have the assessment rubric done...this is how I'm going to mark it in my head and then I would guide them to elicit the things that I need." "and I have the same issues with my students so I'm going to try now something like this in preparation not as the final...." (next step from observation of another instructor) "I'm going to next semester try some of this out but I'm going to choose one may-be two and start from the beginning and build up to something. I need to do that for me because I've always had a bad experience with peer or self evaluation completely." (in using rubrics) "so I think for me, I'm actually with you Me, rather than an instructional rubric, I'll go with a checklist, they're visually easy with bullets and you can make it task specific" "the first thing that we should do is solicit from the various levels what kinds of things they're doing to now to incorporate...to encourage self assessment because there are, your right, all kinds of little checklists and happy face, yes or no...so there is stuff and actually that.." (in share with colleagues throughout the depart-ment) "it would take me 5 minutes to give feedback to the student, and while I was giv-ing feedback, everybody had to write a comment or comments...like I think you did this well, I think you could work on this...and I'm thinking I'm going to do that in my class"
End	"I have sat down with myself and I'm going to really try this term and I'm going to do it on Thursdays, I have it written down this is what we're going to be doing on Thursday and one of them is this assessment and self assessment where they are going to look at their work and assess how well they did, if they were there and I'm going to have it separately in a file folder where they are going to meas-ure their own attendance, they're going to say whether they were in or not, how hard they worked that kind of thing..." "I thought something similar H, but I was thinking of it note taking, I was going to get them every day, like I get my guys or did, to put the date on and to take notes in that class and at 1070 note taking is really important...so I thought how

	can I do this even on days when we don't have note taking per say...they don't have a listening activity as such and I thought okay maybe I will just get them in the habit of writing the date on a piece of paper and recording either a new vocabulary word that they learned or something ...give them time at the end of every class to record something that they're going to work on…" "I'm going to try this...on self-assessment I'm going to sit down and have a chat with them." "So one of the things I'm going to do is set up a diary for myself…(to) celebrate their accomplishments so to make sure that I don't ignore D because D is quiet and you get 3 or 4 every week, I'm going to have a little.. just a one pager which ones today and make sure that I do it at the time not after the fact." "now the next stage where I'm going the next time…I'm going to try to work on the actual questioning part of that and see if instead of giving them the paper, see if they could build it....what would be important, if you're listening to someone what kind of things are important for you and hopefully draw out from them...well, I have to hear the voice loud enough, they have to use words that I understand...those kinds of things. So that they're reflecting about it before they even get this" "so we only have 2 months for next term. I'm going to do the assessment like you suggested at the end of the week. Are you going to take an hour? H - I'm only going to take a half hour....I'm going to use a 1 hr lesson in that time and 45 minutes on this stuff and I'm still thinking about how am I going to break it up but that's what I'm still thinking about." "I do know what I need to do...rework my questions for any of the exercises for evaluation that I do because...yes they can underline it but do they really know what it is that they are underlining and it really made me think yeah, I need to put my ego aside and focus on getting them to really understand....just for themselves...if I could get one student to say...yeah, why is that, I would be so happy."

Table 5.11 Teaching students

Beginning	"So actually I am interested in trying them out cause then some sort, you come up with some sort of multiple choice activity a/b/c/d and they've got to hold up the card" "So actually I am interested in trying them out cause then some sort, you come up with some sort of multiple choice activity a/b/c/d and they've got to hold up the card" "where am I going, where am I now, how do I get there, I think and I'm going to try really hard to do, I try but I don't do it very often,… but I will discuss with them the first one so that they know, I gotta get ...like I don't know...I gotta get a better mark than that the next time, is as far as I think I can go with them because I don't think conceptually they're handling things very well but they deal well with numbers..50%, 90%, I understand that. You know, I got 50% I can do better than that...so I'm gonna try next semester to do as many pre-assessment tasks as I can."
Middle	"so I can think about how to use that video instead of just me looking at it and evaluating to make it a formative evaluation… but I like your idea of did you set a goal and did you meet it in this....I would like putting that into a final piece." (next step to improve activity) "…but I like it when I'm writing it and they see me writing it and I ask them to write along with me and I think I'll ask for more help next time I do that, next term…" "I'm giving them their feedback or maybe I can just get them to write...do a

	checklist at that point so that everybody's doing something while the next person gets up to get ready to do their presentation...I think I'm going to do that....”
End	“…but anyway that's another thing I'm going to get them to do is a free-writing exercise, yeah and a journal and I'll get some of their thoughts that way…” “… mine is going to be a little bit different. Mine is going to be the oral peer ...I think I sent you that but I am also going to work with my guys starting tomorrow to create our own rubric…” “I told you about one activity that I did on the board and had them go with me and how many marks I would deduct if this was missing but that was really spontaneous and I wrote it down so I have notes of it but now that but now that I've created them and gone through them, I would like to next term have them really truly help me with it now that I have handle on what to do with it in the classroom...cause it's a step right, it's a process...” “the next time I do it, I'm going to, draw it out of them so is there a topic sentence...why is it the topic sentence as opposed to have them just underline because for most of them, they're going to underline the first sentence regardless if they think it's the topic sentence or not so... then that's when I should be asking okay what are the parts of topic sentence and clearly if they don't know that, I just have to scrap that for a second and then go back to the basic of a topic sentence”

4.24 PDGY-EAL - Pedagogy: engaging in active learning

Code	Definition	Coding Rule
PDGY-Eal -Pedagogy - engagement in active learning	Instructor directs her own learning; takes lead in presenting assigned articles; in preparing the use of formative assessment tool	- behaviour that displays the instructor takes charge of her learning

Table 5.12 Directing their learning

Beginning	“what's going on in our professional learning team is that we are perhaps, you know, going to try to implement a little bit of change in something like that....” “it should be things like what they've done well and what they need to improve on. Now I would like...would you like to talk about that..” “the quizzes I don't think you can do that though...you can do practice quizzes you can develop practice quizzes maybe but I think that works really well with writing like first draft, second draft , third draft..you're marking you know and descriptive feedback inside the feedback like not only making the corrections but explaining it”
Middle	“so, my epiphany as I was reading this again, is that we could probably use some of the structure in here to structure some of our own activities as we go forward. So I guess we are going to talk about 2 things.” “But just let me finish and then we’ll go back to your point Mo because I find it interesting that you're identifying it as these strategies…”
End	“okay so I guess our goal for now is to start talking about observations and getting…just coordinating…” “let’s think about what we’re going to do this term…” “okay, let’s focus back on what we said we would talk about…”

Table 5.13 Seeks clarification on content, on shared activities

Beginning	"you sometimes used the term normative for formative… I just wondered if it was a term used previously and they changed it...no normative because I ...."
	"And they look at the guide, a scoring guide, is that right?"
	"I don't understand that activity..."
	"Can you just give us an example of the feedback that you used..."
	"Concept checking?"
	"Is that the type of descriptive feedback we're talking about?"
	"so I guess they just have to try to read it out loud and then try to hopefully hear their own mistakes so it's just self-evaluation as opposed to..."
	"getting them to attend to the page right so how do you get them to reflect on that?"
	"What did they say about the first item?
	"Is there any value in them asking the person to take another look at.."
	"in what ...you said extreme..in what way I wonder"
Middle	"That's what I couldn't get. I couldn't understand the proximal development…"
End	"could I just go back a second…you said 50% is on that…what's…"
	"…let's just say…there's four of those now is that four iterations of the same writing or is that four discrete writing?"

Table 5.14 Seeks and/or give feedback

Beginning	"yeah, one way you can do this is to show them the rubrics, if you're doing writing you can make a user friendly rubric to walk them through it."
Middle	"I have for instance made a check list, like sort of a rubric for my class that we're doing the project so if I were going to chose something that would be it. But it failed dismally."
	"well, that's okay...what did it look like and why did it fail?"
	"how did you fail, because from your end it sounds fine..."
	"it was a sheet beyond ...it was a sheet that needed to come after they got it all together and then they could have done it"
	"use that checklist...they don't need a lot of extra information because they've already used the parameters for developing the thing so you don't need to go into a lot of extra things..."
	"what about video...taping it so they can look at their own?"
	"and then when it's over you can ask do you think you did better than the first time, where do you think, why do you think"
End	"they don't fall in between so how do I do that for a very small task that may be only 20 minutes?"
	"okay so now I'm wondering is that pat of…is that also part of formative assessment, in a way?"

Table 5.15 Interacts with material

Beginning	"The issue is being addressed here is what is the difference between summative assessment and normative (sic) assessment and these are terms that get bandied around the whole time." "(papers shuffling) yeah, I'm not sure which chapter it was but it was about that...you have to start at the very beginning .... pull out the high and low...show the examples...give examples of good and bad and why it's good and why...." "yeah, right off the bat what the expectations are and having them work at their own...having them grade it..that was it....how you would grade it and how they would grade it and what they're looking for and what you're looking for and sort of coming together and saying..okay we'd like you to mark us on the title page, give us some marks for that for example. And you hadn't thought of that and you could give that flexibility and say okay I'll give you one point for that so that involves them.... that was Chapter 3" "Essentially what they identified was 5 overriding criteria for assessment for learning. I think you're right in that there's nothing really earth shattering here, those 5 things and I bulleted them for you and we have talked about them and used examples probably without labeling them like this but one was the sharing your learning intentions and things like rubrics and what are the criteria, right; effective classroom discussions, in other words this is what they focussed on in this one....not just asking yes/no questions and not just listening for the right answer but actually listening to see where your students....where their understanding or misunderstandings are....feedback, we've talked about that, in terms of not just numbers but things that will commence that will move people forward...what was good...what's the next step. Activating students as the owners of their own learning, again trying to get people to take responsibility for letting you know, in fact, if they understand something or not...even something as simple as that, right.....we talked about those response cards and the last one was activating students as instructional resources."
Middle	"oh, well just as we've been talking about scaffolding....building in all these things so in the end hand it over to the students and actually talk about the theory right...everybody rolls their eyes at theory right, but I did a lot of my Masters with this....Vygotsky and constructing knowledge right, so talking about this space...it's between what they already know...this proximal development...this space where you can figure it out on your own, your independent problem solving..."
End	"it was in the bag from the conference but I have this one...generation X ...just a little paragraph...generation X have been generally characterized as hard working, independent and skeptical...generation Y 81 - 99 came along during the last two decades; its members are identified as confident and technologically advanced and they come with a sense of entitlement and I thought…"

Table 5.16 Shares ideas using formative assessment tools/strategies

Beginning	"having the students create a rubric....teaching..just teaching the fundamentals...okay what is a rubric .... instead of just doing okay here is the rubric, tell me the words you don't understand and this is what we're going to be using for the next four months" "Again this is just getting students involved in ...so like divide students and ask them to sort work samples in order through good to poor. So even giving them what you guys said but not telling them which is high medium or low and let them try to figure it out."

	"And again I think this is mainly related to writing...you would attach this and they have to fill out this form after they've done it right, and their opinion and what they think and then they even have a classroom and then this is the plan. So this is sort of a little contract to learning." "so like you said...they would want to see what they did right ...they don't always want to be told what they did wrong"
Middle	"put it on the overhead and have like a worksheet with them and say okay this is the work, this is what I'm going to be using to grade, here is a copy of it, let's look at it....is there a topic sentence, what are the details...whatever it is, how is the grammar, whatever it is that you're looking at." "I would really love to get the rubric thing to a point to where they can understand...like some kind of a simple checklist where they...cause I can't be giving them examples anymore…"
End	"…that would be interesting…you could see if when they participated in the creation of it would they pay more attention to it once they get it back in terms of feedback, you know."

Table 5.17 Uses formative assessment tools/strategies

Beginning	
Middle	"the oral error correction so H gives them 10 sentences, with the boys, she'll say....I just threw them up on the board...it's just like...this is the grammar point we've studied ...I'm giving you 10 sentences...listen, write yes or no and it's amazing....they're very oral...they can do it but then you give them a paper exercise and they can't do it so I tried to make....I tried to do what H was saying...make the connection ....kay guys you can never seem to do this on paper but speak it out, talk it out because they're very good with their oral skills they could catch the s or no s…" "...I've taken the writing rubric and I really made it student friendly…" "yes, you're completely right, so that's actually the first one I'd like to try is the writing rubric" "Now, I think the difference between what the instructional rubric in here and the one I'm about to offer you is the one in here is task specific...what I call my student friendly writing for my students and I just kind of re-jigged the language so whereas in marking..in the assessment rubric, it'll be your grammar has no mistakes, now in the instructional rubric I've got...I don't make any mistakes in my grammar, okay. So really I've just re-jigged the assessment rubric a little bit." "I had a checklist and I knew my class was kind of weak but we were doing a review for the exam and I said, okay here's your topics, you get these topic cards and then you check yourself off on this list and they did their topic card and they were totally useless ...like everything was good. And I thought, God this is not working...like you said, they have to know how to do the task so then I took the checklist and I broke it down in columns and they had to write location, and they had to write 3 or 4 places and then why, they had to give a reason or example."
End	"I am going to do this again because I have another writing piece and I want them to use the same tool...and I will do that, I'll have them in pairs...part of the tool at the end they have to check each other's spelling because it's hard to find your own spelling mistakes so I'll do the whole thing with a partner and I will decide who works with who and they have to do it all together...they'll go through one piece together then they'll have to go through the other piece together then they'll have to mark it and do the whole thing and that should help. Because another thing she

	noticed was at the beginning even though this is the 3rd time I've used that tool, slightly different every time, they still when it was time to start they kind of looked at me like...what, what teacher?" "Well, what I did was I also created color coded… like the tenses so one sheet is all yes/no and then the second sheet I created was the 5 wh questions similar, right and um, what I did was first I got ...I kind of moved towards this..I didn't get it all right away so but ideally you give them the paper with the format all in different colors then you might...the first time I got them to come up to the board and we did it as a class." "…so what I did was I took 3 paragraphs and I asked 4 / 5 questions for each paragraph...different ones like is there a topic sentence yes, if thers is underline it.....are there transition signals, if yes, color them or whatever....they did the quiz and I corrected them…" "I've taken the writing rubric and made it student friendly so for task achievement....did you do what you were supposed to do and then I broke it down ....I did everything I was supposed to do this is when they can mark their own, I did everything I was supposed to do ...I did most...." "we did the self reflection and I thought, wow they're getting better with the self-reflection but then I thought that's too bad because it won't be carried on the next term...."

Table 5.18 Connects theory to practice

Beginning	"no, no, no I think they just need a holistic idea of what they do right and what they do wrong. And the big thing on this is...okay Saleh your spelling is weak...let's talk about closing the gap cause right now you make too many spelling mistakes." "I think what I`m doing…I'm discovering…is what I'm doing and now I`m doing it more and because of my opportunity now, you know this is all resonating right and I am connecting it because when I`m doing this writing and have them...okay you mark it, I`ve marked a couple you`ve seen so you have to start owning what you think is good writing right." "It's like they had a project to do and without this rubric they're just doing the project but if they have the rubric and they see clearly, like the teacher put the objectives on the front page of the project; you're going to learn this, you're going to learn this…" "So you're prompting with questions...you're telling them ...you're saying for example...here's a sentence and I can see two things that I know that you know because you've done it right so many times before but for some reason you got them wrong here....what are the two things that you didn't get." "First, when we started this maybe a month or so ago now, but one of my students in a regular quiz put down this...she wrote this great sentence which used the right tense and the possessive form and everything and the vocab. And I remember looking at it and I thought wow, that's great. Normally, you just mark it right but I highlighted this one and I wrote beside it ... this is a great sentence...this is a perfect sentence for...So then I noticed she used it, she started using it in class"
Middle	"so they had workshops to introduce assessment for learning which is very similar to what we're doing here actually in terms of how they delivered the workshops…" "no that instructional rubric vs evaluative rubric...using a rubric to get the students ...things we've already talked about...giving it at the beginning...making it

	accessible...and they help to create it so then they know what their looking for..."
End	"yeah but then you said later on about the tool, yeah, yeah but that's what I was asking because like J I was thinking of formative assessment as this is the actual proper feedback on their work which then leads to changes but not realizing that there's a lot more to it so that's why this was so fascinating to me because it wasn't even on my radar."

4.25 PDGY-Ef - Pedagogy: Effective Feedback

Code	Definition	Coding Rule
PDGY-Ef -Pedagogy- effective feedback	Instructor engages in critiquing colleagues classroom activities; encourages/directs students in learning	- the instructor will ask critical questions; make comments on what their colleagues are doing; make suggestions to enhance the work of colleagues

Table 5.19 Giving feedback

Middle	N - now when you come in next week, my group, I think I talked to you guys before about how I wanted the guys to sort of self-assess and peer-assess their presentation and I made up a little sheet to guide them but nobody did it or few or one or two people did it, some people didn't have their presentations ready, etc. So this time I formalized it very carefully and I put marks to it so their going to get 10%. I divided, I learned a little bit from the first sheet, they didn't know who was supposed to answer which questions, because there was a certain amount of self assessment and a certain amount for the listener, for the peer. So this time I separated that and there's a self assessment sheet and there's a peer assessment sheet so when you come in, we're going to see if that will fly a little bit better....I gave them a date and I told them you will do it on this date, if you're not there you don't get the marks....if your presentation is not ready, you don't get their marks. Da - unfortunately, I know we have to do that but giving marks to this kind of assessment defeats the purpose but I know we have to give them some incentive. I wonder if, maybe if you're going to try it next semester, if you didn't start it slowly in smaller chunks and then build up so that this will be the final one so that they get used to expectation that their going to have to look at their own and they're going to have to look at somebody else's De - they're just not used to it, right and they have to be trained because they've never done this before, they really haven't I don't think N - so maybe....well certainly that was a mistake in the first one round...it was just too much coming at them and they didn't know what to do...that was part of it. There was also, my directions I think were a little bit mixed because I had the two tasks mixed up plus there was no marks and they asked specifically is there marks. So, I hoping this will be an exercise and it will be interesting to have you there to see how it goes and if in fact, they will take it this time. And the other thing I eliminated all together was the assessment at the end when you're listening to presentation and you have to say...was the person making eye contact, da, da, da,....5,5,5,5,5...no thought, anything, into it, right so I thought why do it. Da - the other thing you can do too, is put a little comment box beside to justify...why did you give them 5, what did they do good N - because they won't fill it because I had that at the end ...tell me one good thing you liked...tell me one good thing the person can improve ....nothing ...everything good, very good, you know so it's like .....so we're kind of trying to get them to do something they don't want to do or they don't know how to do or they don't see the value in doing it ...

	H - what level is it N - 1070 H - would it be helpful, I don't know, I'll just throw this out as a question ....as a policy of our department that these students learn this kind of thing from semester one, simplified form but the concept is there so that they're not doing it at the end of their term, you know N - I think that would be an excellent idea H - especially when the research is showing that that's what works N - and you have to build on it Da - but as you're going through the class, too, you're questioning can also be a build up to this as well because then they answer, you ask them well, why did you do that or somebody else answers....well what is good about that answer....that kind of thing and then they get used to, even orally, in the classroom so that when it comes to written....oh yeah, okay we've done that kind of orally N - okay that'll be some things for me to think about in terms of....the next go round...as you say to start it earlier. But for example, here does the presenter know the material very, very well, so the person answers yes/no and then I said why do you think this. And yesterday, we talked about I said, if you said yes, why would you say yes H - have you got sample for them to see N - a sample? H - a presentation for them to grade N - we've looked at a couple of samples just to give them sort of the idea of something they have to produce; we haven't actually graded it H - it might be good to grade Da - that is a good idea (all agree)

4.26 PDGY-Eq - Pedagogy: Effective Questioning

Code	Definition	Coding Rule
PDGY-Eq -Pedagogy- effective questioning	Instructor engages in thought provoking/reflective discussion with colleagues; encourages students thinking process	- asking critical questions that invoke thought concerning what colleagues are thinking; how they use their formative assessment tool; how they interact with their students

Table 5.20 Questions

Beginning	H - "Can I ask you before you go on…do you do that all the time?" Mo - "yes" H - "do you?" (Application because the instructor was forced to give an example) "Let me ask you, how's their listening though?" (Analysis)
Middle	"So what happened?" (Synthesis) "What did it look like and why did it fail?" (Comprehension and Evaluation) "How did you fail?" (Analysis) "What did they not do?" (Analysis) "Why do you think it worked?" (Evaluation)

	"Do you think that makes a difference?" (Evaluation) "Why?" (Synthesis)
End	"How can we implement this to small events, like small tasks instead of a big project…" (Application) "How will you do the self-assessment?" (Application) "What will you say to them?" (Application) "What are you going to do?" (Evaluation)

4.27 PDGY-Ka - Pedagogy: Knowledge Acquisition

Code	Definition	Coding Rule
PDGY-Ka -Pedagogy-knowledge acquisition	Instructor acquires knowledge individually through past experience / new content / outside experts; applies knowledge in the classroom	- verbalizes where and how the instructor may have learned something; connecting what they've read to classroom practice; making inferences about what they've read;

Table 5.21 Constructing knowledge

Beginning	"it's funny about the feedback because it says here on page 34, like offer regular descriptive feedback as opposed to a valuative feedback so not giving them an A or a very good or great sentence structure you need to really give them, to work on..." "So that was really cool and it says the quality of the feedback rather than its quantity determines its effectiveness which I thought was pretty.....sometimes I find myself writing more than they've written in the feedback...." "Okay so the last, how can I close the gap part, right. This was again focusing on one aspect of quality and then strategy 6 is the one I was interested in on page 36 - teach students focussed revision and this is what we were talking about before they get a grade right?" "they're saying that the feedback must be a clear and positive message which is fine because it gives students they need to understand where they are and that's what they call a cognitive factor and develop students feelings of control which is they say the motivational part which I'm not sure how that would translate here…" "we need to see it from the student perspective…so we're saying we're going to test this today and writing is probably the most difficult....we're going to test whether you got the format right and then we end up marking their grammar and their punctuation so this is saying look at it from the student's perspective and kind of close in the parameters a little bit ...they're putting the reference into this and they have now forgotten maybe the rest of it so we have to limit what the learning target was. And maybe on the next assignment you can say now for the next assignment...this what you did was good and on the next assignment when you do it also keep an eye on ... your caps or whatever" " but they've done that and they say in the mode it depends of the assignment...written, oral or demonstration showing them but they say the best one is having a conversation with the student prompting questions. So you're prompting with questions...you're telling them ...you're saying for example...here's a sentence and I can see two things that I know that you because you've done it right so many times before but for some reason you got them wrong here....what are the two things that you didn't get." "N – "so like you said…they would want to see what they did right… they don't

	always want to be told what they did wrong" H – "one of the things that they say in the article is students are less likely to pay attention to descriptive feedback meaning good job...if it's accompanied by a formal judgement...I think what they're saying is you can do some things without a mark...do it without the grade and given them a chance to practice some things so you don't have a mark." Mo - "sometimes that very helpful in going forward...right, you would of had a better mark....I mean we may phrase it differently but you would have done better if you had done this and this and this you'd get a better mark so one of the ways we can sort of frame that with our students I think is you've done this and this and this and this is great...you've got a 7/10 ...if you do this and this you will get an 8 or a 9, right?" "(paper shuffling) yeah, I'm not sure which chapter it was but it was about that...you have to start at the very beginning .... pull out the high and low...show the examples...give examples of good and bad and why it's good and why…"
Middle	"those 5 things … and we have talked about them and used examples probably without labelling them like this but one was the sharing your learning intentions and things like rubrics and what are the criteria, right; effective classroom discussions, in other words this is what they focussed on in this one....not just asking yes/no questions and not just listening for the right answer but actually listening to see where your students....where their understanding or misunderstandings are....feedback, we've talked about that, in terms of not just numbers but things that will commence that will move people forward...what was good...what's the next step. Activating students as the owners of their own learning, again trying to get people to take responsibility for letting you know, in fact, if they understand something or not...even something as simple as that, right.....we talked about those response cards and the last one was activating students as instructional resources." "…it's this space between what they get on their own and then what they get when they are in the group. And that's what Vygotsky calls this zone of proximal development, right. So that's sort of where the other parts come together when your starting with what do you know in class and they go to that KWL technique ...what know already and then, W what do you want to learn and then L what have learned." "…asking questions…open-ended questions…don't respond by that's right…respond with another question and they also say to try to infer…ask a student what did he/she mean…so that's good…waiting several seconds after asking a student a question…" "what the literature says about giving feedback and here it's got ...there are 4 things you do in peer assessment, you clarify, you value, you raise concerns and you suggest, so it's really a template that you follow. So clarify.....so H let me just make sure I understand...what you were writing about was the life of Suddam Hussain, right you were writing about his life from birth to death, right, okay...I really liked that you talked about the good stuff he did as well as the bad stuff...there's your value...okay so the first thing if clarify, then value...okay, raise concern...I'm wondering, however, if your document wasn't a bit bias on the negative side and then suggest, perhaps it would be a more even document if it were slightly less biased if you brought in....I'm making this up as I go along..."
End	"and instead of always giving positive reinforcement after you've heard the right answer...sort of just remaining neutral and saying okay that's interesting...did anyone get anything different because he said once you give the positive reinforcement you've ended the discussion...you've ended the students inquisitive thoughts of saying well okay, wait I had something different but it's wrong be-

	cause the teacher just said that question was right" De "this is coming straight out of the K-12 system ....my daughter has been trained in this since kindergarten and it's just (snaps her fingers) I mean it's developed right" Mo "do you mean the peer assessment?" De "my daughter knows how to do this because this is what they do in teacher's college now, they train teachers to do formative ...." "I want to read these things on feedback and I want to go back and look at what feedback is and about asking the right questions, especially asking the right questions. I'm gathering that...I'm feel like, I'm thinking of feedback as being an assessment and peer assessment as much bigger than they really are because it's supposed to be ongoing and I have a feeling that I probably do it anyway but somehow, it's like freaking me out..."

4.28 CLTR – Culture

CLTR - Culture	Instructor recognises: students are dependent learners; lack experience; need to be told what to do and how to do it; extrinsically motivated	- any reference made concerning their students learning behaviour

Table 5.22 Comments reflecting student culture

Beginning	M - "…students just look right at the mark." D - "They do here." "thinking that they know...oh yes, I know that and they don't even mark it wrong. They'll erase the answer and then mark it right and it's because it's not that they're cheating but because they think yeah..." "encouraging the students in taking some responsibility for their own learning which in TPP is an enormous task but what we aspire to." "my experience with that has been that people then copy from somebody or just, just do something to get out." "I actually had a note saying, like how can we do this discreetly because everything in this culture is about saving face…" "I find that these fellows are loath to um, to say they don't get it and they're having trouble and I think we want to encourage a…they need to have a time where they say, this is what I've learnt but I really find that a bit hard…" "well this is it, I mean given our learners, if I didn't give a vocabulary quiz, they wouldn't study so how formative can I be?" "I finally did a song and I've been shy to do a song but I finally asked them do you want to do a song and they said yeah so we did it and they loved it." "I was talking to a gentleman the other day who works in the shops with the TPP boys and he said oh, you're in 106 ...you spend your time...it's like a zoo in there... I said yeah, yeah but I love them…and he said I think they are actually getting better. He's been here a few years this man and he said from when he arrived to now he feels that there's a little more seriousness, focus…" "but it's so important to learn how they're thinking. And I've learnt a lot about how they think from listening to these kinds of discussions but I can't pinpoint anything right now but pretty amazing. Because of their memories, they use their memories so much ....we've lost that ability because they're trained into it and we're not..." La – "…we have to change the culture of learning." J – "yes, that's what we've

	noticed in a lot of these things...in the previous chapters that we were doing... we're saying exactly that. It might work in certain context but here it's really about changing the way they learn and that starts in kindergarten." Li – "that's right and it came out today when I had the librarian about what help is...can you help me and we know what that means...can you do it for me and so if there's one thing we have get over....help is really guiding you not doing it and if's there's one place we could start, it's with that word."
Middle	"but you've got this other barrier in their knowledge… they might know in their first language but then you've got the second language and the whole thing is losing face, culturally...we still have so many barriers..." "we go through that activity where they know exactly what they are being marked on but they still don't care at the end…" "you're teaching them what they need but you're making them feel like they come up with it so that they might buy into it more easily…" "but worth it because if you can get them to the point where they can look at writing and evaluate it...maybe it's not such a big jump for you in the academic stream but for us in the TPP stream it's a big jump...they're not used to....like they're just used to writing a sentence and getting immediate feedback ....teacher is this right...every sentence so it's a big deal." "…and culturally, I think this is where they've come from ....from you know what we understand from their secondary which is they gave them help all the time." "They're very tactile, it's a very tactile culture, I think…oral and tactile." "because they're immature…"
End	"…my guys…we go through that activity where they know exactly what they are being marked on but they still don't care at the end. If I sat with them and explained and they said why teacher then I could say well you only had one example of this when you are supposed to have two oh yea, they would know. But I think that rubric itself is just so daunting maybe cause it really is an oral culture after all…" De – "and their vowels are so completely different…they're just like wee little marks." H – "that's why we get so many different spellings of things because of the vowels." "…it is part of the culture more than home....that they will argue, blame you, argue, this is not what they understood, blah, blah, blah, it's all negotiation but here's the paper...it's all in the lines and it's done." "what you're experiencing is also what we're experiencing at trying to get students to see the main idea vs a detail...maybe it's something from their own language structure...I don't know how Arabic works on a paragraph to an essay ..." "but don't forget classical Arabic is subject, verb, object...it's colloquial Arabic that isn't so if they know the Koran, they know that that's how it should go."

Appendix M – Data Collected – Journal Reflections

Table 5.26 Individual Instructor Journal 2

Demonstrate Change to Teaching Practice	**Includes many Evaluative Statements**	**Provides a Great Deal of Planning**	**Makes Comments on Their Learning**
I can adapt my instruction immediately. I made a very simple rubric for students to use when looking at their writing recently. I prepared a good sample and a bad sample of a presentation - we looked at it in class. I gave students a clear rubric of what they were getting marked on - we discussed this. I have totally had to change my teaching style here!! I try to get them (the students) to think about writing. I do this by creating samples of stronger and weaker writing and then have them decide why one writing would get a higher mark.	I think I offer students a picture of learning targets and I think I give them feedback but I think I need to be more specific with the feedback. My learners are very different. I have to make more effective goal sheets.	Things I want to do: Give students learning targets at the beginning of each unit. Try to find out what they know before we begin the unit. At the end of the unit I want to go back to this: what have I learned. Make students more responsible for their learning. Perhaps I should have them (the students) write the plan (on the board) - makes them pay attention.	Actively learns by writing a statement in her journal and responding to it. I find my meetings almost therapeutic - it is a chance for me to get re-energized and get more ideas from my peers. I find the discussions with my peers to be the most useful. We all have great ideas and I learn more from hearing everyone's ideas and experiences.

Table 5.27 Individual Instructor Journal 3

Demonstrate Change to Teaching Practice	**Includes many Evaluative Statements**	**Provides a Great Deal of Planning**	**Makes Comments on Their Learning**
I've started focusing on the type of feedback I give to my students when I'm assessing their writing.	There's definitely been a change in my teaching practices. I'm conscious of new ideas (I learned from the text). Learning different tidbits from my PLT and from the observation is improving my teaching.	Next term, I'm committed to having my classes help develop a writing rubric (with guidance, of course) so they feel a sense of ownership and so they understand how they got their mark. Even though the college has us upload High/Medium/Low examples of writing to our portfolios, it never donned on me to show work room their peers. This is something else I'm going to implement next semester. I don't always consider how I'm doing but I should more though!!! Something to work on next semester	I have had many 'a-ha' moments throughout the three months: giving effective feed back; rubric development; showing example of strong and weak writing to the students. I love collaboration and reflections are helpful. My team is awesome and I've learned a lot.

Table 5.28 Instructor Responses

Demonstrate Change to Teaching Practice	**Includes many Evaluative Statements**	**Provides a Great Deal of Planning**	**Makes Comments on Their Learning**
I never ask that question anymore because I've learned it's not going to get me any useful information so I started...I can see myself deliberately like saying okay well if he was rude did he smile...you know some sort of concept checking to see if in fact the people are with me but ....not this do you understand. So again, that's a very ...to me that's a very subtle kind of change in my practice, right and it's not one that I do all the	Record keeping…. for tracking student progress. This is a problem for me. I really need to formulate clearly, to articulate for myself **exactly** what the learning goal is in the classroom. I often deal with teaching language holistically, and perhaps not enough time is spent on specifics. To be honest, though, except for a few things (past tense / irregulars / and or but because so…there are	I need to **set a schedule** to do these things… immediately after class, but before leaving the room. Next semester I hope that I can discipline myself enough to get the students to keep one folder in their binders with their graded things (not quizzes)… and then we can look at them to help prepare for their quizzes, and to compare their work on the quizzes with their ongoing work to see if / where there is	Reading the articles and talking with my team have helped me to return to my teacher roots.

time...but as soon as I hear myself say.	some others), I really am not sure if I am capable of breaking it up into discreet, digestible parts). I am perhaps not as rigorous, as 'scheduled', as I could be. I don't spend enough time with students on an individual basis to discuss how they did and to help them figure out how to make it better.	a problem. I think that the next time, I will give over to the students sometime around week 4 and let them try some of the questioning themselves… create the questions (we do it, but not until much later in the course). *Next semester, I will set aside time to meet with each student at least once a week for them to discuss their progress. I will need to set down the guidelines and schedule for these times….i.e.: 1. students must bring all their work in the correct section of their binder…2. Students should have a minimum of two questions for me. 3. Students should be prepared to discuss freely what they liked / didn't like about something in the week, either specifically or generally.*	

Appendix N – Instructor's Formative Assessment Tools

How you are being graded				
Task Achieve-ment	**Organisation**	**Grammar**	**Vocabulary**	**Mechanics**
3 paragraphs, 8 sentences min. Extra (because, so, and)	Transitions (*First, As a result of the incident,)* Ideas flow step by step	Simple past or past continuous verbs	Words from the Vocabulary List	Spelling , capi-talization and punctuation

Check your paragraph

Circle all the connecting words (*because*, *so*, *and*) you used. How many are there?	
Underline the transitions you used. How many are there?	
(Draw brackets around) all the verbs you used. How many are in the past tense? How many are there all together?	/
Draw a box around all the 1072 vocabulary words you used. How many are there?	
Ask your friend to highlight all words that are spelled wrong. How many are there?	

Now give yourself a grade

	2	**1**	**0**	**SCORE**
Task Achievement	4 or more con-necting words	2-3 connecting words	0-1 connecting words	**/2**
Organisation	7 or more tran-sitions	4-6 transitions	0-3 transitions	**/2**
Grammar	All verbs are in past tense	Some verbs are in past tense	Few verbs are in past tense	**/2**
Vocabulary	4 or more words from 1072	1-3 words from 1072	0 words from 1072	**/2**
Mechanics	0-2 spelling mistakes	3-6 spelling mistakes	7 or more spelling mis-takes	**/2**
				/10

Check list for Writing

- ✓ Do I have capitals on the first word of each sentence?
- ✓ Can the teacher tell the difference between my capitals and small letters?
- ✓ Does every sentence end with a questions mark (?) or a full stop (.)?
- ✓ Do I have an article (a, an, the) before the nouns that need them?
- ✓ Do I have a verb in every sentence?
- ✓ If the verb is in the past tense, am I using the correct tense? (Past simple if the time is indicated in the sentence; otherwise the present perfect)
- ✓ Does the verb agree with the subject (he doesn't; NOT he don't)
- ✓ Do I have commas where I need them?
- ✓ If I'm writing a paragraph, is the first sentence indented?
- ✓ Is my writing neat and tidy?
- ✓ Are there spaces between the words so the teacher can see that each word is separate?

		10-8 Excellent	7-5 Very Good to Good	4-2 Adequate to High Fail	1 Inadequate
Writing	Task Achievement	You follow the instructions exactly and completely and you add information where you can.	You mostly follow the instructions. Maybe you leave something out or you do something that is not in the instructions.	Your ideas aren't clear or your writing does not follow the instructions.	You don't do what you are told to do. You don't complete the task.
	Organisation	Your writing is very organized and logical. You give examples to support general statements.	Mostly your writing is organized, but sometimes you don't support your statements or they don't follow logically.	Your sentences are not well organized and your paragraph is not logical.	Your writing is not organized or clear. You don't use transition words correctly.
	Grammar	The grammar you have just learned is very good and there aren't very many mistakes. The mistakes are small. The grammar that you learned before is almost perfect.	You make some mistakes but not many. The grammar you already know is very good. Sometimes there are big errors but your sentences are easy to understand.	You make a lot of mistakes and sometimes your sentences are hard to understand.	Your grammar is very poor and often your sentences are too difficult to understand.
	Vocabulary	You know lots of words and you use them correctly and appropriately.	You use lots of different words and you use them correctly. Sometimes you use the same word again and again. Sometimes you use a very common general word when you could use a more interesting word.	You don't use very many words and sometimes the words are in the wrong form.	You don't use many different words and they are often in the wrong form.
	Mechanics	You use capitals and punctuation correctly. You make only a few small spelling mistakes	You make a few mistakes with capitals and punctuation and a few spelling mistakes, but your writing is still easy to read and understand.	You make a lot of mistakes with capitals and punctuation. You make a lot of spelling mistakes that sometimes make your writing hard to read.	You make so many mistakes with capitals, punctuation and spelling that your writing is difficult to read.

TPP-106

Writing Self-Assessment

Module 1

Use the chart below to mark your paragraph. These charts are similar to what we use to give you a mark for your writing.

	3	2	1	0	SCORE
Mechanics					
Capital letter at the beginning of each sentence	9-10 sentences have a capital letter	7-8 sentences have a capital letter	5-6 sentences have a capital letter	4 or fewer sentences have a capital letter	/3
Full stop at the end of each sentence	10 sentences have a full stop	8-9 sentences have a full stop	7-6 sentences have a full stop	5 or fewer sentences have a full stop	/3
Spelling	0-2 mistakes	3-4 mistakes	4-5 mistakes	6 or more	/3
Grammar					
Subject and verb in each sentence	9-10 sentences have a subject and a verb	7-8 sentences have a subject and a verb	5-6 sentences have a subject and a verb	4 sentences have a subject and a verb	/3
Subject and verb agreement (final S)	All subjects and verbs agree	Some subjects and verbs agree	Few subjects and verbs agree	No subjects and verbs agree	/3
					/15

What are **Ali's** plans for 2013? Choose 8 pictures and write about them. You must write at least 8 sentences.

- **Indent** your paragraph
- Use: **going to, want to, hope to, plan to**
- Use each of these words once: **because, but, or, and**

Samples

A) Next year Ali is going to exercise. Next year Ali is going to finish college. Next year Ali is going to work. He is going to make a lot of money. Next year Ali is going to marry. He and his wife are

going to go to Malaysia for their honeymoon. Ali is going to buy a big house. Ali is going to be happy.

1. Are there eight sentences? _____
2. Does the writer use "going to" ?_____.
3. Does the writer use: want to, hope to, plan to? _____.
4. Does the writer use: because, but, or and? _____.

B) Ali wants to do many things next year. First, he is going to finish college and go a trip with his friends. He wants to go to Dubai or London. Then, Ali is going to work for QP and make a lot of money. Then, Ali plans to buy a new car. He wants to buy a Bentley, but he is going to buy a Land Cruiser. Next year, Ali wants to exercise more because he is a little fat. Finally, Ali hopes to marry next year and start a new life. He hopes to be happy and healthy!!

1. Are there eight sentences? _____
2. Does the writer use "going to"? _____.
3. Does the writer use: "want to", hope to, or "plan to" ?_____.
4. Does the writer use because, but or, and?

Which paragraph will get a higher mark? Why?

Editing Checklist

	Yes	No
Are there eight sentences or more ?		
Did you indent ?		
Did you start each sentence with a capital letter ?		
Did you use a period (full stop) ?		
Did you use "going to" ?		
Did you use: want to, plan to, hope to ?		
Did you use: because, but, or, and ?		