

A Study of a Teaching and Learning Centre in a Post-Secondary Educational Institution

by

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Abstract

The purposes of a Teaching and Learning Centre (TLC) include helping faculty improve their teaching and enhancing students' learning. The functions of a TLC vary, depending on the needs of the higher education institution. However, it is important for faculty to utilize the services of a TLC to become more effective educators.

Using a mixed methods approach, this study examined the faculty awareness level of a TLC, how innovative teaching ideas were being diffused, and how faculty (as clients) view the services offered by a TLC (as a service unit). A convergent design was used to collect data via an online survey and personal interviews. This study focused only on faculty and close to 1,700 faculty were invited to participate in this study. More than 200 faculty responded to the survey and from that pool, fifteen randomly selected faculty were interviewed. All the interviews were audio-recorded, transcribed, and analyzed to uncover themes that emerged from the data.

There seemed to be a low faculty awareness level of the TLC within the institution in this study. Faculty felt that the TLC needed to "connect" more with them because there was a lack of marketing of the TLC to present itself more visibly within the institution. There was a concern regarding the lack of diffusion of innovative teaching ideas reported by the majority of interviewed faculty voiced such opinion. It was suggested that more communication channels needed to be used for diffusing new teaching ideas. Also, most faculty felt that there was a need to improve the service quality from the TLC personnel.

Results from this study indicated that there was a need for the TLC to improve its communication strategies (e.g., marketing and social media) so that faculty could be better and more frequently informed about the unit. Future research projects may include marketing strategies and service quality of the TLC, as well as the nature of the management support of the unit.

Keywords: diffusion of innovation; faculty awareness; force field analysis; service quality; teaching and learning centre; technology acceptance model

Dedication

To my two lovely daughters, Pamela and Kirsten.

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List of Acronyms

CRS	Classroom Response System
FDP	Faculty Development Program
HEI	Higher Education Institution
ISW	Instructional Skill Workshop
LMS	Learning Management System
PBL	Problem-Based Learning
PDA	Professional Development Activity
ROI	Return On Investment
SME	Subject Matter expert
TAM	Technology Acceptance Model
TLC	Teaching and Learning Centre

Chapter 1. Introduction

A higher-education institution (HEI) offers many different services from different functional units, and a Teaching and Learning Centre (TLC) comprises one of these. This unit can have many different names such as the Centre for Teaching and Learning (CTL), Centre for Teaching Innovation (CTI), Centre for University Teaching (CUT), the Teaching Support Centre (TSC), Centre for Teaching, Learning and Technology (CTLT) and Learning and Teaching Centre (LTC). To avoid possible confusion, I will be using Teaching and Learning Centre (TLC) throughout this thesis.

About fifty years ago, these units provided limited services related to teaching and learning. Nowadays, with the advance in technology, along with the needs of students in a HEI, a typical TLC offers many different services to faculty and students to better serve these individuals. To justify the cost of this unit and to improve its products and services, it is important to understand how it functions within a HEI and how it affects teaching and learning. This thesis examines the faculty awareness level of the TLC in a Canadian college as well as how innovative teaching ideas are being diffused. It also looks at the perception of faculty members about the services offered by a TLC (as a service unit).

1.1. Purposes of a Teaching and Learning Centre

Teaching and Learning Centres (TLCs) in North America have existed for a little over five decades. Grabove et al. (2012) have provided the following description of two historical events:

The University of Michigan created North America's first centre for teaching and learning in 1962, a voluntary unit that relied largely on a network of motivated professors to transmit interests and ideas. In 1969, McGill opened one of the first Canadian teaching and learning centres, with several more universities following in the 1970s. (p. 3)

The Society for Teaching and Learning in Higher Education (STLHE) was established in Canada in 1981 by educational developers and faculty connected to the support of teaching and learning (Grabove et al., 2012, p. 3). These developments indicated that a TLC can provide value to a HEI. Although many educators realize the value and

importance of a TLC (Andurkar, Fjortoft, Sincak & Todd, 2010; Clark & Saulnier, 2010; Levine-Sauberman, 2014; Linder, 2012; Nadler, Shore, Taylor & Bakker, 2012; Schumann, Peters & Olsen, 2013), some administrators within the higher-education institutions (HEIs) may not have the same assessment. Since some administrators view the TLC as a low priority in their list of activities, they will provide little or no funding to their TLCs after the unit has been set up. In an extreme case, one TLC was even shut down (Bartlett, 2002). Such actions may lead to the possible under-utilization of this unit within the HEIs. Nevertheless, those educators who strongly believe in the importance of the TLC continue to be involved in faculty development programs (FDPs) (Eison & Stevens, 1995; Gibbs, 1995; Grant, 2005; Kaufman, 1995; Mooney, Fordham & Lehr, 2005), which are considered as the main activities carried out by a TLC (Steinert et al., 2006). Therefore, there is a need to fully understand the purposes of a TLC in a HEI.

The purposes of a TLC have been well documented. TLCs have been created by HEIs to improve the quality of faculty's teaching and students' learning (Barlett, 2002; Carmichael, 2008; D'Avanzo, 2009; Goldstein, 1980; Levine-Sauberman, 2015; Mills, 2009; Singer, 2002; Troller, 2002). Lieberman (2005) asserted that "Centers for teaching and learning were providing the faculty with the pedagogical theory and practice that they needed to teach at both the graduate and undergraduate levels" (p. 87). Schumann, Peters, Olsen (2013) pointed out that "Teaching and Learning Centers (TLCs) have traditionally focused on direct contact with faculty in an effort to improve teaching skills and transfer knowledge about student learning" (p. 21). Their studies illustrated the fundamental ideas of a TLC. Kolomitro & Anstey (2017) stated that "Teaching and learning centres collaborate with educators on teaching improvement for the express purpose of offering students learning experiences that are transformational, inspiring, and intellectually challenging" (p. 1). Again, their research shows the dual purposes of improving faculty's teaching and students' learning for a TLC. However, most centres now offer a variety of services, such as faculty development programs, workshops, consultations to coach faculty, graduate and undergraduate teaching assistants, and support to sessional and part-time instructors (Frantz et al., 2005; Gosling, 2009; Plank & Mares, 2013). Calderwood and Klaf (2015) also identified that "The stated mission of the CTL is not explicitly one of mentoring. But it is implicitly so" (p. 293). This shows the multiple roles that a TLC serves. Furthermore, Atkins, Koroluk and Stranach (2017) claimed that "TLCs help to shape the professional and academic cultures, and

instructional practices of their institutions” (p. 253). All these authors have confirmed the purposes of a TLC in a HEI and its value in the ever changing educational environment.

1.2. Functions of a Teaching and Learning Centre

In the early days of the existence of TLCs, some educators were already pushing these units to provide more functions. Due to advances in technology, TLCs now provide many more services to the faculty and students of a HEI (Plank & Mares, 2013, p. 5). Besides offering workshops, seminars, consultations to faculty, a typical TLC also provides services to students who enroll in distance learning courses by using podcasting or online course management systems such as Blackboard, Desire2Learn and Moodle. Some TLCs will even offer special services to a specific discipline (such as health care or dentistry). The functionality of a TLC is much higher today than forty years ago when the Internet was not available. By using the advanced technology available in a HEI, a TLC can carry out many functions to fulfill the needs of its clients.

Many of the activities carried out by a TLC are considered as FDPs (Calderwood & Klaf, 2015; Mahn, McMann and Musanti, 2005; Troller, 2002) since these activities give faculty the opportunity to either improve their teaching skills or share their teaching experiences with others. Therefore, offering FDPs seem to be an important function of a TLC as FDPs can further expand the teaching skills of faculty – something that may help students to learn better. Below is a brief discussion of faculty development.

1.3. Faculty Development

Faculty Development can be defined as any activity that aims to improve the professional knowledge and skills of faculty members so that they can fulfill their professional roles at the institution that they work for (Artze-Vega et al., 2013; Hamilton and Brown, 2003; Hendricson et al., 2007). While this concept was new to many educators in its early days, The Group for Human Development in Higher Education (1974) had already pointed out the need for faculty development and its importance. Various authors suggested a variety of roles for faculty members. Gaff (1975) stated that “Faculty development focuses on faculty members and seeks to promote their individual growth and development” (p. 8). Festervand and Tillery (2001) posited that “faculty development should center around activities that promote the creation and transfer of

knowledge” (p. 109). Hamilton and Brown (2003) claimed that “Faculty development is about planned change over the course of one’s academic career” (p. 1334). These authors from different academic disciplines have all agreed that faculty development is needed for educators to improve their teaching and to help their students to better learn. Without faculty development, a HEI may suffer from possible stagnation that could lead to a poor quality of education being provided. Without quality instruction in the classroom, students will not be able to master the subject matter and this will lead to fewer and less competent workers in the labour market. As a result, the entire economy will be affected. In their research, Sorcinelli, Austin, Eddy & Beach (2006) concluded that “The findings of this study validate our belief that faculty development is a critically important lever for ensuring institutional excellence” (p. 175). Furthermore, in their study, Yamani, Shakour & Yousefi (2016) also concluded that “Faculty development in professionalism can contribute to university faculty members to become better role models and inspire their students, peers, and even the society” (p. 1). Hence, faculty development is essential to the success of the HEIs. The next section will briefly describe the history of faculty development to show more clearly how we have reached the point where we are today.

1.4. History of Faculty Development

The history of faculty development began over 200 years ago. Kimball (1978) mentioned that back in the 1800s, scholars took time off to improve their academic knowledge. Lewis (1996) confirmed that sabbatical leaves were taken at Harvard University in 1810. Smith (1959) generalized the term faculty development as “the enhancement of the value of a teacher to society” (p. 350) and he advocated for research on teaching and considered this as part of faculty development. He also proposed that research could improve a faculty’s quality of teaching. I agree with this assessment as I believe the more research a faculty does, the more he/she will learn about the subject matter and how best to present it to students for better learning (Healey & Jenkins, 2009). If that happens, the faculty member will be able to share his/her new knowledge with his/her students and the students will improve their learning.

O’Grady (2017) stated that “The University of Michigan was a pioneer in efforts to study and support the learning experience on campus, launching its Center for Research on Learning and Teaching (CRLT) in 1962, the first of its kind in North America” (p. 3).

The members of The Group for Human Development in Higher Education (1974) started a project that focused on improving the development of students, faculty, and administrators in US colleges and universities. Since the interest in faculty development was on the rise, reforms in post-secondary education and faculty accountability caused the interest in this area to grow exponentially. Members of The Group for Human Development in Higher Education (1974) stated in their report that “The decline of academic mobility, the lessons learned from attempts at reform, the call for accountability – each helps to explain the current interest in faculty development” (p. 18). This was the time when faculty development started to gain recognition and momentum.

In 1974, a Professional and Organizational Development (POD) Network was formed in the United States. Its purpose was to “support improvement in higher education through faculty, instructional, and organizational development activities” (Sorcinelli, Austin, Eddy, & Beach, 2006, p. 5). An early definition of faculty development was given as “the total development of the faculty member – as a person, as a professional and as a member of an academic community” (Crow, Milton, Moomaw, & O’Connell, 1976, p. 3). After POD had gained popularity, more support was given to faculty development. Grabove et al. (2012) reported that:

In 1977, the National Council for Staff, Program, and Organizational Development (NCSPOD) was created with a mandate to provide faculty, staff, and organizational development practitioners within the US college sector – and increasingly, in Canada as well – with an opportunity to develop as practitioners by sharing information and experiences. (p. 3)

NCSPOD also helped to create an important academic entity called ‘The Society for Teaching and Learning in Higher Education (STLHE)’ in Canada. The STLHE Constitution states that ‘The Society for Teaching and Learning in Higher Education (STLHE) was developed formally in Canada in 1981 by educational developers and faculty interested in the support of teaching and learning’ (Grabove et al., 2012, p. 3). Since its inception, this society has been providing support to faculty development through many different educational events. On the current STLHE website, the vision of this organization is stated as follows: ‘STLHE strives to be the pre-eminent national voice, and a world leader, for enhancing teaching and learning in higher education. The Society supports research, its dissemination, increased awareness, and application of research through scholarly teaching and learning’ (retrieved from

<https://www.stlthe.ca/about-stlthe/vision-goals/>). For this paper, I will focus on the Canadian context of educational development.

In the 1980s, more educators (and administrators as well) started to realize the importance of faculty development due to the advances in technology. Conrad and Hammond (1982) pointed out that community college educators were concerned about the possible decline of overall quality of instruction if FDPs were not provided by the administration in time to catch up with the advancing technology. The advances in technology provided one of the reasons why educators needed to be provided with FDPs.

1.5. Importance of Faculty Development

In his paper, Riegler (1987) emphasized the importance of faculty development as follows: 'In the late 1960s, however, faculty development became the focus of a significant movement in higher education' (p. 53). He identified how critical faculty development had become in the post-secondary education environment during that time. In their study of the medical education field, Steinert et al. (2006) identified the importance of faculty development in improving teaching effectiveness. Other researchers have also advocated that faculty development is important to a HEI (Condon et al., 2015; Sorcinelli, Austin, Eddy & Beach, 2006; Wilkerson & Irby, 1998). Since FDPs are normally offered by a TLC, it is necessary to understand how these activities are evaluated.

1.6. Evaluation of Teaching and Learning Centre Activities

The main purpose of faculty development is to improve faculty members' professional knowledge and skills so that they can fulfill their professional roles. There are many activities offered by a TLC that can help faculty to improve (Wright, 1995, p. 12). To determine if such activities are useful, evaluations need to take place. Evaluating the FDPs will also help the TLC to design programs that will enhance faculty's skill sets in educational delivery. Ramalanjaona (2003) stated that "Evaluation of the effectiveness of any faculty development program (FDP) is crucial to provide assessment of existing programs and to yield valid recommendations for designing future programs that better address the needs of individual faculty members and the sponsoring institutions" (p.

891). Similarly, Chen, Kelley & Haggar (2013) indicated that “Centers for Teaching and Learning have increasingly realized the need to effectively measure the impact of their programming on the quality of teaching and student learning” (p. 107). However, when it comes to evaluating the effectiveness of these activities, few studies have been conducted to achieve this goal. As a result, there are not many evaluation tools available. Below is a chronological discussion of the lack of availability of evaluation tools for the FDPs.

Ferren and White (1977) pointed out that few specific evaluation tools had been developed because faculty did not want to degrade the value of FDPs and did not want to imply that some faculty needed help with their teaching because nobody wanted to draw the attention of management (p. 37). This is implicitly understood because most faculty members do not want to see their colleagues penalized due to poor teaching performance. Mayo (1979) claimed that there was “...relatively little firm information concerning the effectiveness of FDP at the present time” (p. 253). At that time, the focus was on attracting faculty to participate in these FDPs as evaluation was not viewed as critical. Fifteen years later, after more FDPs had been developed, this focus had not changed. Researchers still could not devise the correct tools for evaluating FDPs. Olson (1994) pointed out that the most obvious problem in evaluating FDPs is the criteria to be used in measuring their effectiveness (p. 387). Eight years later, Quirk, Lasser, Domino, Chuman and Devaney-O’Neil (2002) agreed with Olson and asserted that “Few studies examine the effectiveness of various faculty development delivery methods” (p. 755). Steinert et al. (2006) re-confirmed that “Although there are many studies related to FDPs, there is a lack of research on measuring the effectiveness of these activities” (p. 498). Again, these studies showed that many FDPs could not be evaluated properly. In their study, Guglielmo et al. (2011) concluded that there is only minimal assessment related to FDPs in the educational area of the healthcare sector (p. 8). Amundsen and Wilson (2012) did an extensive review on educational development in higher education. They concluded that “Previous empirical reviews covering more than 30 years of published literature could draw only tentative and weak conclusions about the effectiveness of educational development practices” (p. 90). Finally, in a recent study, Sorinola, Thistlethwaite, Davies and Peile (2015) alleged that “The effectiveness of faculty development (FD) activities for educators in UK medical schools remains underexplored” (p. 385). All these studies have pointed to the same conclusion – there is

definitely a lack of research on tools for evaluating the effectiveness of FDPs. It seems that it will be a long time before some useful evaluation tools will become available to determine the usefulness of the FDPs.

While there is a lack of research on developing evaluation tools for FDPs, a few researchers have tried to devise such tools. Kirkpatrick (1994) developed a model that can be used to evaluate training programs. The model contains four levels. These are: (1) Reaction, (2) Learning, (3) Behaviour, (4) Results (Kirkpatrick, 1994, p. 21). Each level measures certain attributes of human behaviour. Some researchers have managed to apply Kirkpatrick's model when evaluating the FDPs (Steinert et al., 2006). However, the model has been considered insufficient due to the poor design of some FDPs (Guglielmo et al., 2011; Hendricson et al., 2007; Olson, 1994).

Nevertheless, based on existing evaluation tools, researchers have managed to obtain some results on the effectiveness of some FDPs (Chacko, 2013; Herrmann et al., 2007; Mitcham, Lancaster, Stone, 2002; Patridge, Harris and Petzel, 1980; Peters, Ladden, Kotch, Fletcher, 2002). Centra (1978) provided a list of different FDPs that were carried out by different institutions. (p. 155) Some of these programs are considered more effective than others based on many studies. However, educators continue to struggle with finding better evaluation tools to assess FDPs.

1.7. Theoretical Foundation of the Thesis

In a HEI, new ideas for teaching are developed from time to time. One of the purposes of this paper is to look at how innovative teaching ideas are diffused in a HEI. The theoretical foundation for that discussion will be based on Rogers' (2003) Diffusion of Innovations theory. In Rogers' theory, there are four main components: (1) the innovation, (2) communication channels, (3) time, and (4) the social system (Rogers, 2003, p. 11). Each component also contains attributes that are interrelated. Here are brief descriptions of each component.

1.7.1. The Innovation

The innovation is the idea that needs to be shown to others so that it can be adopted. It contains five characteristics that help to explain an innovation's rate of

adoption. These are: (1) relative advantage, (2) compatibility, (3) complexity, (4) trialability, and (5) observability. (Rogers, 2003, pp. 15-16)

1.7.2. Communication Channels

A 'communication channel' is "the means by which messages get from one individual to another" (Rogers, 2003, p. 18). There are several types of communication channels. A Mass Media channel is a quick and efficient way to inform potential adopters about an innovation. An Interpersonal Channel allows a face-to-face encounter between two or more people. Depending on how one wants to let the innovation be known, several choices of communication channel are available at any time due to the advances in technology.

1.7.3. Time

The time component relates to diffusion in three ways: (1) the innovation-decision process, (2) innovativeness, (3) rate of adoption. When it comes to the diffusion of an idea, time is a very critical variable. Therefore, it is important to understand this element in Rogers' theory.

1.7.4. The Social System

"A *social system* is defined as a set of interrelated units that are engaged in joint problem solving to accomplish a common goal" (Rogers, 2003, p. 23). An innovation can only diffuse within a boundary that is set by the social system (Rogers, 2003, p. 24). Also, the social system's structure governs the stable and regular behaviours of individuals in a system. Structure allows the prediction of behaviour with some degree of certainty.

These four elements in Rogers' (2003) theory form the foundation of the diffusion process as the attributes of each element can lead to the explanation of why a diffusion happens or not. In the case of FDPs for the HEIs, these elements can be applied for clarification so that one can understand what happens during the diffusion process.

The Diffusion of Innovations theory has been applied to many studies in different fields. Cragun et al. (2012) applied this concept to promote dental hygiene education.

Drape, Westfall-Rudd, Doak, Guthrie and Mykerezi (2013) used the theory to help the promotion of integrating technology into an agricultural associate degree's curriculum. Hsu (2015) applied this principle to investigate the possibility of integrating technology in hospitality education in Taiwan. Besides applying this theory in the educational environment, researchers have also used it in business situations. For example, Gollakota and Doshi (2011) applied the theory to explain the failure of building rural telecenters in India by the company ITC. Gray (2012) used this concept to show potential danger when the administrators of Xbox Live forced the users to accept the innovations during the game. Chen (2014) used the theory to explore the effectiveness of workplace e-learning for local government staff in Taiwan. All these examples have demonstrated the usefulness of the diffusion theory.

Besides looking at the diffusion of innovative teaching ideas, I have also investigated the reasons why faculty accept or reject the usage of a TLC's services in their HEI. I utilized Lewin's (1947) Change Theory as the theoretical foundation to confirm the above behaviour. It is very important to understand the reasons why an organization will change and how people behave in certain ways during the organizational change. The Change Theory will help to explain why some educators behave in a certain way towards the TLC. Lewin's theory identifies a three-stage process of change: (1) Unfreeze, (2) Change, (3) Freeze (or Refreeze). As people are getting ready to change their behaviours due to certain forces (driving forces as explained by Lewin's (1951) Force Field Analysis), they go through the first stage of "unfreezing". In stage two, people make the changes or go through the transition. In stage three, once people have made the change, they become stable in their behaviours and feel comfortable with their new routine.

Lewin (1951) developed a method he named 'Force-Field Analysis'. I will utilize this to determine some of the group dynamics factors (forces) that have a major impact on the acceptance or rejection of using the services of a TLC. This can also help to explain why faculty display certain behaviours towards a TLC in this study. By understanding such behaviours, it may be possible to produce suggestions that help to improve the current situation in this HEI.

As technology advances, innovative teaching ideas will become available to enhance a faculty member's teaching tasks. The Technology Acceptance Model (TAM)

developed by Davis (1989) will also be applied to examine how users accept a particular technological approach over the others. This model helps to explain how the faculty (as users) may perceive a new teaching idea delivered through technology.

Finally, the consumer behaviour model will be used to explain the way faculty (as consumers) behave towards the services offered by a TLC (as a 'business'). By looking at the TLC situation as a business case, administrators, TLC personnel and faculty may be able to better understand the position of a TLC within a HEI. As well, this model ties in nicely with the TAM since many innovative teaching ideas are related to technology.

1.8. Changes in the Original Proposed Study

The original study I proposed examined three items: (1) the functionality of a TLC, (2) the faculty satisfaction with this TLC's services, and (3) the faculty awareness level of this TLC in Canadian College. Besides Rogers' diffusion theory, Kirkpatrick's (1994) evaluation model would also be used to apply to the original study. However, due to some unforeseen labour relations issues, this study had to be altered to avoid potential complications and possible delay of the research process (see Chapter 3 for details). As a result of the changes, this study will not look at the functionality of a TLC and faculty satisfaction with this TLC's services; therefore, the Kirkpatrick's model will not be used during the theoretical discussion of my study. Also, due to the non-disclosure agreement with the TLC's Director, the name of this post-secondary institution will be identified as Canadian College throughout this thesis.

1.9. My Research

Although many studies (Beane-Katner, 2013; Challis, Holt & Palmer, 2009; D'Avanzo, 2009; Forsyth & Cummings, 2011; Linder, 2012) have been conducted to investigate the value of a TLC through its FDPs, few have been done on studying the faculty awareness level of a TLC and how innovative teaching ideas are diffused by a TLC within a HEI. As well, this study also examines the relationship(s) between faculty as consumers and the TLC as a business unit; this is a unique way to analyze an educational unit. My research is a case study of the TLC in a HEI located in British Columbia, Canada. The chosen TLC has gone through many changes over the years and has a long history that will be described in Chapter 2.

1.10. Research Questions

For this study, I am addressing three main areas. The first is faculty awareness of a TLC. The second is how innovative teaching ideas are diffused. The third is how faculty perceive a TLC's services from a service unit perspective. Here are the key research questions:

1. What is the level of faculty awareness of the TLC?
2. How are the innovative teaching ideas of the TLC diffused within the institution?
3. How do faculty view the services of the TLC as its clients?

Since the level of faculty awareness is related to the utilization of the TLC, I am interested in how the TLC unit is being promoted within this institution. As for the innovative teaching ideas, I am interested in how they are being diffused by applying Rogers' (2003) theory of "Diffusion of Innovations". As well, I am interested in how faculty view the services of the TLC from a service-unit perspective.

Faculty awareness is the key to the possible utilization of the TLC services. When the faculty become aware of the TLC's existence and the services it offers, the faculty may be able to take advantage of the innovative teaching ideas offered by the TLC. Once the faculty have utilized the TLC services, they will become the clients of the TLC. As clients, they will be able to determine if the services offered by TLC are appropriate or useful. As well, their perceptions of the TLC as a service unit can be given. The relationships among these three areas form the basis of my research questions.

There are three goals in this study. The first one is to identify certain approaches to market a TLC within a HEI so that the level of faculty awareness can be raised. Once the level of faculty awareness has been raised, hopefully, more faculty members can take advantage of the services offered by the TLC. The second goal is to investigate how any innovative teaching ideas are diffused within a HEI. If a good teaching idea gets diffused, it can be shared by faculty members to enhance their teaching. As mentioned previously, the services of a TLC help to improve the teaching and learning of both faculty and students of a HEI. Therefore, it is important for faculty to know more about a TLC within their HEI. Lastly, I want to understand how faculty as clients perceive the

services of a TLC when TLC is viewed as a service unit. The discovered relationship(s) between faculty (i.e., clients) and a TLC (i.e., a service unit) may help to improve the services of TLC within a HEI.

1.11. Personal Interest in the Study

I have been teaching in the post-secondary environment for almost thirty years. I am a regular faculty at a community college and I have been teaching there for over twenty-five years. I belong to the Computing Department in the Faculty of Commerce and Business Administration at the college. Like many faculty members at this HEI, I did not obtain any teaching credentials prior to my teaching career, nor did I pick up any formal teaching skills from anywhere. I learned to teach by replicating what my professors did at my university. I remembered what they did and I basically repeated what they did in class when I first started teaching. Since I worked as a teaching assistant in the computer lab while I was a student, I did observe how my instructor taught his classes and remembered to apply what he did when I started my teaching career.

Over the years, I learned to improve my teaching based on my students' feedback and learned from some of my colleagues' ideas during our conversations on teaching. In the early days of my teaching career, there were very few offerings to faculty on improving their teaching skills at my college. In fact, I do not recall seeing a TLC at my institution in the eighties. I had very limited knowledge about teaching skills when I started teaching at that time. I had no ideas at all about the relationship between a TLC and faculty development. Nor did I see the value of a TLC. Over the years, I just taught the way that I felt was good for my students. However, as time went by, I wanted to learn more about the field of education. So I enrolled in the Doctor of Education program at SFU.

While I was doing my course work at SFU, I came across a professor who had been working in the TLC at the university. During her lectures, she mentioned the TLC and that caught my attention. Although I have been teaching for many years, I never utilized any of the services offered by the TLC at my college as I simply did not feel that I needed those services. While I was reading some articles on the TLC, I was exposed to many different issues faced by the TLCs in different HEIs in different countries. I became

very interested in what a TLC does. The more I read about TLC, the more intrigued I was by this special unit in a HEI. Therefore, I have decided to choose TLC as the topic of my study. I like to take on the challenge of learning more about the TLC.

While my study focuses on faculty awareness level and the diffusion of innovative teaching ideas, I also want my research to be different from other TLC studies. Since my educational background is in computing science and business, I have decided to look at a TLC from a service perspective – which is very different from most of the TLC studies that I have encountered. In the part of my study where I look at how the faculty behave towards a TLC, I will treat the faculty as clients and the TLC as a service unit. I want to investigate the perception of the faculty members (i.e., clients) towards the services offered by the TLC (i.e., a service unit) in Canadian College. I believe my study will contribute to the educational field in terms of how a TLC should behave as a service unit.

To avoid personal bias as a faculty and doctoral student, during this study, I focused on the purposes of the study without inputting any personal feelings towards any of the collected data (e.g., transcription of the interviews). All the results in this study were analyzed through an objective view to ensure accuracy.

1.12. Research Framework

Below is the framework of my research. This diagram identifies the three areas of the TLC that I want to do my investigations on since I want to have a better understanding of those areas.

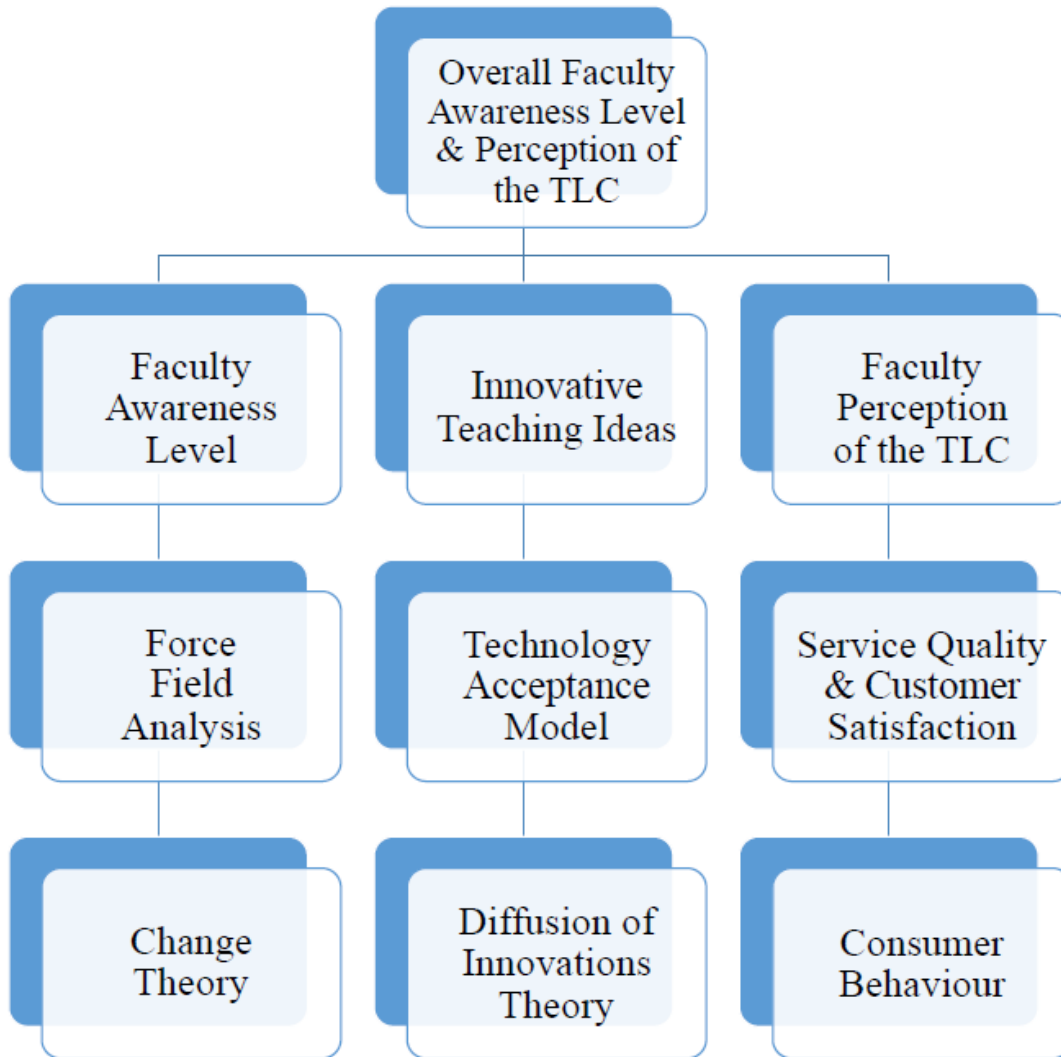


Figure 1. Research Framework

The goals of my research are: (1) to look at the overall faculty awareness level of the TLC within the HEI, (2) to understand how innovative teaching ideas are being diffused within the HEI, and (3) to understand the perception of faculty members (as clients) towards the services offered by the TLC (as a service unit). When looking at the faculty awareness level, Force Field Analysis is being applied as well as Change Theory to see if the collected data can confirm these two theoretical concepts. When looking at how innovative teaching ideas are being diffused within the HEI, the TAM and Diffusion of Innovations theory are applied to validate the collected data. Finally, when looking at the faculty perception of the services offered by the TLC, theoretical concepts of service quality and customer satisfaction as well as consumer behaviour are applied to validate the collected data. The section below describes how my thesis is organized.

1.13. Organization of the Thesis

My thesis is organized into five chapters, including this chapter. Chapter 2 is a review of the literatures related to Rogers' theory on Diffusion of Innovation, Lewin's Change Theory and Forced Field Analysis, Davis' Technology Acceptance Model (TAM), as well as the consumer behaviour model. Chapter 3 provides a detailed description of the methodology applied to this study. The mixed method approach is used to collect both quantitative and qualitative data. Chapter 4 presents the results of the study. They include both the data gathered from the survey and the transcriptions from the interviews conducted. Finally, Chapter 5 provides the conclusions of the study and its limitations, as well as the directions for further research.

Chapter 2. Literature Review

I begin this chapter by briefly describing the history of the TLC in this study. This is followed by a review of faculty development and TLCs. As well, I will discuss the theories applied to my research that include Lewin's Change Theory and Force Field Analysis, Davis' Technology Acceptance Model (TAM) and Rogers' Diffusion of Innovations, theoretical concepts of service quality and customer satisfaction as well as those of consumer behaviour.

2.1. History of the TLC in this Study

In order to better understand the results of my study, below is a history of the TLC in my chosen HEI, Canadian College. The history of this TLC was researched and written by this author as there was nothing recorded about this unit previously. In my initial research on the history of this unit on the Internet, I found nothing. Apparently, nobody had written anything about the history of this unit at all. Since I was very interested in the evolution of this unit, I did more research to find out how the unit was set up initially. I asked the Associate Vice President, Education to give me some help. He gave me the names of two people to contact. I talked to these two employees of the TLC who have been working there for over twenty years. I asked them about the history of the unit and all the changes that happened. From these two long-time TLC employees, I managed to learn much about the history of this unit. John, the first person I talked to worked as a computer technician in different areas before he became involved with the TLC. He gave me many details about the unit from an operational and technical perspective. He identified the many changes that took place within the unit over the years that he worked for the unit (n.d. personal communication). Jane, the second person worked for the TLC for twenty-two years before she moved to another area. She gave me many details regarding the evolution of the unit and many major events that took place within the unit. Her details focused mainly on special events and the changes to the different areas within the unit (n.d. personal communication). She even gave me some documents that she had saved about certain events that took place within the unit. To verify some of the events that happened, I also went to the library to talk to a librarian who specialized in archiving documents. She gave me some yearbooks, newsletters and special event pamphlets relating to the unit to review. In those documents, I managed to

find more information about this unit as well as confirming the details provided by the two employees with whom I had spoken. As a result of my research, I managed to create the history of this unit given below.

The history of this unit covers the time period from 1967 to 2016. During this time period many events happened to this particular TLC. As mentioned before, due to the non-disclosure agreement with the TLC director of this institution, I am not allowed to identify the name of this HEI. Instead, I will use “the institution” whenever the name of this institution is mentioned in this thesis.

2.1.1. Precursor to the TLC

Prior to the creation of the current TLC, in 1967, there was only one area that served the entire institution – the Instructional Communications Department. The primary purpose of this department was to assist all stages of teaching with all technologies and for departments across the institution by providing the most up-to-date instructional supports to the teachers for them to improve learning for their students. During that time, the department consisted of the following categories: (1) providing projection equipment, (2) providing television equipment, (3) film library, (4) learning laboratory, (5) video tape library, (6) production of instructional and learning materials, (7) engineering services, (8) experiments with multi-media systems, (9) general educational and cultural activities, (10) student clubs, and (11) future expansion. However, as advanced technology emerged, some of these services were combined while some were eliminated. The department was renamed in 1983.

2.1.2. Renamed Unit

In 1986, the renamed unit expanded to serve more clients. The unit served both internal and external clients on a cost-recovery basis, which meant that this unit would charge both internal/external clients for its services. In 1992, after a re-organization, four main functional groups were formed: (1) instructional delivery consultants, (2) technical writers, (3) graphic artists, and (4) project assistants (looking after documentation). In 1993, three more groups were added. They were: (1) management (which included outside sales during that earlier period), (2) video production, and (3) audio visual services.

The mandate given to the unit was to assist the institution in improving the teaching/learning process for new and existing programs, courses and instructors. For the development and production of any learning materials, the unit would go through five stages to ensure quality. The stages were: (1) planning, (2) development, (3) production, (4) publication, and (5) evaluation. The expected end results of this quality approach would be outstanding student achievement. Under the management's guidance, this unit was running quite successfully as many large-size firms (external clients) asked for this institution's services. These clients included Vancouver School Board, Telus, and Georgia Pacific. The unit had also extended its services overseas to Malaysia as the unit provided training materials to the students in that country.

In 1994, the institution developed its first online course. This project was developed by the part-time studies area of Health Sciences which worked closely with the Instructional Design Unit. The reason for developing an online course was due to the high demand of students who were working and could not physically attend classes, especially those who lived out of town. The development of an online course was very successful as the course delivery format served the working students well due to its flexibility. Students could view their course materials any time and anywhere they wished as long as they had access to the Internet. The growth of online learning at the institution developed tremendously from its large distance education culture. With the advancement of the Internet technology and the dropping price of computers to make them more affordable, online courses greatly improved the accessibility to course materials for students and thus resulted in a huge growth in this area. The technician whom I interviewed told me that he spent a lot of his working time supporting students who were taking the online courses. As a result of the high demand for online courses, the institution had to hire a few more technicians to provide support to the growing online student population.

From 1995 to 1997, a faculty member from the Computing area managed the unit. During her time as Director, the unit worked closely with subject matter experts (SMEs) within the institution (i.e., faculty members) and outside consultants to review existing programs and develop new curricula.

2.1.3. Creation of the Educational Technology Unit

The availability of educational technology during the mid-90s completely changed the landscape of post-secondary education. For examples, the Internet allowed students to take online courses as well as receiving online tutoring if needed. Also, computer/video conferencing allowed students to meet with their instructors electronically even though they could not attend the classes physically. The technological impact affected this unit significantly since some faculty members (i.e., the early adopters) wanted to use such technology in their teaching. Around 1996, a special project was created. This three-year funded project aimed to extend online education. The main focus of this project was to formalize and standardize the processes, infrastructure and support models needed to enable large scale online learning across the institution. In 1997, the Educational Technology unit was created as part of the unit. During that year, an online learning management software (LMS) platform named WebCT became available. The institution adopted this LMS to use for all of its online courses since this new platform provided useful features (e.g., discussion, assignment submission and exam) that would allow instructors to deliver the courses more effectively.

2.1.4. Unit Self-evaluation

Within an educational institution, it is very common for a functional unit to do a self-evaluation to determine if any changes are needed to either improve the efficiency of the unit or to see if the unit serves its intended clients properly. This is a requirement for any educational institution that wishes to be accredited by an educational accreditation body. Also, in the past, the institution needed to do so to satisfy the government's requirement. However, that requirement has been removed by the government recently. The normal time period for such unit review to take place typically falls between three to five years. For the TLC, the time for a unit review had arrived. In 1997, the unit did an evaluation of teamwork. The purpose of this exercise was to evaluate the synergy of the workers within the unit. A consulting firm was hired to do this evaluation. This exercise allowed management to see if the unit workers were functioning cohesively.

2.1.5. Unit Services

While the unit continued to serve the clients in this institution, the unit strived to improve its performance based on available technology within the institution on a regular basis. An example of such initiative could be found in the special paper sent from the Office of the President of this institution in 1997. In this strategic planning paper, management identified goals to provide direction for information technology and educational technology being deployed at this institution. Some of the goals related to the enhancement of faculty teaching and student learning.

In 1998, a Vice-President of Learning and Technology Services was appointed to manage the unit. Under his leadership, the unit continued to take on new challenges while serving the clients in the institution. Besides using educational technology, the role of the unit since its inception was to promote faculty development at the institution. Management had realized the importance of faculty development since the beginning; therefore, the unit had been utilizing the Instructional Design Consultant (IDC) unit to assist faculty in doing professional development for many years.

2.1.6. Proposed Name Change

In 2000, another re-organization resulted in the amalgamation of all the different units, with Administrative Support (documentation services) being the last unit to merge. In October 2000, the name Teaching and Learning Centre (TLC) was proposed. While the name of the unit was proposed to be changed, its goals to improve the quality of teaching of the faculty and students' learning were never altered. In the year 2000/2001 business plan (draft), the TLC mission was stated as follows: "The Teaching and Learning Centre advocates and supports learning and teaching excellence at this institution and in the global community by providing products and services that improve workplace performance" (reference cannot be disclosed).

While the proposed name change never took place, the unit continued to provide its services to the clients in this institution. In the Operational Plan, 2002/2003 to 2004/2005, the value of the unit was stated as follows:

The Unit is a service department to the institution. Its success is realized through the success of others – the schools, the instructors and ultimately

the students – and achieved by adding value to the inextricably linked acts of teaching and learning. (reference cannot be disclosed)

While there were other service units existing at the institution, this unit was clearly a unique functional area that differed from others as it served all faculty and students, plus external clients.

2.1.7. Name Change to The Unit

In 2005, the unit was officially renamed to something else. To avoid the possible disclosure of the institution, I will use the generic term TLC for this unit. At that time, there were seven service areas. They were: (1) Administration, (2) Audio Visual, (3) Instructional Design Consultants (IDC), (4) Media Production, (5) Project and Documentation Services, (6) Technical Writing and Graphic Art, and (7) Distributed Learning Service. Each area provided its respective services to clients.

While the unit's identity was changed to TLC, its goals remained the same. As well, the unit continued to take on new challenges while providing important services to its internal/external clients. One such challenge was a five-year project named Technology-Enabled Knowledge (TEK) Initiative starting in 2005. The idea behind this project was to take advantage of the popularity of the Internet and to use this tool to promote the use of educational technology. This huge project was fully supported by the TLC and all the successful activities would be maintained continuously by TLC.

2.1.8. Current State of the TLC

In December of 2016, the Associate Vice-President, Education left the institution. After his departure, the Vice-President, Academic took over the overseeing of the operations of this unit. As of July 2017, there have not been any changes in the mandate of the TLC.

In 2018, the TLC continues its mandate to serve the clients of the institution for the purpose of improving teaching quality and student learning. Under the leadership of the new Associate Vice-President, Education, this unit is staying on course to provide useful services to its clients. Currently, there are several areas within the TLC available to serve its clients. The services include technical support to Learning Management

System (LMS) for online courses for both faculty and students, audio and video support, instructional skills workshops (ISWs), curriculum design, and program design for instructors. Each area offers different services to its clients who require assistance in their teaching and/or learning needs.

All the workers from these areas within the TLC provide services to all faculty and students of the institution on a regular basis. While these specialists offer assistance to the clients of the institution, they also try to find time to upgrade themselves with current knowledge in their respective areas so that they can continue to offer the services to their clients. As mentioned previously, faculty development is needed within a HEI.

2.2. Faculty Development

Although TLCs offer a variety of services nowadays, one of its main functions is to provide faculty development events for the faculty members. Studies have shown that TLCs offer FDPs to assist instructors in improving their teaching as well as enhancing their students' learning. (Calderwood and Klaf, 2015; Hewson, Copeland and Fishleder, 2001; Mahn, McMann and Musanti, 2005; Troller, 2002) Lieberman (2005) stated that "Centers for teaching and learning were providing the faculty with the pedagogical theory and practice that they needed to teach at both the graduate and under-graduate levels" (p. 87).

There are many studies that have identified the importance of faculty development in producing professionals (Condon et al., 2015; Gaff & Simpson, 1994; Guglielmo et al., 2011; Riegle, 1987; Sorcinelli, Austin, Eddy & Beach, 2006; Steinert et al., 2006; Wilkerson & Irby, 1998; Yamani, Shakour & Yousefi, 2016). These studies are valuable for those who are interested in faculty development. McLean, Cilliers and Van Wyk (2008) indicated that the chronological evolution of faculty development in the medical education field had started since the mid-seventies. The medical professionals saw the need for faculty development and decided to push for those ideas. Faculty in other fields also recognized the importance of faculty development and followed suit (Conrad & Hammond, 1982; Crow, Milton, Moowaw & O'Connell, 1976; Eison & Stevens, 1995; Festervand & Tillery, 2001; Gibbs, 1995; Grant, 2005; Mooney, Fordham

& Lehr, 2005). Faculty development has become a critical part in many HEIs. The TLC provides one avenue for offering faculty development activities.

2.3. Relationship between a TLC and the FDPs

There is a close relationship between a TLC and the FDPs because many TLCs provide FDPs to help improving the teaching skills of faculty (Calderwood & Klaf, 2015; Mahn, McMann & Musanti, 2005; Troller, 2002). Hence the effects of faculty development on HEIs cannot be ignored. Many educators have been working actively to keep their professional knowledge current. Faculty development involves many different activities. Ouellett (2010) identified the different stages of faculty development work to help a faculty improve his teaching (pp. 5-7). As more studies were done on faculty development, many different related activities (e.g., workshops, seminars, mentorship programs, and microteaching) became developed. The existence of a TLC allows those activities to become available in improving faculty's teaching skills as well as students' learning. The functions of a TLC have helped many educators to realize the importance of faculty development and how this unit may affect the world of education. In their study, Atkins, Koroluk and Stranach (2017) asserted that "Teaching and Learning Centres (TLCs) play an important role in professional development of faculty, staff, and teaching assistants at colleges and universities. In many ways, TLCs help to shape the professional and academic cultures, and instructional practice of their institutions" (p. 253). Below is a discussion of the effects of faculty development on the educational environment.

2.4. Effects of Faculty Development on an Educational Institution

Although many educators in higher education consider faculty development is important to a HEI (Condon et al., 2015; Sorcinelli, Austin, Eddy & Beach, 2006; Wilkerson & Irby, 1998), some believe that faculty development is critical to teaching faculty only (Fidler, Kahkoo, & Miller, 2007; Gaff and Simpson, 1994; Murray, 2002; Schofield, Bradley, Macrae, Nathwani & Dent, 2010; Wilkerson and Irby, 1998). In reality, faculty development is directly important to three different entities: (1) the HEI, (2) faculty, (3) students. By understanding how faculty development may affect these three

entities, one will realize the importance of this undertaking and why a TLC is so closely related to faculty development.

It is generally assumed that an educational institution is where individuals go to obtain an education, then get a job and become a useful citizen to the society. Such expectation has not changed for years. However, in the late 1960s, the public's favourable attitudes towards HEIs had changed due to unsatisfactory teaching quality because of the lack of faculty development provided in the HEIs (Cook, 2011; Gaff, 1975; Groccia, 2010; Schroeder, 2011; Sorcinelli, Austin, Eddy, Beach, 2006; The Group for Human Development in Higher Education; 1974). Gaff and Simpson (1994) stated that "The public has lost much of its affection for higher education. What was taken for granted thirty years ago must be shown to be beneficial today" (p. 173). Parents, students and governments were asking the HEIs to improve their educational quality during that period of time. In the early 1970s, HEIs faced a challenge that they had never encountered before – the demand for higher quality teaching from the public. Woodward, Love and Komives (2000) pointed out the public's uproar that "Institutions are unresponsive, they are costly, and they exercise little accountability" (p. 61). As the public became fed up with rising tuition fees and lower quality of teaching, they demanded that the HEIs must provide better quality of education. Meanwhile, to raise the standards of education, accreditation bodies (e.g., Association to Advance Collegiate Schools of Business (AACSB), Accreditation Council for Graduate Medical Education (ACGME)) required their member institutions to have FDPs in place in order for these HEIs to maintain their memberships. Legorreta, Kelley and Sablynski (2006) confirmed that "The AACSB standards require that the business school's mission statement drive all decision making, including faculty coverage of courses, learning objectives, intellectual contributions, and faculty-development programs" (p. 3). Similarly, Lawrence and Oyama (2013) indicated that "The ACGME specifies a number of requirements for faculty development which will be reviewed" (p. 347).

Besides helping to meet the required educational standards, faculty development plays an important role in supporting organizational change within an educational institution. Steinert (2012) stated the following:

... faculty development can promote culture change by helping to develop institutional policies that support and reward excellence in teaching, communicate the expectation of professionalism among all faculty

members, encourage a re-examination of criteria for academic promotion if appropriate, and provide educational resources for junior and senior faculty members as needed. (p. 35)

As administrators approved FDPs in their HEIs, faculty's teaching and students' learning seemed to improve from the non-FDP time as studies had shown. (Calderwood and Klaf, 2015; Hewson, Copeland and Fishleder, 2001; Mahn, McMann and Musanti, 2005; Troller, 2002) By implementing FDPs, a HEI can support faculty to take better pedagogical approaches to their work; as well, improving faculty's teaching will help to enhance students' learning. Tomlinson (2018) stated that "A strong causal connection is made between teaching quality and student outcomes: teaching quality adds immediate value to outcomes, defined in terms of the future exchange value of their degrees" (p. 716). As a result of the implementation, better output (i.e., skilled graduates) will lead to better overall citizenship for the society. While better graduates will give the institution a better image, that will also lead to better economic value being generated as more students will want to attend an institution due to its scholarly and quality image (e.g., Harvard University). Hence, faculty development does have a huge impact on a HEI. As Camblin and Steger (2000) stated, "There is no debate that faculty development is a significant key to the continued success of higher education" (p. 16).

As HEIs improved faculty's teaching and students' learning, the public changed its previously negative view of higher education. In their report, The University of Scranton (2004) pointed out that a year 2000 national study titled 'Great Expectations' had concluded that "Americans agree that higher education is more important than ever for success" (p. 2). The study revealed that "77 percent of respondents say that getting a college education is more important than it was ten years ago" (The University of Scranton, 2004, p. 3). Immerwahr (2004) concurred by stating that "Many Americans thought that higher education was extremely important and was generally doing a good job" (p. 1). In recent years, the public seemed to embrace the value of higher education again. In his report, Aguilera-Barchet (2012) asserted that "Higher education should also help individuals to become more reflective and better able to adapt to new realities, in addition to learning how to deal with diversity" (p. 31). Pew Research Center (2014) conducted a survey on college graduates from different generations and stated that "The generations agree that getting their college degree was worthwhile" (p. 9). Finally, Supiano (2015) reported that a public-opinion poll from Gallup showed that "the vast majority of Americans value education beyond high school ... and they see higher

education as connected to getting a good job and having a good life” (p. 1). All these studies demonstrated the importance of higher education nowadays. Of course, faculty development plays an important role as FDPs help to improve the quality of teaching in HEIs.

2.5. Effects of Faculty Development on the Faculty

Riegle (1987) identified five categories of faculty development: (1) instructional development, (2) professional development, (3) organizational development, (4) career development, and (5) personal development. Other than organizational development, the other four categories relate to an individual faculty closely. Instructional development will help a faculty to improve his teaching. Professional development will allow a faculty to gain more professional knowledge. Career development will assist a faculty to plan for advancement in his career. Personal development will help a faculty to grow as an individual in how he relates to others. All the activities from these four faculty development categories will have major impact on a faculty.

Researchers have found that FDPs help to improve instructional skills for faculty. Dath and lobst (2010) stated that “Medical teachers in conventional educational systems need faculty development to prepare them to function effectively in a competency-based medical education (CBME) system” (p. 683). Their study showed that without ongoing upgrade, medical instructors will fall behind in their skills. Faculty development also helps to enhance the knowledge of a professional. In the dental field, Hendricson et. al. (2007) did a study to ask the question: “Does Faculty Development Enhance Teaching Effectiveness?” (p. 1513) The results of their study did point to some positive findings in the importance of faculty development. As a faculty attends a professional development event such as a workshop, he/she will acquire more professional knowledge. Duda (2004) also maintained that “Faculty development programs are designed to help the faculty, both junior and senior, with academic career advancement” (p. 93). Her position was supported by Morzinski and Fisher (2002) who asserted that FDPs “build career-important relationships with peers, mentors, and academic consultants who enhance socialization skills and contribute to academic advancement” (p. 402). Those studies focused on the benefits of FDPs in career advancement of faculty in the HEIs. This is especially important to young faculty.

Faculty development also helps to improve the personal well-being of faculty. If a faculty has issues with his/her work life (e.g., receiving student complaints), it is very likely that he/she will not do as good a job as before due to frustration. Riegle (1987) proposed that faculty members can obtain useful skills such as interpersonal skills and life planning through the FDPs. Murray (2002) suggested that FDPs may bring back the lost enthusiasm to a faculty member who has taught for a long time. The whole idea behind personal development is to help a faculty member grow as an individual in life so that his/her life is fulfilling. These studies have indicated that FDPs will help faculty to improve as individuals in their personal lives. In general, if a worker has a good personal life, the chance that he/she becomes a good worker is quite high. In the case of a faculty member, he/she will become a better instructor and hopefully, his/her students will learn more effectively from him/her.

2.6. Effects of Faculty Development on the Students

Students are the reason why faculty have their teaching careers. Without students, faculty would have nobody to teach and therefore have no jobs. It is important for faculty to know how to teach students properly so that their students will acquire an appropriate education as required by their HEI. If faculty members fail to deliver the knowledge and skills to their students due to various reasons (e.g., lacking teaching skills, lacking classroom management skills, or not being an expert in the field), it is highly likely that they will receive negative feedback from their students. Such negativity may also impact the reputation of the institution. Therefore, it is crucial for faculty to participate in FDPs to eliminate their deficiencies. “The tacit assumption underlying [FDPs] is that when faculty learn more about teaching, they teach better, which in turn improves student learning – a plus for everyone” (Rutz et al., 2012, p. 41). This shows how important it is for faculty to be good at what they do as their performance will have major impact on their students.

Researchers have conducted studies to demonstrate that FDPs have a positive effect on the learning of students (Derri, Vasiliadou & Kioumourtzoglou; 2015; Edwards, Snyder & Sanders, 2016; Willett, Inverson, Rutz & Manduca; 2014). Elliott & Oliver (2016) stated that “The research findings showed the professional development program at the case institution yielded positive gains in teacher practices and student learning – both central to the institutional mission and goals” (p. 96). By participating in FDPs,

faculty members may learn some useful tips about their teaching methods, delivery styles and classroom management skills. They may also acquire important interpersonal skills that can be used to improve their communications with their students. As well, they may gain valuable, updated knowledge to help them become a subject matter expert in their field of specialization. Once faculty members have acquired useful professional knowledge, they will be better prepared to deliver such knowledge to their students. By doing so, both faculty and students will benefit. As a whole, the institution will also benefit because of these useful FDPs. All of these benefits will happen because both administrators and faculty are willing to make changes within their HEIs. However, for those people who want to make changes, they have many challenges to face within their HEIs.

2.7. Changes Within a HEI

When it comes to making changes within a complex organization, management face many challenges along the way (Andersson, 2015; Dent & Goldberg, 1999; Erwin & Garman, 2010; Hirschheim & Newman, 1988; Stanley, Meyer & Topolnytsky, 2005; Tavakoli, 2010; Thomas & Hardy, 2011). However, in one case in which administrators within a HEI wanted to change by asking faculty to improve their teaching via faculty development, the result was different. There was very little resistance. Faculty actually agreed to make the change proposed by management without causing a lot of problems. Although the public was considered to be the initial moving force for the change, in reality, literature suggested that faculty was the main force to push hard to start the movement of faculty development (Conrad & Hammond, 1982; Gaff, 1975; Grabove et al., 2012; The Group for Human Development in Higher Education, 1974). Such action by the faculty fits the description of an organizational change model known as the Teleological Model.

Kezar (2001) indicated that in a teleological model, an organization is assumed to have a mission and has the ability to adapt. Changes are proposed because the leaders and change agents see the need to change. As well, it is the internal features of an organization that stimulate the change. “This model sees change agents and leaders as the focus of the change process” (p. 35). The teleological model has many benefits. They include: setting up strategies for making the appropriate changes, identifying the leaders and change agents, and getting the collaboration from workers and helping staff

to develop. Also, the institutional leaders needed to have visions. As Kezar (2001) pointed out, “The ability to, at times, forecast or identify the need for change was an important contribution, helping organizations to survive and prosper in what otherwise would have been difficult times” (p. 35). I agree with the assessment because administrators at HEIs need to know what changes are necessary for the current survival and possible future success. Also, it is important for administrators to understand that changes are needed for improvement in any organization. For administrators in the HEIs, to implement changes for improving faculty’s teaching skills, they will do so through the services offered by a TLC.

2.8. TLC Services

In the early days of the TLC existence, most TLCs offered only workshops to help faculty improve their teaching skills. Nowadays, besides offering FDPs to improve faculty teaching skills, many TLCs offer a variety of services to assist faculty in doing their jobs as well as helping students to learn (Barlett, 2002; Carmichael, 2008; D’Avanzo, 2009; Goldstein, 1980; Levine-Sauberman, 2015; Mills, 2009; Singer, 2002; Troller, 2002). The services include: (1) faculty consultation, (2) curriculum design, (3) media support, (4) technology support, and (5) student tutoring. Faculty consultation involves an educational consultant who works with faculty regarding teaching skills and student learning matters. Typically, the consultation is done on a one-on-one meeting session. The TLC also offers to assist faculty in designing program curriculum. When a department wants to develop a new program, TLC specialists will work with this department (usually a team of faculty members) to make sure that all the educational issues (such as pre-requisites and student learning experiences) are dealt with. The specialists will also work with faculty on course design. Their job is to assist faculty to make sure that educational goals (such as learning outcomes and assessment means) are appropriate. TLCs also provide media support to faculty in the classroom when a faculty member needs certain help with media equipment such as monitor, screen projector, speaker, microphone, overhead projector, television, VCR player and CD/DVD/Blu-ray player. When it comes to technology support, TLC technical specialists will provide services to assist faculty in using technology in the classroom. These specialists may conduct workshops to teach faculty how to use presentation software (such as Microsoft PowerPoint and Prezi). They also provide support for faculty who

teach online courses by training them to use the online course software such as Blackboard, Moodle or Desire2Learn. These technical specialists assist faculty in setting up online courses and provide technical support for the faculty (e.g., setting up a test, setting up assignment due date, setting up a marks sheet) when they teach the online courses. They will also conduct workshops to train faculty on using the online course software. Finally, some workers in the TLC focus on tutoring students who need help with their courses. All these services are now available at many TLCs within the HEIs (Barlett, 2002; Carmichael, 2008; D'Avanzo, 2009; Goldstein, 1980; Levine-Sauberman, 2015; Mills, 2009; Plank & Mares, 2013; Singer, 2002; Troller, 2002). They are available because of the changes implemented within the HEIs. In her study, Linder (2012) stated that changes which impact TLCs include “the growing population of adjunct instructors and the increasing responsibility of CTLs to take on organizational development roles” (p. 33). Furthermore, Schumann, Peters and Olsen (2013) maintained that “TLCs have been charged with keeping up with the latest teaching trends and acting as a catalyst to bring about needed change, moving the faculty and the institution from old pedagogical models to new ones (p. 21). New services of the TLC have become available due to the changes in the educational environment as clients (both instructors and students) have more needs than before. And these changes can be explained.

2.9. Change Theory

Lewin's (1947) Change Theory can be used to explain the changes that happened within the Canadian College in my study. In this theory, he identifies a three-stage process of change: (1) Unfreeze, (2) Change, (3) Freeze (or Refreeze). The first stage of 'unfreeze' is “where the desire to change occurs, or at least the recognition that change is needed” (Kaminski, 2011, p. 1). Riddle (1994) stated the following, “According to Lewin, in order to start the unfreezing process a felt need must exist – something to disturb the status quo” (p. 18). That is exactly what happens in the case of starting faculty development in a HEI. It is the faculty who want to make the change since they recognize that there is a need to improve their teaching skills (Conrad & Hammond, 1982; Gaff, 1975; Grabove et al., 2012; The Group for Human Development in Higher Education, 1974). During this stage, faculty need to understand that they need to change their current behaviour (i.e., the way they have been teaching) and to get ready to move into the next stage. To help faculty to realize the necessity for the change, open

dialogues and “re-educational activities such as team building, personal development, and brain-storming” (Kaminski, 2011, p. 1) have to be carried out to communicate this *unavoidable* change to the faculty. However, such activities must be carried out in a positive manner so that the faculty can see the future benefits of the change in relation to their jobs. By doing so, faculty will feel more comfortable to get ready for the next phase. As Levasseur (2001) wrote, “The first step of Lewin’s model tells us how to minimize barriers to change and increase the odds of a successful change effort” (p. 73). Burnes (2004) further supported Lewin’s view point by pointing out “[Lewin] argued that the equilibrium needs to be destabilized (unfrozen) before old behaviour can be discarded (unlearned) and new behaviour successfully adopted (p. 985). These studies have indicated the importance of the first stage. To achieve unfreezing, Schein (1996) identified three important processes: (1) disconfirmation of expectations or hopes, (2) induction of guilt or survival anxiety, and (3) creation of psychological safety or overcoming of learning anxiety. All three processes must take place or the unfreezing stage will not be carried forward.

The second stage entails “a process of change - in thoughts, feelings, behavior, or all three” (Kaminski, 2011, p. 1). This stage is also considered as the ‘movement’ stage. “Movement takes place after people have bought into the need for change” (Levasseur, 2001, p. 73). The purpose of this stage is for faculty to use the new way to do things and keep on using the new way in a consistent manner. During this stage, faculty need to be “convinced that the new way is better than the old” (Kaminski, 2011, p. 1). Sligo (2003) stated that “Genuine change occurs when individuals absorb and internalize new knowledge, attitudes, behaviour and skills as part of their problem-solving in the change experience” (p. 49). Faculty need to try out the new teaching methods to experience the results in order to confirm that the changes will help to improve their current teaching. Manchester et al. (2014) maintained that “Once movement has begun, the organization allows for trial and error to occur around the practices and new social norms guide people toward the practices as more and more individuals are observed performing them. Attitudes may become more favorable toward the behaviors and resistance declines” (p. 85). During this time, faculty will need to stay with the changed behaviour (i.e., the new way of teaching) without reverting back to the old behaviour. They must maintain a good attitude towards this changed behaviour and have faith in it. As Hussain et al. (2017) suggested, “This change process of Lewin

second step will shift the behavior or attitude of department, organization, or individual to the next new level” (p. 3). This step involves many actions. Kritsonis (2005) indicated that there are “Three actions that can assist in the movement step include: persuading employees to agree that the status quo is not beneficial to them and encouraging them to view the problem from a fresh perspective, work together on a quest for new, relevant information, and connect the views of the group to well-respected, powerful leaders that also support the change” (p. 1). As long as faculty carry out those actions, the change will be moved forward.

The final stage of freeze (or refreeze) “consists of establishing the change as a new habit or process, so that it now becomes the “standard operating procedure” or Status quo” (Kaminski, 2011, p. 2). This is where the change will become accustomed to by the faculty. Kritsonis (2005) stated that “The purpose of refreezing is to stabilize the new equilibrium resulting from the change by balancing both the driving and restraining forces” (p. 2). During this stage, faculty must embrace the new way of doing things consistently or they will revert back to the old habits of doing things. That is, they have to carry out the balancing act. They must have a positive mindset towards the implemented changes. They need to maintain their focus on this new way of doing things. Kritsonis (2005) identified that “It is the actual integration of the new values into the community and traditions” (p. 2). Welch (1979) agreed by saying that “new changes are integrated and stabilized” (p. 309). Sligo (2003) further confirmed that “Refreezing occurs when individuals integrate what they have learned into their own practice at work and, more importantly, into their own expectations and assumptions about how they will perform at work” (p. 49). Faculty need to put their newly learned teaching skills into the classroom and have a good idea how well those skills will be applied in their teaching.

Keeping the implemented changes will require much effort from the faculty. It is very important for the faculty to remain stable in this new state. Schein (1996) indicated, “The main point about refreezing is that new behavior must be, to some degree, congruent with the rest of the behavior and personality of the learner or it will simply set off new rounds of disconfirmation that often lead to unlearning the very thing one has learned” (p. 34). Kritsonis (2005) agreed by stating that “It is highly likely that the change will be short lived and the employees will revert back to their old equilibrium (behaviors) if this step is not taken” (p. 2). Therefore, the new behaviours must remain consistent and the faculty must continue to use the new way of teaching. Kaminski (2011)

maintained that “The changes implemented are ‘frozen’ in place to ensure that they become part of normal working procedures” (p. 2). Manchester et al. (2014) also agreed that “This is the point at which reinforcements for the new procedures will increase the likelihood of sustaining them” (p. 85). However, this state will take time to reach because some faculty will find it challenging to teach in a way that they are not accustomed to. Hussain et al. (2017) pointed out that “The implementation of change involves the current state of organization have to be changed into a desired state, but this will not occur quickly but simultaneously” (p. 5). Levasseur (2001) concurred by stating that “Successful refreezing requires a commitment to remain actively involved until required new behaviors have replaced those that existed prior to the change. This does not happen overnight or without ongoing support to the organization attempting to institutionalize the change” (p. 73). Lewin’s theory has been followed by many administrators in different organizations when they go through changes. In the TLC of the chosen institution, this theory also applies. Here is how the theory works.

When one of TLC specialists has an innovative teaching idea that is deemed to be beneficial to the HEI, he/she has initiated the first stage of ‘Freeze’. This change agent will try to persuade (or convince) some faculty members to try out the new idea. That is, he/she is trying to change the mindset of the faculty to accept a new way of teaching. As the specialist shares this idea with some faculty members, that will somewhat raise the faculty awareness level of the TLC, especially those innovators who like to try out new things. During the second stage of “Change”, some faculty members (i.e., the innovators) make the movement by using this new teaching idea in their classes in a consistent manner. Also, these innovators will continue to share their experiences with other faculty members within the institution. By doing so, they are shifting their behaviours towards a new norm. As time goes by, more and more faculty member will accept this new way of teaching. During the last stage of ‘Refreeze’, most if not all of the faculty members will accept the new way of teaching as the norm. That is, they will treat the new teaching idea as their normal operation standard. That is how the Change Theory is being applied in this case.

2.10. Force Field Analysis

While the Change Theory is used to explain the changes that happened within a HEI, Lewin’s (1938) Force Field Analysis can also be used to further explain those

changes. As a matter of fact, this analysis is the extension of the Change Theory. Many studies of change within an organization use this tool to guide or implement the modification (Ajimal, 1985; Baulcomb, 2003; Bozak, 2003; Hustedde & Score, 1995; Kumar, 1999; Lan & Lee, 1997; Norsworthy & Gerstein, 2003; Schwering, 2003). To further explain the purpose of this concept, Thomas (1985) stated that “Force Field Analysis does not in and of itself reduce resistance to changing strategies. However, force field analysis does provide a mechanism for identifying and assessing the various forces working for and against strategic changes” (p. 56). This analysis will assist those who are in charge of the change to see whether the change will become a reality or not. By analyzing the situation, one can become prepared for the next move.

The idea behind this analysis is that when there are forces (both internal and external) being applied to an organization, people within an organization will react and something needs to be done to alleviate these pressures; otherwise, it may lead to potential organizational chaos. Different types of forces exist. They include “people, organizations, resources, attitudes, traditions and values” (Hustedde & Score, 1995, p. 3). According to Lewin, when a situation is stable (i.e., status quo), everything is at an equilibrium due to the balance between the driving forces and the restraining forces. At that time, the sums of both forces are equal. As Kaminski (2011) explained, “Driving forces are forces that influence a situation, pushing in a particular direction: they tend to initiate a change and keep it going” (p. 2). A driving force comes in different forms. Bozak (2003) asserted that “A driving force might be the result of external forces compelling the change. It may also result from internal problems with a current system or simply the desire to improve a situation” (p. 81). Kippenberger (1998) added that “Lewin exemplifies driving forces as ambition, goals, needs and fears” (p. 10). Once the driving forces get pushed beyond their normal position, a change will get started.

On the other hand, “Restraining forces are forces that act to restrain or decrease the driving forces – they make it difficult to move a change forward” (Kaminski, 2011, p. 2). Riddle (1994) stated that “Restraining forces are those that act as barriers to change, influence the effect of driving forces, and do not lead to locomotion” (p. 17). Restraining forces exist to prevent any changes from occurring. However, change will take place when an imbalance occurs between the two forces. That is, a disequilibrium has been reached. A successful change can be achieved by one of the following: (1) increase the

driving forces to alter the equilibrium to a new level, or (2) reduce the restraining forces to vary the equilibrium to a level different from before.

The situation with the HEIs is a good explanation of Force Field Analysis. Students and the public (external force) applied pressures on the HEIs to raise the quality of teaching and deliver better qualified graduates. Meanwhile, some faculty members and some administrators (internal force) in the HEIs started to realize the importance of FDPs while many faculty members did want to improve their teaching. As both driving forces were pushing harder than the restraining forces (i.e., those faculty members who opposed to the change), the equilibrium could not be sustained and the status quo could not be maintained. The result was that the administrators of the HEIs went with the change. By establishing and implementing FDPs, administrators of the HEIs moved to a new equilibrium – both the driving forces and restraining forces are now in balance under the new condition (i.e., the implementation of FDPs). The Force Field Analysis is a good concept to explain the changes that happen within an organization.

Besides explaining changes, the Force Field Analysis also integrates well with the Change Theory. When the status quo is disturbed, that means a potential change may occur. It also means that the driving force is pushing forward to cause the disequilibrium. This push matches the first step of the Change Theory – Unfreeze. In the case of the FDPs, more faculty and administrators wanted to change than those who opposed to the change. That is, the driving forces were stronger than the restraining forces. As a result, the change was accepted. During step two of the Change Theory, movement was made and people's attitudes had to change as well. Then the implementation took place. At step three of the Change Theory – Refreeze took place. People were accepting the new status quo (i.e., the existence of FDPs) – meaning that the new equilibrium had been achieved. Both the driving forces and the restraining forces were in balance now. Faculty finally had accepted the change as the operating norm. This whole process will start again when new teaching ideas become available.

2.11. Innovative Teaching Ideas

Over the years, many innovative teaching ideas have been developed. Of those ideas, many of them are related to computers due to the advance of technology. Below

is a brief discussion of some of the innovative teaching ideas that were developed since the early 1970s. These innovative teaching ideas are presented in a chronological manner (from 1970s to 2010s) to show the creativity of teaching faculty and how these ideas helped to improve faculty's teaching and students' learning.

One of the innovative teaching ideas in higher education is called Problem-Based Learning (PBL). PBL was first suggested by Barrows (1976). After his initial study, other educators decided to do further research on this idea (Blumberg, Michael & Zeitz, 1990; Boud & Feletti, 1991; Eagle, Harasym, & Mandin, 1992; Johansen, Martenson, & Bircher, 1992; Kaufman, 1995; Tiberius, 2002). PBL had been widely used in HEIs for a long time as it was demonstrated to be very useful for instructors to assist students in learning.

Technology usage is a must in education. In their study, Dufresne et al. (1996) stated the usefulness of a Classroom Communication System (also called a Classroom Response System (CRS) or 'clicker' later). This system promoted active learning for students. This wireless system consisted of transmitters that allowed students to send responses (by using a terminal stick) and receivers to collect their answers to a given question in class. There are different types of commercial CRSs that have similar features (Burnstein & Lederman, 2003). Studies (Paschal, 2002; Siau, Sheng & Nah, 2006; Morerich & Moore, 2007; Yourstone, Kraye, & Albaum, 2008; Salemi, 2009) have shown that the usage of CRS in the classroom enhances students' learning, retention and engagement due to the immediate feedback and interaction with the instructor.

Here are more examples. Thurston, Secaras & Levin (1997) explained the usefulness of Teaching Teleapprenticeships (TTa), an innovative program that aimed to train new teachers to integrate technology into their teaching. Through the usage of electronic networks and different educational software, student teachers were trained to apply technology in their learning. Faculty and university supervisors were involved to provide support to these student teachers. This innovative teaching idea helped to train many non-technical education majors to become better instructors. As we are heading towards year 2020 and beyond, more innovative teaching ideas will become available. Neo & Neo (2001) included the usage of multimedia technology in the PBL environment to enhance the students' learning experience. They claimed that "The power of

multimedia lies in the fact that it is multi-sensory, stimulating the many senses of the audience” (p. 20).

Online education has become popular because it is convenient and effective. Salajan & Mount (2008) presented a project on how the Faculty of Dentistry at the University of Toronto applied online technologies to improve its online course curriculum. The faculty adopted the Blackboard Learning Management System (LMS) to develop their online courses. As a result of this adoption, the online courses developed had made up about twenty percent of the dental curriculum. In their study, Hargis et al. (2008) discussed the success of using iPods by some of its faculty to teach their classes at the University of Pacific in California. The research resulted in the improvement of faculty’s teaching and learning. An interesting study was performed by Kommers and Hooreman (2009) in which mobile phones and personal digital assistants (PDAs) were used to do real-time teacher coaching (synchronous coaching) with students. The result showed that synchronous coaching is more effective than the traditional asynchronous (delayed) approach of teaching. Computer simulation is gaining popularity in the educational environment. In their study, Elson, Mount-Campbell & Woods (2009) used virtual world simulations to help educators with their teaching in the area of problem solving within the industrial engineering education environment. The result demonstrated that the usage of such tools would “increase the expertise and knowledge of engineering graduates” (p. 144).

Besides the engineering field, the faculty in the dental education area also became involved in developing innovative teaching ideas. One such idea was called microteaching. Kamboj, Kamboj, George & Jha (2010) pointed out that the usage of microteaching (a teaching-simulation exercise) could provide the faculty immediate supportive feedback. This approach may be able to prepare some of the faculty for teaching in the future. While the health care professionals wanted to improve their teaching, business faculty also joined in to develop innovative teaching ideas. In their research, Butler and Reddy (2010) identified that by using innovative teaching methods such as inquiry-based learning (IBL) and the story method, the human resources management (HRM) students would understand the materials and ideas better. Such understanding will improve student employability and satisfy employer need. In his study of mechanical engineering education, Jokar (2011) explained that “An innovative hands-on approach was taken in teaching thermal/fluid systems design as an upper-level

undergraduate course” (p. 275). This method was intended to “enhance the students’ industrial vision, and to prepare them for mechanical engineering practice before they graduate” (Jokar, 2011, p. 275). The approach received positive feedback from the students and the mechanical engineers.

Anderson & Romney (2014) suggested that virtual laboratory exercises were useful to provide students with experiential training. In their study, they showed that a virtualization environment was most effective in providing students with hands-on, experiential security learning in their cyber security education and learning. In their study of geography degree curriculum reform, Martí, Feliu & Varga (2014) maintained that free and open-source program and collaborative online resources (wikis) were useful to allow students to acquire the necessary knowledge in their program. They claimed that the inclusion of open-source software allowed the students to gain practical experience while the wiki-type applications enabled the students to do research and perform team work. In their study of teaching electrocardiogram (ECG) to students, Zeng et al. (2015) used a new ECG teaching method to “enable students to master basic knowledge of ECG interpretation skills in a limited teaching time” (p. 99). This new “graphics-sequence memory method” was shown to be very useful for teaching purpose.

Finally, in their research, Amster, Campbell & Sistik-Chandler (2016) discussed the usefulness of an iPad (iPM3) for the digital journalism students to deal with their practical field work. This pilot study “shows mobility, adoption of innovation, and immediacy to be factors that contribute to the success of the accomplishing the goal of field reporting in the 21st century” (p. 139). It also showed that mobile technologies affected the way college/university students deal with online course content nowadays. Those were some of the innovative teaching ideas developed during a time span of over forty years.

Of the fifteen examples mentioned above, more than half of them involved the usage of computer (e.g., multimedia, online LMS, open-source software, virtual lab) and other advanced technologies such as clicker, iPod, PDA, iPad. This trend will probably continue as new technologies are being developed at a constant pace. Therefore, it is important for faculty to keep up with the advanced technology so that they can integrate such technology into their classes. One way to obtain the knowledge of advanced technology for faculty is to participate in the FDPs offered by the TLC. Of course, this

may not be easy for faculty due to various reasons (i.e., time, workload, cost). However, faculty need to accept the fact that technology can be helpful to their teaching. By accepting technology and be able to apply its usage in the classroom may make life easier for faculty.

2.12. Technology Acceptance Model (TAM)

New technologies get introduced all the time. However, when trying to understand why people accept a newly developed technology, Davis' (1986) Technology Acceptance Model (TAM) can explain the reasons. Susilo & Kaufman (2014) stated that the TAM "has been applied widely in understanding behavioral and motivational issues in computer and software adoption and usage". Many studies have demonstrated that is indeed the case (Gefen, Karahanna & Straub, 2003; Koufaris, 2002; Lederer, Maupin, Sena & Zhuang, 2000; Legris, Ingham & Collerette, 2003; Pavlou, 2003; Pikkarainen, Pikkarainen, Karjaluoto & Pahnla, 2004).

This model has two main factors: (1) perceived usefulness, (2) perceived ease of use. Perceived usefulness is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989, p. 320). Gefen, Karahanna & Straub (2003) considered it as "a measure of the individual's subjective assessment of the utility offered by the new IT in a specific task-related context" (p. 54). When Davis (1986) used the term "system", he was referring to an application system used by an individual to get the tasks completed. This factor determines to what extent an individual feels about the effectiveness of the new system that can help him/her to improve his/her task performance. The key here is the "subjective probability" (Davis, Bagozzi & Warshaw, 1989, p. 985) of increasing job performance given by the individual. If an individual feels that the application will help him/her perform the job better, the perceived usefulness of this system will be high.

The second factor of perceived ease of use is more complicated than the first one. Perceived ease of use is defined as "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320). Gefen, Karahanna & Straub (2003) considered it as "an indicator of the cognitive effort needed to learn and to utilize the new IT" (p. 54). This factor determines the amount of effort an individual has to provide in order to use the new system. That is, if an individual feels

that the new system requires a lot of efforts to get the job done, he/she will not use the system. As Davis claimed, “an application perceived to be easier to use than another is more likely to be accepted by users” (Davis, 1989, p. 320).

The TAM basically requires both factors to have a high perceived value before a user will accept the new technology. If the perceived usefulness receives a low value from the user, even though the perceived value for ease of use is high, the chance of the new technology will be used is still low, and vice versa. These two factors of the TAM clearly explain why certain newly developed technologies will get accepted by users quickly while others will not.

In the case of innovative technological teaching ideas, if a faculty member has a high perceived usefulness and high perceived ease of use for a new technological teaching tool, he/she will accept it and will use it. However, if the perceived usefulness of this new tool is low, even though the tool is very easy to use, the faculty member still will reject this new technology and will not use it, and vice versa. Therefore, it is important for any innovative technological teaching idea to obtain high perceived values for both factors before a user will adopt the new idea and put it into use.

2.13. Accepting New Technological Teaching Ideas/Overcoming Resistance

As Lewin’s (1938) Force Field Analysis explains the situation, for faculty to accept new technological teaching ideas, the driving forces must be stronger than the restraining forces. When dealing with restraining forces, one that is worth consideration is the resistance to change. Employee resistance occurs when there is a proposed change at work. Predișcan, Braduțanu & Roiban (2013) asserted that “Employees opposition towards manager’s proposed changes occur in any change process” (p. 1607). When the workers are not comfortable with any proposed change, they will try to resist it at first. Sligo (2003) stated that “The more settled people feel in their current role, the more inclined they may be to oppose change that is not their making” (p. 52). That is human nature. People in general do not like to see changes that may make them feel uncomfortable or that they are not accustomed to. Senge (1990) said, “People don’t resist change; they resist being changed” (p. 155). His statement implies that people do not reject any change; however, they do not like to be forced to change from their normal

behaviour. That is, they do not want to do something different from their normal routine. Therefore, it is important for any change agent (i.e., an innovator or an administrator) to understand and to overcome the resistance to change. Hirschheim & Newman (1988) provided the definition of 'resistance to change' as follows:

an adverse reaction to a proposed change which may manifest itself in a visible, overt fashion (such as through sabotage or direct opposition) or may be less obvious and covert (such as relying on inertia to stall and ultimately kill a project). (p. 398)

Workers may resist a proposed change because they are afraid that they may lose their jobs (even though in reality they may not) or they may lose their current status (e.g., a change of the job title that may be perceived as lower rank from the current one). When they have a negative perception of the proposed change, the natural reaction is to go against it. If an administrator does not understand the cause of resistance, it will be a challenge for the administrator to overcome this resistance. Similarly, when faculty learn about any proposed new technological teaching idea, it is possible that they may resist to change during the initial stage when management makes the announcement about the change. However, if the administrator understands TAM and knows how to deal with the situation by following Lewin's three-step approach, he/she may have a better chance to succeed in implementing the proposed change.

In order for a new technological teaching idea to be accepted and be used on a regular basis by most if not all the faculty, it has to go through the process of diffusion. Rogers' (2003) Diffusion of Innovations theory will help to explain this whole process. Below is a discussion of this theory.

2.14. Diffusion of Innovations Theory

According to Rogers (2003), "An *innovation* is an idea, practice, or object that is perceived as new by an individual or other unit of adoption" (p. 12). The key concept of innovation is how others will look at the idea. His view of innovation was that "If an idea seems new to the individual, it is an innovation" (p. 12). As long as nobody has expressed any positive or negative feelings towards the idea or showing approval or refusal to it, then it is an innovation. As well, Rogers (2003) pointed out that the "Newness" of an innovation may be expressed in terms of knowledge, persuasion, or a decision to adopt" (p. 12). He provided the definition of diffusion as follows: "*Diffusion* is

the process in which an innovation is communicated through certain channels over time among the members of a social system” (Rogers, 2003, p. 5). As well, he said that “Diffusion is a special type of communication in which the messages are about a new idea” (Rogers, 2003, p. 6).

Rogers’ (2003) theory consists of four main components: (1) the innovation, (2) communication channels, (3) time, and (4) the social system. (Rogers, 2003, p. 11) For each component, it also contains attributes that are interrelated. Here are the brief descriptions of each component.

2.14.1. The Innovation

Innovation is the idea that needs to be shown to the others so that it can be adopted. It contains five characteristics which will help to explain an innovation’s rate of adoption. They are: (1) relative advantage, (2) compatibility, (3) complexity, (4) trialability, (5) observability. (Rogers, 2003, pp. 15-16) Relative advantage is “the degree to which an innovation is perceived as better than the idea it supersedes” (Rogers, 2003, p. 15). The key point is whether a person perceives an innovation as valuable or not. The more the relative advantage of an innovation is, the faster it will be adopted. However, this innovation may not be useful at all! Compatibility is “the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters” (Rogers, 2003, p. 15). If an idea is incompatible with the values and normal standards of the social system, it will not be adopted as quickly as a compatible innovation will. Complexity is “the degree to which an innovation is perceived as difficult to understand and use” (Rogers, 2003, p. 16). If an idea is very complicated to explain and use, it will not be adopted quickly. Trialability is “the degree to which an innovation may be experimented with on a limited basis” (Rogers, 2003, p. 16). An innovation that can be tried out by an individual will be adopted faster because it represents less doubt or uncertainty as the individual can see the result after the trial without guessing what the result will be. Observability is “the degree to which the results of an innovation are visible to others” (Rogers, 2003, p. 16). If it is more convenient for the individuals to see what an innovation can do, the rate of adoption will likely be faster.

In relation to technological innovative teaching idea, I believe the factors of complexity, observability and trialability are the most critical ones for the faculty. Here are the reasons. If a new technical teaching tool is very difficult to use, faculty would not want to adopt it because they do not want to spend a lot of time to learn to use it even though the tool might be very useful. If one looks at the case of the “clicker”, the item is quite easy to use and the user can try it out quickly. “Being able to test an innovation or try it will facilitate the rate of adoption. If it can be experimented with or taken out for a ‘test drive’, it is more likely to be utilized” (Pennings, 2012, p. 2). As well, faculty could see the results of using the clicker immediately. Due to these reasons, many faculty members adopted the usage of this new teaching tool in their classes very quickly. Similarly, any innovative technological teaching ideas (such as PowerPoint, Ponzzi) were also adopted quickly because of these three factors. Furthermore, the complexity factor is similar to the second factor of the TAM – perceived ease of use. When a technological innovative teaching idea is easy for faculty to use, there is a high probability that it will get adopted quicker than the one that is much more difficult to use. Again, the new tool might be very useful; however, faculty simply cannot afford the time to learn to use it since they are quite busy with their curricular activities.

2.14.2. Communication Channels

Rogers (2003) defined ‘communication’ as “a process in which participants create and share information with one another in order to reach a mutual understanding” (p. 5). If a person sends out a message to his friend who fully understands that message, then a communication has taken place between these two individuals. A ‘communication channel’ is “the means by which messages get from one individual to another” (Rogers, 2003, p. 18). There are several types of communication channel. A ‘Mass Media Channel’ is a quick and efficient way to inform potential adopters about an innovation. Its purpose is to allow an individual or a few individuals to announce the innovation to many people. Examples of mass media channel are radio, television, and newspaper. ‘Interpersonal Channel’ allows a face-to-face encounter between two or more people. This channel is more useful when persuading a person to accept a new idea. Of course, using the Internet nowadays is the quickest and most efficient way to announce an innovation to the world as the intended audience will receive the new idea almost instantly. Also, the Internet allows the intended adopters to interact quickly since

Internet users can communicate quickly with their friends through social media now, either by using their computers or their smartphones. Depending on how one wants to let his innovation be known, the choices of communication channel are available any time due to the advance in technology.

In the case of technological innovative teaching idea, it is highly likely that the idea will be communicated via the smartphone than a computer. Since a smartphone is more readily available than a mobile computer and it is more convenient, there is little doubt that a faculty will use it to share his findings of any new teaching tool with his colleagues. Eventually, the faculty might send out a group e-mail to his colleagues informing them of the new tool. Obviously, communication channels are important for telling others about the new teaching idea.

2.14.3. Time

The time component relates to diffusion in three ways: (1) the innovation-decision process, (2) innovativeness, (3) rate of adoption. When it comes to the diffusion of an idea, time is a very critical variable. Therefore, it is important to understand this element in Rogers' theory. Rogers (2003) explained the innovation-decision process as follows:

The innovation-decision process is the process through which an individual (or other decision-making unit) passes from first knowledge of an innovation, to the formation of an attitude toward the innovation, to a decision to adopt or reject, to implementation and use of the new idea, and to confirmation of this decision. (p. 20)

An individual will go through this process when he encounters an innovation. Rogers (2003) conceptualized five main steps in the innovation-decision process: (1) knowledge, (2) persuasion, (3) decision, (4) implementation, and (5) confirmation. Here is a brief explanation of each step. An individual will gain *knowledge* when he becomes aware of an innovation and gains some understanding of how it works. *Persuasion* occurs when an individual forms an attitude (favorable or unfavorable) towards the innovation. *Decision* takes place when an individual carries out certain activities that will lead to a choice of adoption or rejection of the idea. *Implementation* happens when an individual starts using the innovation. *Confirmation* occurs when an individual evaluates the result of an innovation-decision that has already been made. (Rogers, 2003, p. 20)

Since people will react towards an innovation differently (possibly due to their personality or attitude), it makes sense that some will adopt an innovation quicker than the others. Rogers (2003) explained that “*Innovativeness* is the degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than the other members of a system” (p. 22). He also set up five adopter categories, or classifications of the members of a social system on the basis of innovativeness. The categories are: (1) innovators, (2) early adopters, (3) early majority, (4) late majority, (5) laggards. (Rogers, 2003, p. 22) *Innovators* belong to the first 2.5% of the individuals in a system adopting an innovation. *Early adopters* are the next 13.5% to adopt the new idea. *Early majority* belong to the next 34%. The next 34% of the individuals are called the *late majority*. The last 16% to adopt are called *laggards*. (Rogers, 2003, pp. 280-281) These five adopter categories have their unique characteristics and values about innovative ideas.

The *Rate of Adoption* was defined by Rogers (2003) as “the relative speed with which an innovation is adopted by members of a social system” (p. 221). That is, once an innovation has been announced, how quickly will people pick up an innovative idea in terms of time? He also identified that this rate is “generally measured as the number of individuals who adopt a new idea in a specified period, such as a year” (Rogers, 2003, p. 221). One important aspect Rogers did point out about the rate adoption is that: “The more persons involved in making an innovation-decision, the slower the rate of adoption” (Rogers, 2003, p. 221). This concept is applicable to the case of adopting a technological innovative teaching idea within a large-sized HEI. Since many faculty members are involved in this adoption process, therefore, the rate of adoption will no doubt be slower if a new idea ever gets adopted. This is something that administrators of HEIs should make note of.

2.14.4. The Social System

“A *social system* is defined as a set of interrelated units that are engaged in joint problem solving to accomplish a common goal” (Rogers, 2003, p. 23). An innovation can only diffuse within a boundary that was set by the social system. (Rogers, 2003, p. 24) Also, the social system’s structure governs the stable and regular behaviours of individuals in a system. Structure allows the prediction of behaviour with some degree of certainty. Rogers (2003) stated that “One aspect of social structure is *norms*, the

established behavior patterns for the members of a social system” (p. 37). The norms can affect the diffusion of an innovation as the norms of different individual groups will vary due to different factors (e.g., members’ individual characteristics or their upbringings) even though these groups of individuals may belong to the same origin.

Within the social system, one critical concept is Opinion Leadership. “*Opinion Leadership* is the degree to which an individual is able to influence other individuals’ attitudes or overt behavior informally in a desired way with relative frequency” (Rogers, 2003, p. 27). This leadership is not formal and has nothing to do with the social status of an individual in the system. “Opinion leadership is earned and maintained by the individual’s technical competence, social accessibility, and conformity to the system’s norms” (Rogers, 2003, p. 27). This leadership is important for administrators to understand. Barker (2004) confirmed that the concept of opinion leaders works well as “known and trusted opinion leaders in a group or community have tremendous influence with respect to the acceptance or rejection of innovations” (p. 131). He provided three different cases in his study to prove this point.

Early adopters are often opinion leaders and they may serve as role models for many other members of the social system. Early adopters can help to get an innovation to reach the point of critical mass which indicates the success of a diffusion. “A *Change Agent* is an individual who influences clients’ innovation-decisions in a direction deemed desirable by a change agency” (Rogers, 2003, p. 38). Most change agents are well-educated professionals. Change agents rely on the opinion leaders to assist them in the diffusion of ideas. Sometimes, change agents will have problems effectively communicating ideas to their clients due to *heterophily* – “the degree to which two or more individuals who interact are different in certain attributes” (Rogers, 2003, p. 19). In that case, an aide will be used. “An *aide* is a less than fully professional change agent who intensively contacts clients to influence their innovation-decisions” (Rogers, 2003, p. 38).

These four key components in Rogers’ theory form the foundation of the diffusion process as the attributes of each component can lead to the explanation of why a diffusion happens or not. The Diffusion of Innovations theory has been applied to many studies in different fields. Cragun et al. (2012) used this framework to promote dental hygiene education and found success. Drape, Westfall-Rudd, Doak, Guthrie and

Mykerezi (2013) applied the concept to help the promotion of integrating technology into an agricultural associate degree's curriculum. Hsu (2015) used this theory to investigate the possibility of integrating technology in hospitality education in Taiwan. All these studies have supported the usefulness of Rogers' theory.

Besides applying this theory in the educational environment, researchers have also used it in business situations. Here are some examples. Gollakota and Doshi (2011) applied the theory to explain the failure of building rural telecenters in India by the company ITC. Gray (2012) used this framework to show potential danger for the creator of Xbox Live forcing the users to accept the innovations during the game. Chen (2014) applied the model to explore the effectiveness of workplace e-learning for local government staff in Taiwan. Again, all these examples have demonstrated the usefulness of the diffusion theory in different areas (both educational and business). In the case of FDPs for the HEIs, all these components can be also applied to clarify the situation so that one can understand what happens to an innovative teaching idea during the diffusion process.

There is little doubt that Rogers' theory can explain what happens to an innovative teaching idea that has been found by someone from the TLC or a faculty. After all, the purpose of the TLC is to improve teaching and learning within a HEI. So, it is normal for most educators to look at the services offered by the TLC from an academic view point. However, this author wants to look at the TLC in a completely different angle from what the educators normally do. My suggestion is that it may be useful if educators look at the interactions between the TLC and faculty from a different perspective – a business angle – so that they can better understand how things can be done by a TLC to better serve the faculty. That is, educators need to make a paradigm shift to view the situation. Let us take a look at how a TLC runs its operations as if it is a business to maximize its desired goal of improving teaching and learning and how it can serve the faculty (i.e., its clients) to achieve that goal. Below is the discussion of this business perspective.

2.15. Looking at a TLC from a Service Unit Perspective

Many faculty find this 'business' perspective objectionable from an academic perspective. However, I am arguing here that this perspective can be helpful for a unit

such as the TLC. The purpose of a service unit is to offer product(s) and/or service(s) to its clients to meet their needs. Its clients will decide if this organization serves them well or not. If the product(s) or service(s) offered is/are good, the clients will probably return for more. Otherwise, they will stop dealing with this organization. A good example is a new car wash facility. If this facility offers excellent services to a new customer that he/she really likes, there is a very high probability that this customer will return. It is also possible that he/she will tell his/her friends about his/her good experience. The same can be applied to the faculty. If the faculty view the TLC as a business, they will see that the TLC offers different services to faculty (i.e., clients) to help improve their teaching and learning (i.e., satisfying the clients' needs). Actually, a TLC is one specific unit (or can be considered as a department) within the overall organization (i.e., the HEI) that serves the clients. If the TLC serves its clients really well and the clients have had great experiences, the clients will probably return to get served again if they have such needs in the future. Also, they may tell their colleagues about their good experiences. Otherwise, they will simply stay away from the TLC and/or share with their colleagues about the unpleasant experiences that they have encountered. That is typical customer behaviour for many people.

Many studies (Chu, Lee & Chao, 2012; Fotiadis & Vassiliadis, 2016; Liang, Ma & Qi, 2013; Lien, Cao & Zhou, 2017; Prentice, 2013; Wilkins, Merrilees & Herington, 2007; Zhao & Di Benedetto, 2013) have confirmed that a business that offers good or excellent services usually can retain its customers and attract new ones to become successful eventually. The success will stay for quite some time until some unusual event takes place (e.g., another company that offers even better services or the service quality has dropped due to poor leadership). With the TLC, it is no different – it has to operate just like a good business does if the workers of the TLC wish to have returning clients.

Of course, one can also view a TLC as a non-profit entity since it does not generate revenue for a HEI. To some, it also really does not matter if it has clients or not because they believe that it likely exists for political reasons. Regardless of the for-profit or non-profit status, this 'business' must maintain a certain level of good performance as expected or it may get shut down due to the negative feedback from its clients (i.e., the faculty and the students who use the services). Also, many faculty use the services of a TLC on a voluntary basis as they are typically not obligated to use such services. Because of the above conditions, in reality, it is possible that there are very few clients

for a TLC to serve. If a TLC loses its existing clients due to poor services, then its chance of success will be slim. As mentioned above, the only exception that an under-utilized TLC (i.e., having very few clients) will remain open is probably due to political reasons. Otherwise, under normal business operating conditions and basic economic sense, one will shut down a business when it has very few or no clients at all. Let us assume that there is no political factor involved here. So, the important question is: how should a TLC operate so that it can keep on running?

The answer to this question is: a TLC needs to provide good/excellent service quality to its clients consistently. Furthermore, even if the TLC does offer good/excellent services, it still needs to market itself regularly to attract new clients because some existing clients may not need to use the services any more once they have finished their particular projects. Therefore, marketing is important - from both the TLC itself and the existing clients. Again, this idea is straight forward. If a business organization offers excellent services but fails to market itself, there is a lower chance that this organization will become successful because hardly anyone knows its existence (i.e., the lack of awareness from potential clients). If one looks at the financial statements of some of the most successful business organizations in the world (e.g., Adidas, Apple, McDonald's, Microsoft, Nike, Target, Walmart), he/she will find that these companies spend millions or billions of dollars annually on marketing. The key is: make the customers aware of the organization's existence and the good products and services that it offers regularly and the customers will show up on the door step. For a TLC, the same rule applies. Providing high quality of service as well as marketing regularly will help a TLC to serve its clients better and become more successful. Below is a discussion of service quality and customer satisfaction – two critical factors to the success of a business.

2.16. Consumer Behaviour - Service Quality and Customer Satisfaction

To serve its clients better, the workers at a TLC need to understand the concepts of service quality and customer satisfaction because these two factors are highly related to business success. Lewis and Booms (1983) defined service quality as a measure of how well the service level delivered matches customer expectations. They maintained that providing quality service means meeting customer expectations consistently. Service quality is one of the key success factors for a business. Many studies of service

quality from different business sectors have been conducted over the years (Amin & Nasharuddin, 2013; Chu, Lee & Chao, 2012; Fotiadis & Vassiliadis, 2016; Moreira & Silva, 2015; Newman & Pyne, 1997; Wilkins, Merrilees & Herington, 2007; Yee, Yeung, & Cheng, 2010; Zhao & Di Benedetto, 2013). These studies concluded that service quality is an important factor to the success of a business organization. Moreira & Silva (2015) maintained that “Service quality proved to be a multidimensional construct and relevant to build satisfaction” (p. 253). When customers are satisfied with the services rendered, they will probably return to the business in the future. Prakash & Mohanty (2013) added that “Service quality can pay rich dividends when done well. Higher levels of service quality produce higher levels of customer satisfaction that lead to increased patronage intentions and increased sales” (p. 1053). Many businesses maintain their dominance over their competitors because of their high service quality. In their study of the hotel sector, Wilkins, Merrilees & Herington (2007) concluded that the “emphasis on the service quality antecedents of hotel customer satisfaction is important because service quality components are the performance drivers of a hotel” (p. 851). If a business organization offers good service quality to induce customer satisfaction, it can then market such feature to attract more customers. In their study of theme park industry, Fotiadis & Vassiliadis (2016) suggested that “Service quality information can be used by marketing professionals to manage consumer expectations or to implement quality improvements, which lead to higher overall customer satisfaction, brand reputation and product sales” (p. 178).

All these studies point to one common theme: if a business offers good/excellent service quality, its customers will receive satisfaction, which will lead to repeated business and more revenue generated – meaning the organization will have a higher probability of success. Similarly, we can apply these business concepts to a TLC and see that it is a chain reaction. If the workers of a TLC provide good/excellent service quality to its clients (i.e., the faculty), that will make the faculty feel satisfied. Once the faculty have received satisfaction, they will go back to the TLC to get served again should they have the need(s) in the future. They may even market for the TLC by telling their colleagues to use the services of the TLC. That will raise the awareness of more faculty within the HEI and possibly improve the positive perception of the TLC by many faculty who might have a negative view of the unit previously. By doing so, the TLC may become a successful entity within a HEI.

However, do keep in mind that a TLC is not a full organization. It is only one of the units in a HEI such as a department within the HEI. Its main purpose is to help faculty to improve teaching and learning, which is what the administrators want it to do. If many faculty use the services of the TLC, it means there exists the possibility of improved teaching and learning at the HEI as students may also benefit from faculty's improved teaching by learning more. If the students talk positively about the faculty, that may improve the reputation of the HEI as a whole. And that will be viewed as a success to management because they can now justify the expenses spent on running the TLC.

If we put politics aside, this is a simple business situation for management to decide if a unit should keep its operations or not within a business. Administrators will use an approach called the cost/benefit analysis. In simple terms, if the benefits outweigh the costs, the business remains open; otherwise, it shuts down. For the administrators, the operating costs of running a TLC will include salaries, equipment and software. However, the intangible benefits will include: improved teaching for the faculty and learning for students, satisfaction from faculty (possibly boosted employee morale), and increased reputation of the HEI which may lead to more students coming to the HEI. We can also apply the cost/benefit analysis to the faculty who consider using the services of a TLC. The costs will include time and efforts spent to learn about innovative teaching skills. The benefits for the faculty will include improved teaching skills, satisfaction of helping students and increased good reputation as an instructor. Is it a worthwhile undertaking for the faculty? That decision is a personal one.

As mentioned before, this author has decided to look at the TLC situation from a business perspective because the business rules do apply to the TLC. Technically, the TLC is an operating unit of a business – the HEI. Some educators may not like to look at education as a business because education is normally viewed as sacred and as an area unrelated to business. However, in reality, running a HEI is very similar to running a business because a HEI can be considered as a business organization. The only difference is that a HEI produces graduates as the final outcome while a normal business produces goods and/or services as the final result. If the administrators can look at a TLC by using the business lenses, they will find that running that unit is very similar to running a small business. If faculty can look at using the services of the TLC as

clients, they will be able to figure out if the usage of the TLC's services is worthwhile or not.

In this chapter, I have discussed several concepts, models and theories that relate to my study. To summarize these concepts, here are the key points:

- Many studies have demonstrated that faculty development is important for faculty to improve their teaching. Faculty development is necessary within a HEI.
- To foster faculty development, FDPs are needed so that faculty can acquire more teaching skills and strategies to help to improve students' learning. FDPs typically originate from a TLC; there is a close relationship between a TLC and the FDPs.
- Changes within a HEI are necessary if improvement/enhancement of faculty teaching and student learning are desired. Changes are not easy within a complex organization such as a HEI.
- When changes occur within a HEI, Lewin's Change Theory can be used to explain those changes. His three-stage process of unfreeze, change and refreeze helps to explain when a change occurs, what happens during a change, and what the outcome is after the change has occurred.
- Lewin's Force Field Analysis can also be used to further help to explain the changes that happened within a HEI. When the driving force is greater than the restraining force, a change will occur. After the change has occurred, the situation will move to a new equilibrium.
- Innovative teaching ideas are needed as they will help to improve faculty's teaching as well as students' learning. Nowadays, many innovative teaching ideas involve with advanced technology. For faculty to obtain knowledge in advanced technology, they should participate in the FDPs offered by a TLC.
- Davis' TAM can be used to explain why people accept a newly developed technology. The factors of perceived usefulness and perceived ease of use determine if an individual will accept a new technology or not. For an innovative teaching idea to be accepted by faculty, both factors must exist. Otherwise, no change will happen.
- For the administrators to implement any innovative teaching ideas, they must overcome the resistance to change from the faculty. They must understand TAM and also know how to apply Lewin's Change Theory before they can implement any changes within their HEI.
- For an innovative teaching idea to become adopted, Rogers' Diffusion of Innovations Theory can be used to guide the situation. Administrators need to fully understand the four main components of this theory: (1) the innovation, (2) communication channels, (3) time, and (4) the social system. These

components form the foundation of the diffusion process as the attributes of each component can explain why a diffusion happens or not.

- If educators can look at the interactions between a TLC and faculty from a service-unit to a client perspective, they may be able to understand how a TLC can better serve the faculty. This perspective is different from the traditional view of academic service and educators need to make a paradigm shift to accept this new perspective.
- By treating itself as a service unit, a TLC can see that faculty are its clients. To satisfy the needs of its clients, a TLC needs to understand how to offer its services appropriately. If a TLC can serve its clients well, it is highly possible that the clients can be retained. If that happens, a TLC can then justify its existence within a HEI.
- If a TLC wishes to serve its clients better, its workers need to understand two important concepts of consumer behaviour – service quality and customer satisfaction. These two concepts are closely related and they are the keys to possible success for a service unit.
- If a service unit can provide quality services to its clients, that situation may lead to potentially high customer satisfaction from the clients. If that happens, it is possible that the clients will return in the future. The clients may also indirectly advertise for the service unit via the word-of-mouth approach. This may lead to more new clients going to the service unit. Given this cause and effect situation, a TLC should take this approach when serving its clients - the faculty; hopefully, the faculty will be satisfied with the services that the TLC provides.

Chapter 3. Method

In doing an educational research study, researchers will use a method that can best address their proposed theories and/or hypotheses. However, the choice for some studies to assess the research questions is obvious while it is not the same for other studies. Reale (2014) suggested that educational measurement models should strive to identify common elements and differences with solid hypothesis and causal relationships. Others suggest that once the common elements and relationships between the measures are statistically validated, the process of generalization (Polit and Beck, 2010) needs to be made to infer upon the key findings. However, this can only be done with the quantitative measurement models. For those researchers who thrive in using the qualitative approach, this perspective of measurement does not sit well at all. In this thesis, some simple tools that rely on using basic descriptive statistics are being applied to do the data collected.

A survey is a frequently used tool used to evaluate FDPs. This tool usually can give an evaluator the quantitative data that he/she is interested in. Another tool is a questionnaire with open-ended questions that will provide qualitative data. Both quantitative and qualitative approaches have their unique characteristics.

Instead of choosing the quantitative approach or the qualitative approach, some researchers will use the mixed methods approach. Based on the research questions in this study, I have decided that a mixed methods approach fits best to answer the questions.

3.1. Mixed Methods Approach

A mixed methods approach is an approach to research in which “the investigator collects both quantitative and qualitative data, integrates the two, and then draws interpretations based on the combined strengths of both sets of data to understand research problems” (Creswell, 2015, p. 2). This approach will compensate for the lack of subjective views from participants in a quantitative research study while also fulfill the need of creating a concrete statistical analysis that a qualitative research needs. This approach is considered “value added” as researchers will gain insights to certain unknown phenomena in their studies.

Although this approach is considered useful, it is relatively young and new to researchers (Lund, 2012). As Leech and Onwuegbuzie (2009) mentioned that “The mixed methods paradigm is still in its adolescence, and, thus, is still relatively unknown and confusing to many researchers” (p. 265). Although studies have shown low application of this approach in the areas of school psychology (Powell et al., 2008), career development (Cameron, 2010), and principal professional development (Parylo, 2012), some other fields seem to be quite receptive to this approach. A few studies have been done using this approach in the health care area (O’Cathain, Murphy and Nicholl, 2007; Seymour, 2012) as well as in the business area (Ahmedshareef, Petridis & Hughes, 2014; Harrison, 2013; Molina-Azorin, 2012). It seems that more and more researchers from different fields are looking into adopting this approach in their research these days.

There are three types of basic designs for mixed methods studies. They are: (1) explanatory sequential design, (2) exploratory sequential design, and (3) convergent design. Of the three designs, I have decided to use the convergent design as it fits best for my study.

3.2. Convergent Design

“The intent of a convergent design is to merge the results of the quantitative and qualitative data analyses” (Creswell, 2015, p. 35). This design allows the researcher to see the results from two different approaches. Creswell (2015) stated that “quantitative results yield general trends and relationships, which are often needed, while qualitative results provide in-depth personal perspectives of individuals” (p. 36). One advantage of using the convergent design is that it makes sense to collect more data to answer the research question(s). Another advantage is that this design is efficient as it allows the researcher to collect both types of data concurrently. Lastly, the data collected can be analyzed independent of each other due to the different techniques for each data type. (Creswell and Plano Clark, 2011, p. 78)

While the convergent design has many advantages, it also has a few drawbacks. One of them is that more effort and expertise may be required since there are two types of data that need to be collected and analyzed. There is a high possibility that different sample sizes may appear and the researcher has to do more work to merge the results

to draw the conclusion. As well, there is the possibility that the two sets of results do not agree and the researcher may end up doing additional data collection. (Creswell and Plano Clark, 2011, p. 80)

I decided to use the convergent design for my study because I believed this design would help to answer my research questions better than the other two designs would. As well, I had time to do more data collection since I did not have to teach during the semester in which I collected the data. The extra time available allowed me to do the individual interviews that usually are quite time consuming. I also decided that there was a need to collect both quantitative and qualitative data for my study because the qualitative data would supplement the quantitative data in answering my research questions.

While the survey allowed me to collect quantitative data, by having open-ended questions in my interview, I was able to gather more detailed data from the participant during the process. As Marshall (2016) pointed out, "The interviewer can probe for explanations of responses." By doing so, I gained more details from the interviewee. Owens (2005) claimed that an interview can obtain "high response quality". Also, the interviewer can help the participant to understand the question in case where the participant is not sure about what is being asked (Becker and UBA-Team, 2011). Such clarification will help the interviewee to provide accurate answers to the question. Wyse (2014) stated that one other advantage is "the capture of non-verbal cues including body language, which can indicate a level of discomfort with the questions. Adversely, it can also indicate a level of enthusiasm for the topics being discussed in the interview." Such cues will help to guide the interviewer in his questioning during the interview. Opdenakker (2006) also mentioned that "Social cues, such as voice, intonation, body language etc. of the interviewee can give the interviewer a lot of extra information that can be added to the verbal answer of the interviewee on a question" (p. 3). The last advantage of this interview method is that "termination of a FtF interview is easy, compared to other interview methods" (Opdenakker, 2006, p. 4).

3.3. Design of my Study

As mentioned above, using the convergent design worked best for my study. When collecting the data, instead of using a phased approach, I conducted both the

online survey and the personal interviews concurrently. While I was designing my survey instrument and the interview questions, I kept in mind the type of data I wished to collect.

When the submission of my study to the chosen institution's REB was considered for approval, it met resistance. The reason for resistance was due to the fact that two questions in the original survey asked the participants to rank their satisfaction of the TLC's functions/services of the chosen institution. Some members of the REB felt that the answers of those two questions would jeopardize the jobs of the TLC workers if management of the chosen institution learned about the results of this study. Since some members of the REB did not want to take any chances of causing harm to the TLC workers, therefore, those two questions in the survey were rejected by the REB due to their sensitive nature. Although I tried to negotiate with the REB, I was not successful. As a result of the rejection, I had to revise the survey to make sure that all of its questions would meet the REB's approval. After several revisions, the survey was finally approved. The entire approval process took close to three months to complete; that was a lot longer than I anticipated. My initial approval from SFU's REB took less than two weeks to complete. As a result of the delay, my personal timeline for the completion of this study was also delayed.

The second reason for conducting both data collection methods concurrently was because of the participants' work schedules. By the time the study was approved, it was very close to the end of the teaching term for the majority of full-time faculty at this institution. Furthermore, I also did not want to lose the enthusiasm of my participants who were willing to do the interviews with me right after they had completed the survey. Also, since the personal interviews would take much longer to do, it would only make sense for me to carry out both methods concurrently. As it turned out, the personal interviews took three months to complete due to the time availability of the faculty members selected for those interviews. I wanted to interview these participants as soon as possible so that I could gather as much detailed information from them as possible. Those were the reasons why I collected both quantitative and qualitative data concurrently. This convergent design did work well for my study as I was able to collect reasonable amount of quantitative data and very useful, detailed data from all the participants during the interviews. All the interviewees were willing to open up and expressed their opinions freely during the process.

I believe my approach of the data collection process has worked out well. Just as expected, the qualitative data collection phase did provide extra information that I was not able to collect during the quantitative data collection phase when I conducted the online survey. Although the personal interviews did take a lot of time to complete, I managed to collect a lot of useful qualitative data that helped to answer the research questions.

3.4. Questions Asked During the Interview

For my study, just like the survey, most of the interview questions focused on faculty awareness of the TLC and usage of the TLC services. However, a few of the open-ended questions sought details regarding innovative teaching ideas and reasons for using/not using the TLC services as well as how faculty view the TLC as a service unit. The answers to those questions helped to explain the data collected in the survey. The qualitative data gathered in the interview definitely supplemented the quantitative data collected in the survey.

3.5. Selection of Participants

Since my research study focused on the faculty awareness level of the TLC, how innovative teaching ideas are being diffused and faculty perception of the TLC services, for the study participants, I only invited the faculty working in the chosen institution. For the quantitative data, I sent out a survey with eleven questions to the participants. The survey was sent out via the e-mail system of the chosen institution. The time limit for the survey was three months. Since the chosen institution has about 1,700 faculty (including both full-time and part-time), even if a 10% response rate would yield a good sample size. Sample size is a critical factor when doing statistical analysis.

Tavakol and Sandars (2014) pointed out that “A large sample size is always better than a small sample size as the sampling error is reduced, especially when nonprobability sampling is used in a study” (p. 841). It is statistically proven by mathematicians that the larger the sample size is, the smaller the margin of error becomes. Besides nonprobability sampling, another factor that can influence sample size is when one does a longitudinal study and there is a potential bias due to the loss of follow-up data. In general, it is better to collect more data if cost is not an issue.

For collecting the quantitative data in this study, cost was not an issue since I had free access to the online survey software tool entitled *Survey Monkey* to create the survey. Also, there was no cost for me to use an e-mail system to invite the faculty to participate in my study. A pilot test was run after the creation of the survey was completed. About fifty people were asked to do the survey during the pilot testing. For the qualitative data, I selected only those faculty who have knowledge of the TLC or those who have used the TLC services. Also, I selected the participants from all six schools for both full-time and part-time instructors. Since many faculty had different teaching schedules, it did take some time to arrange for all the interviews to be conducted. During the interviews, all the participants were very cooperative as they all wanted to provide useful information for my study.

3.6. Rationale on the Development of Survey Questions

When developing the questions for the survey, I followed a logical flow in such a way that the data collected could be grouped and analyzed accordingly. Although I tried to co-construct the survey with the TLC staff, I was not successful. The survey instrument is made up of four parts: (1) demographic data of participants, (2) the level of awareness of the TLC by the participants, (3) the usage of the TLC services by the participants, (4) sources where participants look for innovative teaching ideas. Here is the rationale for each of these questions.

3.7. Demographic Data

In the survey, for questions #1 to #5, I asked for demographic information. Question #1 asks for the school that a faculty works in. Question #2 asks for the department in which the faculty works in. Question #3 asks for the faculty's working status (full-time or part-time). Question #4 asks the faculty for the number of years worked at the institution. Question #5 asks for the gender of the faculty. The following table identifies the data sought and the data a participant may provide for questions 1 to 5 in the survey. I collect the demographic data to describe my sample.

Question #	Data Sought	Data Obtained
1	The school that the participant belongs to. Six choices were given.	The participant may select one of the six schools.
2	Name of the department the participant works in.	The participant may enter the name of the department he/she works in.
3	Work status of the participant. Two choices were given.	The participant may select full-time or part-time.
4	The number of years of service.	The participant may enter the number of years he/she has worked.
5	Gender of the participant. Three choices were given.	The participant may select one of the three choices.

Table 1. Demographic Data Sought

Note: All these questions provided useful quantitative data for statistical analysis later.

3.8. Data on the Level of Awareness of the TLC by the Participants

For questions #6 to #8, I collected data to look at the faculty's level of awareness of the TLC. Question #6 asks the faculty if he/she knows if the TLC exists. Question #7 asks the faculty if he/she knows where the TLC is located. Question #8 asks the faculty if he/she knows the functions of the TLC. The following table identifies the data sought and the data a participant may provide for questions 6 to 8 in the survey.

Question #	Data Sought	Data Obtained
6	If the participant knows the existence of the TLC. Three choices were given.	The participant may select one of the three choices.
7	If the participant knows the location of the TLC. Three choices were given.	The participant may select one of the three choices.
8	If the participant knows the functions of the TLC. Three choices were given.	The participant may select one of the three choices.

Table 2. Data on the Level of Awareness of TLC Sought

3.9. Data on the usage of the TLC services by the Participants

For questions #9 and #10, I collected data to look at the faculty's usage of the TLC services. Question #9 asks the faculty if he/she has used the services of the TLC. Question #10 asks the faculty if he/she would consider using the services of the TLC in the next academic year. The following table identifies the data sought and the data a participant may provide for questions 9 and 10 in the survey.

Question #	Data Sought	Data Obtained
9	If the participant has used the services of the TLC. Three choices were given.	The participant may select one of the three choices.
10	If the participant would consider using the TLC services in the next academic year. Three choices were given.	The participant may select one of the three choices.

Table 3. Data for the Usage of TLC Services Sought

For the last question of the survey, I used an open-ended question to ask the faculty where he/she would go to look for innovative educational practices to enhance his/her teaching. This question will allow the faculty to provide ideas where a faculty can find innovative teaching ideas. The data collected from this question is to provide the answer to one of the questions in my study.

3.10. Rationale for the Development of Interview Questions

Some of the interview questions contained multiple parts. The purpose of these questions was to collect data relating to faculty awareness of the TLC, faculty usage of the TLC services and innovative ideas to enhance a faculty's teaching. The answers to these questions complemented the quantitative data collected in the survey and helped to answer my research questions.

3.11. Purposes of Interview Questions Relating to Research Questions

Below is a table that identifies how each interview question addressed the research questions of this study:

Question #	Research Question Addressed
1	Faculty awareness
2	Faculty awareness, client services
3	Faculty awareness
4	Client services
5	Client services
6	Diffusion of ideas
7	Diffusion of ideas, client services
8	Diffusion of ideas, client services
9	Faculty awareness
10	Faculty awareness, client services
11	Faculty awareness, client services
12	Faculty awareness, client services
13	Faculty awareness, client services, diffusion of ideas

Table 4. Research Questions Addressed

3.12. Details About Each Interview Question

1. (a) How long have you been using the services of the TLC?
(b) How many times have you used these services?

The purpose of these questions was to find out the length and frequency of usage of the TLC services. The results can be used as an indicator of faculty awareness of the TLC.

2. Why did you choose to use the services of the TLC?

The purpose of this question was to find out the different reasons for the faculty to use the TLC services as well as possible faculty awareness of TLC. The results may help the TLC to fine-tune what it should offer. It may also provide insights into other unknown issues brought up by the faculty.

3. How did you know about the TLC at the beginning?

The purpose of this question was to find out how faculty have become aware of the TLC. It also revealed if the TLC does any marketing.

4. (a) Which services from the TLC did you use? Prompt: Faculty services?
Technology
Support? Consultation?

(b) Can you elaborate on your usage of the service?

The purpose of this question was to find out which services are used the most often so that suggestions can be made about how TLC can fine-tune its offerings. Also, the answers provided details regarding each function offered by the TLC.

5. (a) How often do you currently use the services of the TLC?

(b) During which time period of the school year do you use the services the most?

The purpose of this question was to find out the frequency of faculty using the TLC services and the critical time period they use such services. The results offered insights for the TLC to allocate its resources properly.

6. Which types of innovative ideas does the TLC use to assist the faculty with their teaching and learning?

(a) How did you find out about these ideas?

(b) Have you implemented any of these ideas in your teaching?

The purpose of this question was to find out the types of new ideas for teaching and learning and their relevancy as well as the source(s) of these innovative teaching ideas. The results also helped me to better understand how the diffusion process is being applied.

7. To what extent did the service(s) you received change how you approach your teaching?

The purpose of this question was to find out if the TLC services were useful to help to improve a faculty's teaching. The results also revealed if the services were practical to the clients and also disclosed how the diffusion process is being applied.

8. How does the TLC make faculty aware of its innovative ideas?

The purpose of this question was to find out how the diffusion process is being carried out. The results also reveal if the TLC markets the new teaching ideas to its clients within the HEI.

9. What is your estimate of the percentage of faculty who know about the services of the TLC?

- (a) In your school
- (b) At this institution

The purpose of this question was to find out the individual faculty member's awareness level of the TLC. The results also revealed how he/she sees the overall faculty's awareness level within the HEI.

10. Can you provide any reason(s) why some faculty choose not to use the services of the TLC?

The purpose of this question was to find out why the TLC services are not used by some faculty. It helped identify the issue of faculty awareness as well as the way the services are offered to the clients by the unit. The results revealed some unknown issues that need to be addressed by the TLC.

11. What do you think the TLC needs to do in order to make itself better known in the community?

The purpose of this question was to find out how the TLC should promote itself from the faculty's viewpoint. It identified the issue of faculty awareness as well as the way the services are offered to the clients by the unit. The results revealed useful ideas to the TLC.

12. What do you think the TLC needs to do in order to have a bigger impact on the community?

The purpose of this question was to find out how the TLC should improve its services from the faculty's viewpoint. It identified the issue of faculty awareness as well as the way the services are offered to the clients by the unit. The results revealed useful ideas to the TLC.

13. Do you have any other comments you would like to share about the TLC?

The purpose of this question was to give the interviewee the opportunity to share his/her views about issues that are not asked about. It identified some issues relating to faculty awareness, diffusion of innovative teaching ideas as well as services offered to the clients. The results revealed useful ideas to the TLC.

3.13. Changes in the Original Survey

When the original survey was created and approved by SFU's Ethics Review Board, it contained two questions that were used to evaluate the faculty satisfaction of the TLC's services of the chosen institution. However, when this survey was sent to the Ethics Review Board of the chosen institution of which the survey would be conducted, those two questions were rejected due to union pressures. As a result of the rejection, both questions were taken out and replaced by an open-ended question to solicit details on innovative teaching ideas. Due to the change of the survey, the original goal of measuring faculty satisfaction of the TLC could not be achieved. Instead, only the faculty awareness level of the TLC, the diffusion of innovative teaching ideas within the HEI and the faculty perception of the TLC services would be investigated in this study.

3.14. Conducting the Interviews

For the qualitative data collection, I interviewed fifteen participants. There was a total of thirteen questions (as listed above), with some questions having sub-questions in them. The time for each interview ranged from 25 minutes to 45 minutes. After each interview, I transcribed the conversation to the best of my ability and typed out everything that I managed to transcribe on a Microsoft Word document. For all the qualitative data I collected during this stage, I did basic coding in an Excel spreadsheet to analyze the data. Keywords from the transcribed documents were then coded in the Excel spreadsheet as they emerged from my counting and the number of occurrences for each keyword were tabulated accordingly. The survey and the interview guide are provided in Appendix.

3.15. Statistics Used for Data Analysis

For the data collected, I used the following basic statistics to analyze my quantitative data: (1) average, (2) median, and (3) percentage relative to a total. Wherever possible, I also used a histogram to illustrate the data distribution for the set of data values collected. I reported the results based on the findings that I had for both the survey data and the interview data collected. The results are discussed in Chapter 4.

Chapter 4. Findings and Analysis

This chapter reports on the findings of the study. It covers the following: background of the participants, findings from the quantitative data via a survey, and qualitative themes from the interviews. Due to a non-disclosure agreement with the selected institution (because of potential labour issues), some of the specific details (e.g., name of the school, name of the TLC) will be modified to a generic form to avoid any disclosure of the true identity of this HEI.

4.1. Quantitative Data Analysis - Online Survey

The online survey consisted of eleven questions (see Appendix). It was used to collect the following types of data: (1) demographics of the participant, (2) faculty's awareness level of the TLC, (3) usage of the TLC by the faculty, (4) the source(s) of technological innovative teaching ideas the faculty encountered at the TLC. The first five questions in the survey asked for demographic data. The next three questions asked about awareness level of the TLC. The next two questions asked about faculty usage of the TLC services. The last question asked the faculty about where their technological innovative teaching ideas came from. The first ten questions in the survey had pre-specified answers for the participant to choose from. However, the last question was an open-ended one to solicit different answer(s) from the participant and the participant was free to provide as many sources as possible. The answers to this question were analyzed differently since it involved qualitative data analysis. The first ten questions were quantified by using Microsoft Excel and analyzed using SPSSv23 after the proper coding on the collected data had been completed. Below are the results of the data collected from the survey.

4.2. Participants Demographics

Obtaining demographical data from the participants helped me to better understand some of the differences in their answers to the survey and the interviews. In the survey, the majority of participants have answered all the questions while a small number have left some questions unanswered.

4.3. Study Participants

For this study, only the faculty members at the institution were surveyed because I was interested in finding about the relationships between the faculty and the TLC. The purpose of this study was to investigate: (1) faculty’s level of awareness of the TLC, (2) the diffusion of innovative teaching ideas within the institution, (3) faculty perception of the TLC services from a client-service perspective. There were 1,682 faculty members (both full-time and part-time) invited to participate in this study. The data collection period ran from July 5, 2016 to October 12, 2016. During this period, an online survey was administered and fifteen interviews were conducted to gather all the relevant data. The participants came from all the schools of the institution. The gathered data covered the entire spectrum of the institution. Out of the 1,682 faculty members invited, 227 responded to the survey. That was a 13.5% initial response rate. According to the Dean of Institutional Research, the normal response rate from the entire faculty on a survey ranges from 7% to 12%. He stated that this response rate was better than normal. Also, faculty from every school participated as that would make the data more representative of the institution. However, of the 227 responses collected, 15 of them contained no data at all (i.e., no answers provided for any of the questions); that is, n=212. Therefore, the adjusted response rate was 12.6%, which was still slightly higher than the normal response rate at the selected HEI for this study. Nevertheless, this response rate was still low for a survey. A higher response rate would better justify the data collected.

4.4. Survey Results

Q1. Your school: six choices were given.

School	Number	%
#2	51	25.1
#5	45	22.2
#1	43	21.2
#3	29	14.3
#6	18	8.9
#4	17	8.4
Adjusted Total	203	100.0
*Note: 9 blank responses		

Table 5. Participants from Different Schools

Result: Out of the 212 responses, 9 left the answer blank. More faculty from the larger schools participated in this survey compared to those from the smaller schools. School #2 was the leader with 25.1% (adjusted), followed by School #5 with 22.2% (adjusted) and School #1 with 21.2% (adjusted). These three schools made up 68.5% (adjusted) of the participants.

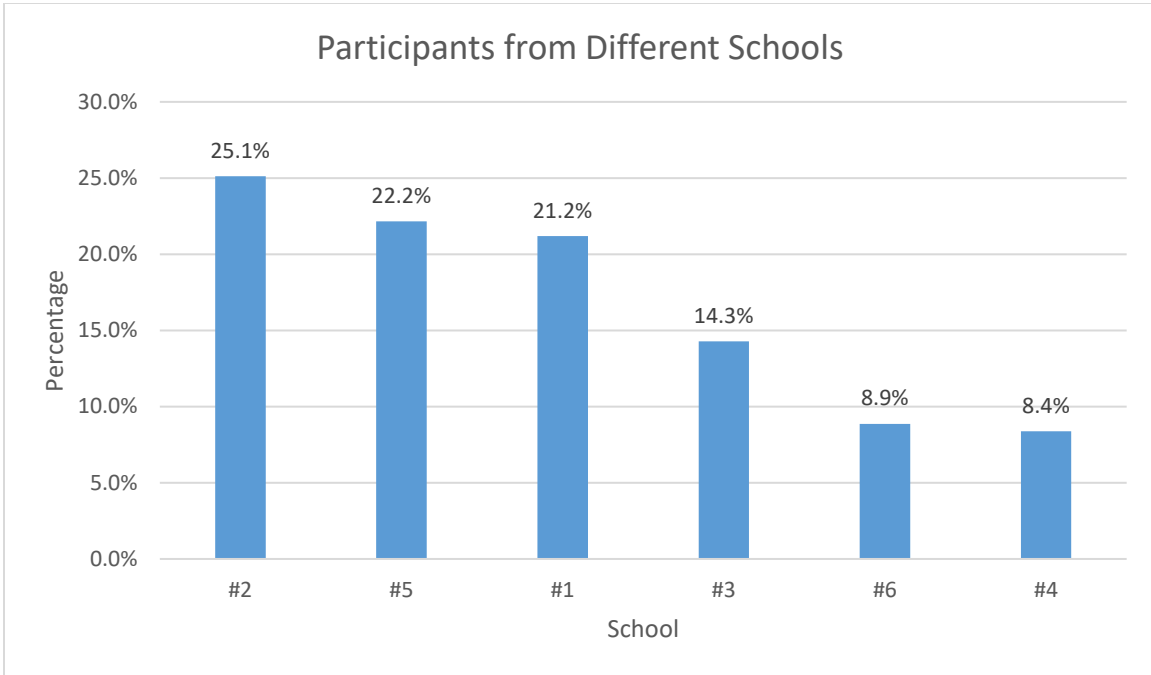


Figure 2. Participants from Different Schools

Q2. Department: Participant was asked to provide one name.

Result: Out of the 212 participants, 187 (88.2%) provided a department name while 25 (11.8%) left it blank.

Q3. Status: Participant was asked to select either full-time or part-time.

	Full-Time	Part-Time	Total
n	122	80	202*
Adjusted %	60.4	39.6	100.0
*Note: 10 blank responses			

Table 6. Job Status of Participants

Result: Out of the 212 participants, 10 left it blank. The adjusted percentage of full-time faculty was 20.8% more than the adjusted percentage of part-time faculty. The possible reason for this difference is that full-time faculty have more access to the TLC than the part-time faculty since the part-time faculty typically teach in the evening and thus will have less access to the TLC workers during normal working hours. As a result of that, more full-time faculty participated in the survey.

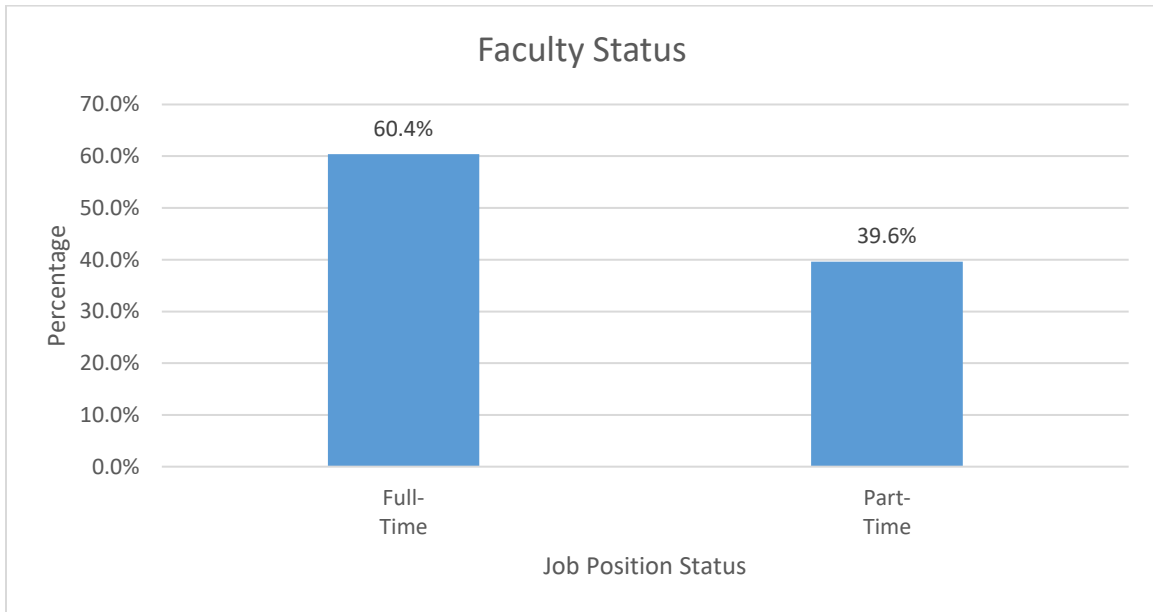


Figure 3. Faculty Status

Q4. Number of years of service at the institution: one number provided.

Result: Out of 212 responses, 194 provided a number while 18 left it blank.

Other statistics:

Average: 10.5 years

Median: 8.5 years

Maximum: 43 years

Minimum: 1 year

Grouping of data:

Years of service	Number of Faculty	Percentage
< 2 years	22	11.3%
3 – 5 years	35	18.0%
6 – 10 years	59	30.4%
11 – 15 years	35	18.0%
16 – 43 years	43	22.2%
Total	194	100.0%

Table 7. Number of Years of Service

Faculty having 6-10 years of service made up the largest group (30.4%) of all the participants, followed by the 16-43 years of service group (22.2%). Both the 3-5 years and the 11-15 years of service group are at 18.0%. The first two groups made up over 52% of the participants. This may indicate that the younger faculty are more interested in the matters related to the TLC.

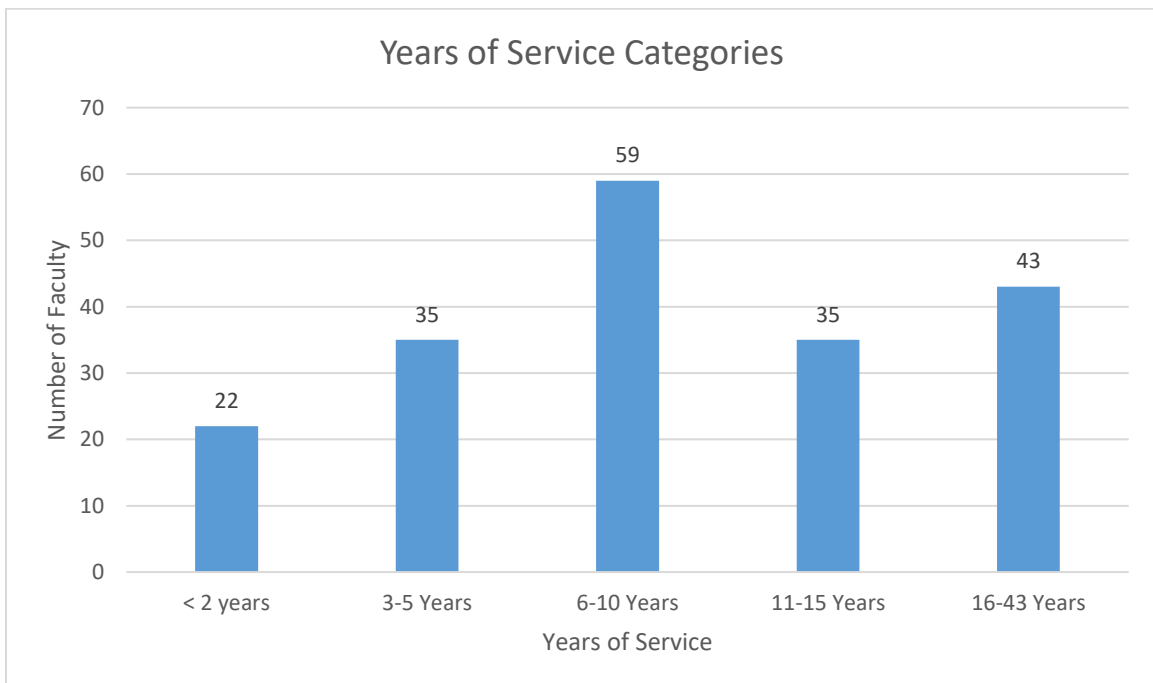


Figure 4. Years of Service Categories

Q5. Gender: Three choices were given.

	Male	Female	Other	Total
n	107	98	7	212
% of Total	50.5	46.2	3.3	100.0

Table 8. Gender of Participants

Result: Out of 212 responses, every participant provided an answer. Male faculty made up 50.5% of the participants, followed by Female faculty (46.2%) and Other (3.3%).

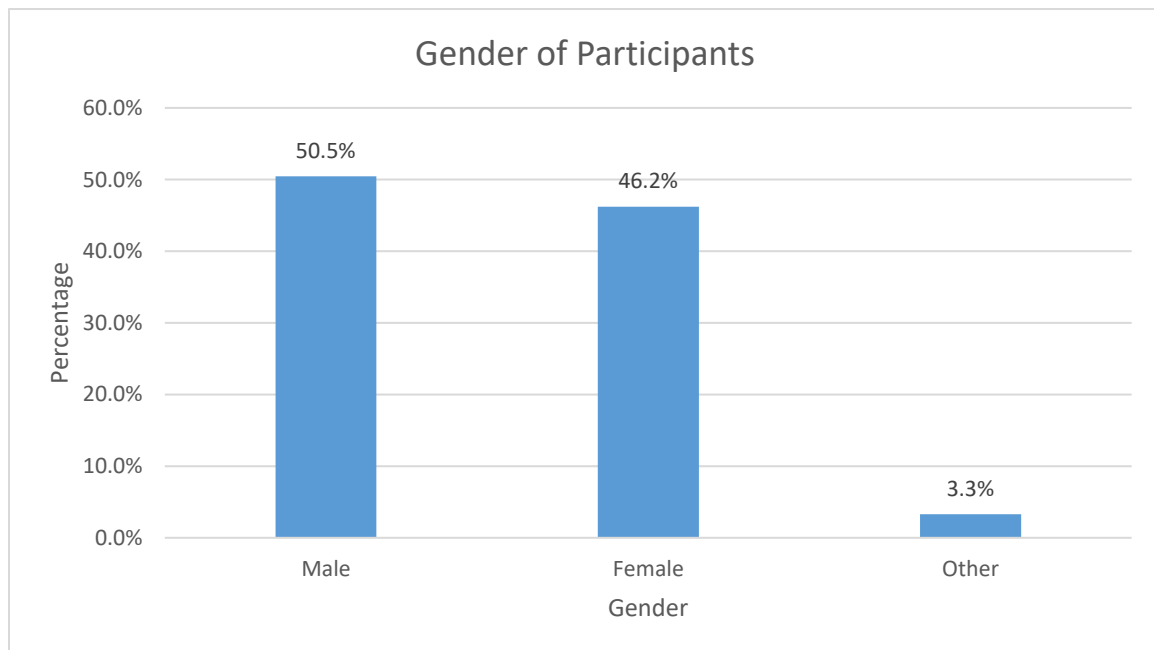


Figure 5. Gender of Participants

4.5. Faculty's Awareness Level of TLC

Q6. I know that the TLC exists. Three choices were given.

	Yes	No	Unsure	Total
n	194	9	7	210*
Adjusted %	92.4	4.3	3.3	100.0
*Note: 2 blank responses				

Table 9. Faculty's Awareness Level of TLC

The high level of awareness of the TLC may indicate that these faculty are interested in the TLC's services.

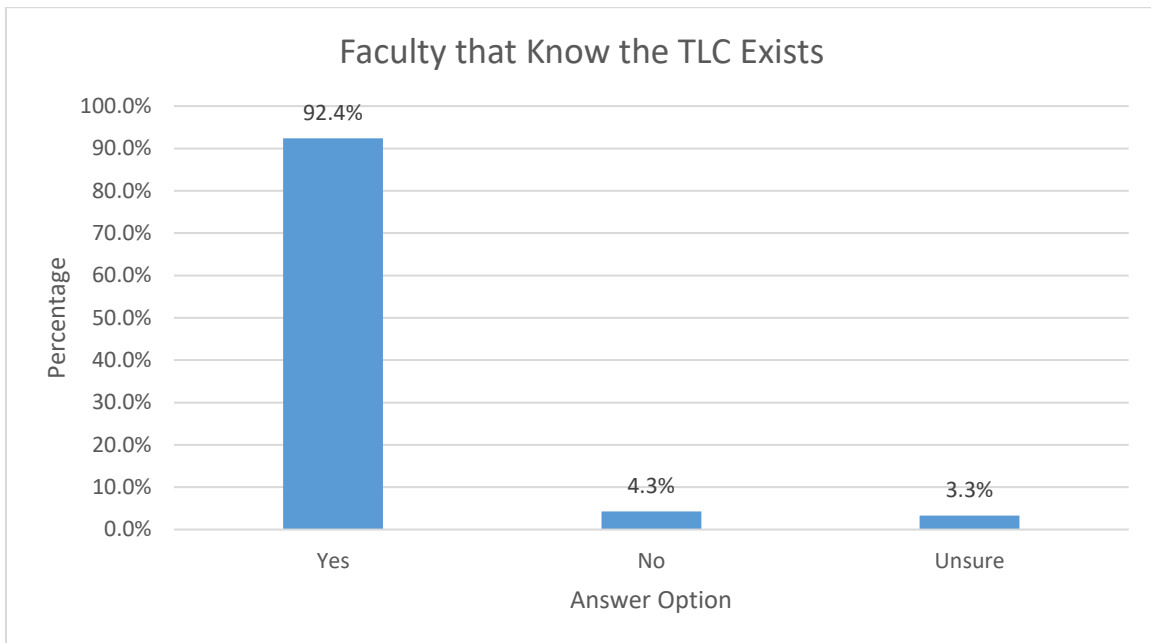


Figure 6. Faculty's Awareness of TLC

Faculty Awareness of the TLC – Full-time vs. Part-time:

		Yes	No	Unsure	Total
Full-time	n	120	1	1	122*
	Adjusted %	98.4%	0.8%	0.8%	100%
Part-time	n	70	8	1	79*
	Adjusted %	88.6%	10.1%	1.3%	100%
*Note: 11 blank responses					

Table 10. Faculty's Awareness Level of TLC (Full-time vs. Part-time)

This table shows that both full-time and part-time faculty have a high level of awareness of the TLC. That may indicate these faculty are interested in the TLC services.

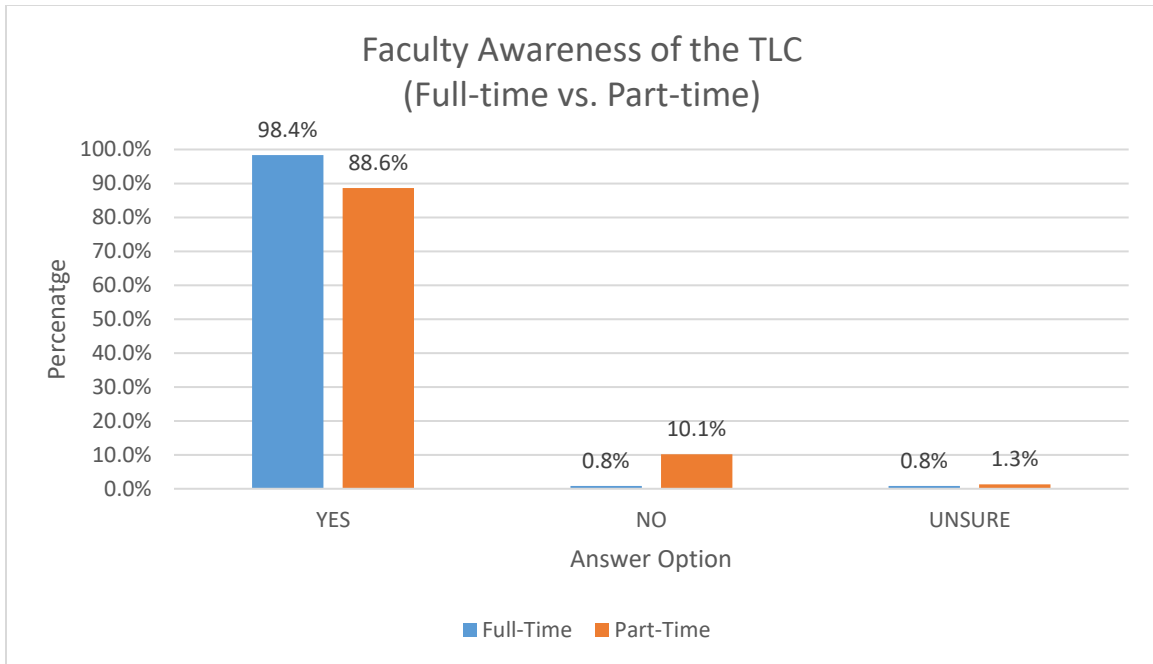


Figure 7. Faculty’s Awareness Level of the TLC (Full-time vs. Part-time)

Faculty Awareness of the TLC – Years of Service Categories:

Category		Yes	No	Unsure	Total
< 2 years	n	18	3	1	22
	Adjusted %	81.8%	13.6%	4.5%	100%
3-5 years	n	32	2	0	35*
	Adjusted %	94.1%	5.9%	0.0%	100%
6-10 years	n	56	2	1	59
	Adjusted %	94.9%	3.4%	1.7%	100%
11-15 years	n	33	2	0	35
	Adjusted %	94.3%	5.7%	0.0%	100%
16-43 years	n	43	0	0	43
	Adjusted %	100.0%	0.0%	0.0%	100%

*Note: 1 blank response

Table 11. Faculty Awareness of the TLC (Years of Service Categories)

Other than the new faculty (81.8%), all the others know the existence of the TLC (94% or higher). This table shows there is a high faculty awareness level of the unit. This

result may also indicate that the new faculty need to be introduced to the TLC more frequently by management.

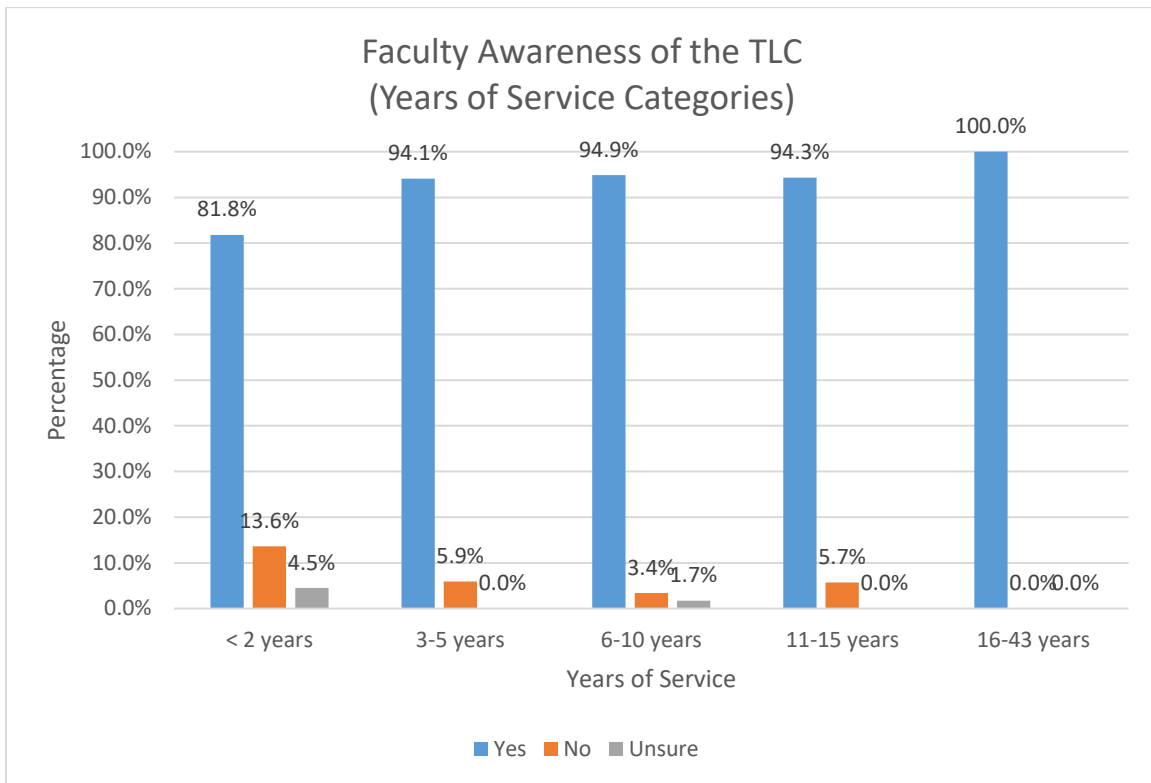


Figure 8. Faculty Awareness of the TLC (Years of Service)

Q7. I know where the TLC is located. Three choices were given.

	Yes	No	Unsure	Total
n	169	26	15	210*
% of Total	80.5	12.4	7.1	100.0
*Note: 2 blank responses				

Table 12. Number of Faculty that Know the Location of TLC

A high percentage of faculty knowing the location of the TLC may indicate that faculty do know where to get assistance on teaching should they need any.

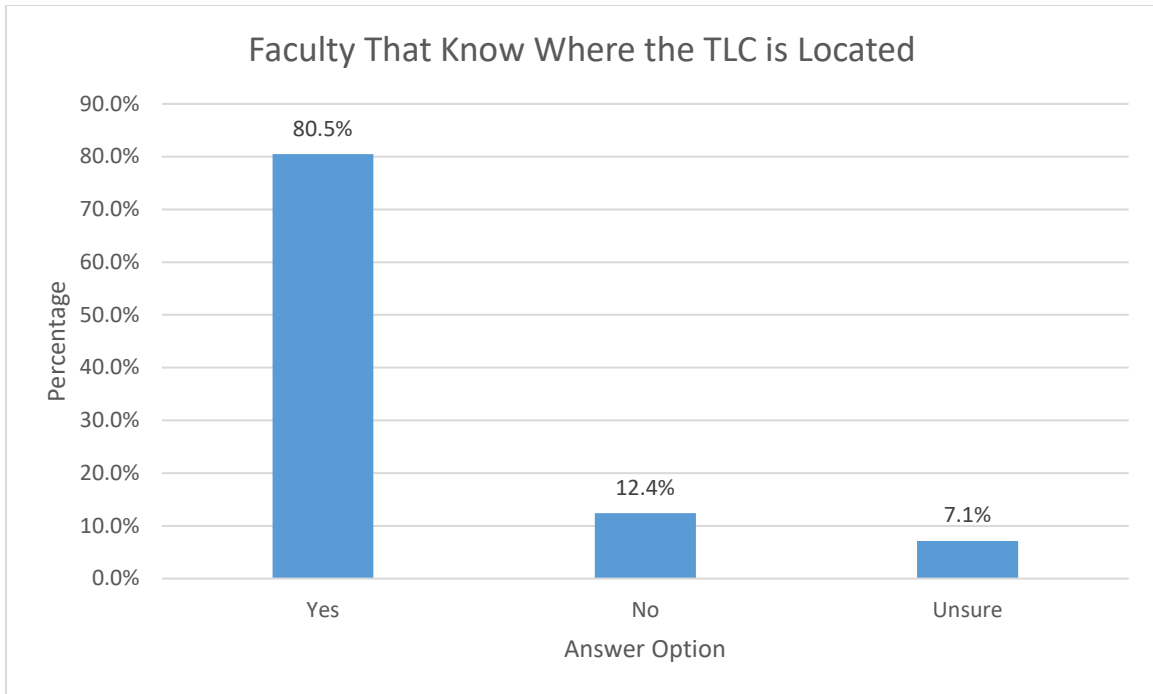


Figure 9. Number of Faculty that Know the Location of TLC

Faculty that know where the TLC is located – Full-time vs. Part-time:

		Yes	No	Unsure	Total
Full-time	n	110	7	5	122*
	Adjusted %	90.2%	5.7%	4.1%	100%
Part-time	n	55	19	5	79*
	Adjusted %	69.6%	24.1%	6.3%	100%
*Note: 11 blank responses					

Table 13. Faculty That Know the Location of TLC - Full-time vs. Part-time

This table shows a high percentage of faculty (both full-time and part-time) who know the location of the TLC. That may indicate the faculty's high awareness level of the TLC services. It may also indicate that these faculty are interested in the TLC services.

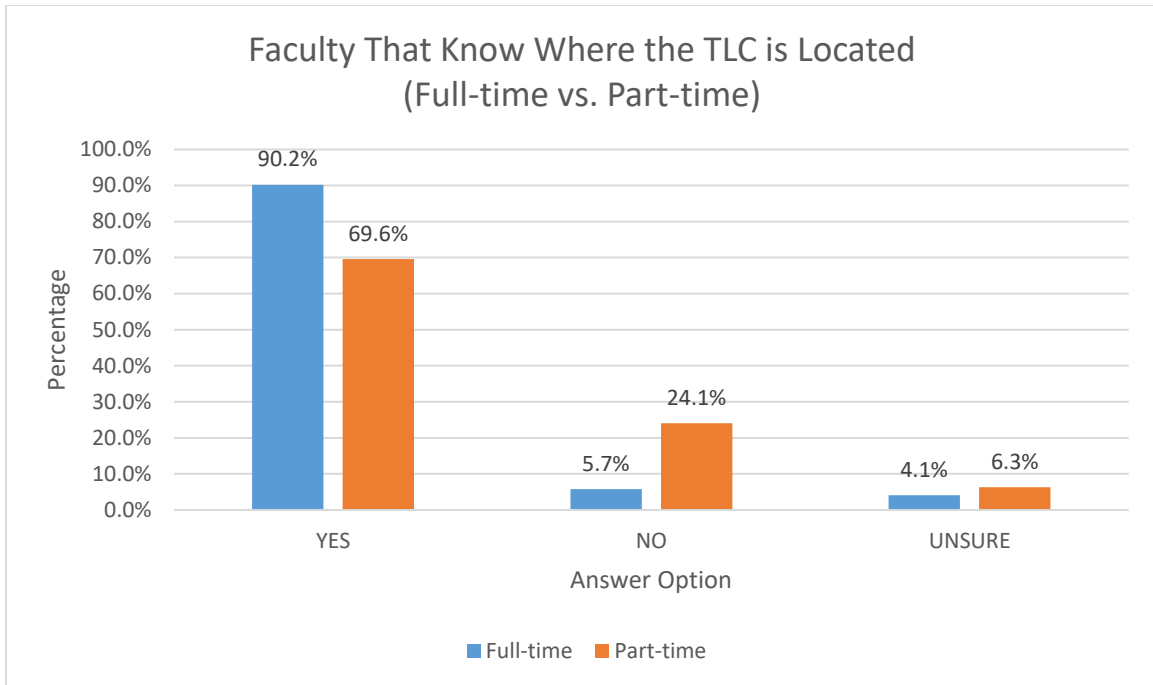


Figure 10. Number of Faculty that Know the Location of TLC (Full-time vs. Part-time)

Faculty that know the location of TLC – Years of Service Categories:

Category		Yes	No	Unsure	Total
< 2 years	n	14	4	4	22
	Adjusted %	63.6%	18.2%	18.2%	100%
3-5 years	n	26	8	0	34*
	Adjusted %	76.5%	23.5%	0.0%	100%
6-10 years	n	51	5	3	59
	Adjusted %	86.4%	8.5%	5.1%	100%
11-15 years	n	30	3	2	35
	Adjusted %	85.7%	8.6%	5.7%	100%
16-43 years	n	36	6	1	43
	Adjusted %	83.7%	14.0%	2.3%	100%

*Note: 1 blank response

Table 14. Faculty That Know the Location of TLC (Years of Service Categories)

This table shows that faculty who have 5 years of service or less have a lower percentage of knowing the location of the TLC (less than 77%) while those who have 6

or more years of service know where the TLC is located (83.7% and higher). This result indicates that the TLC may need to market itself more to the new faculty.

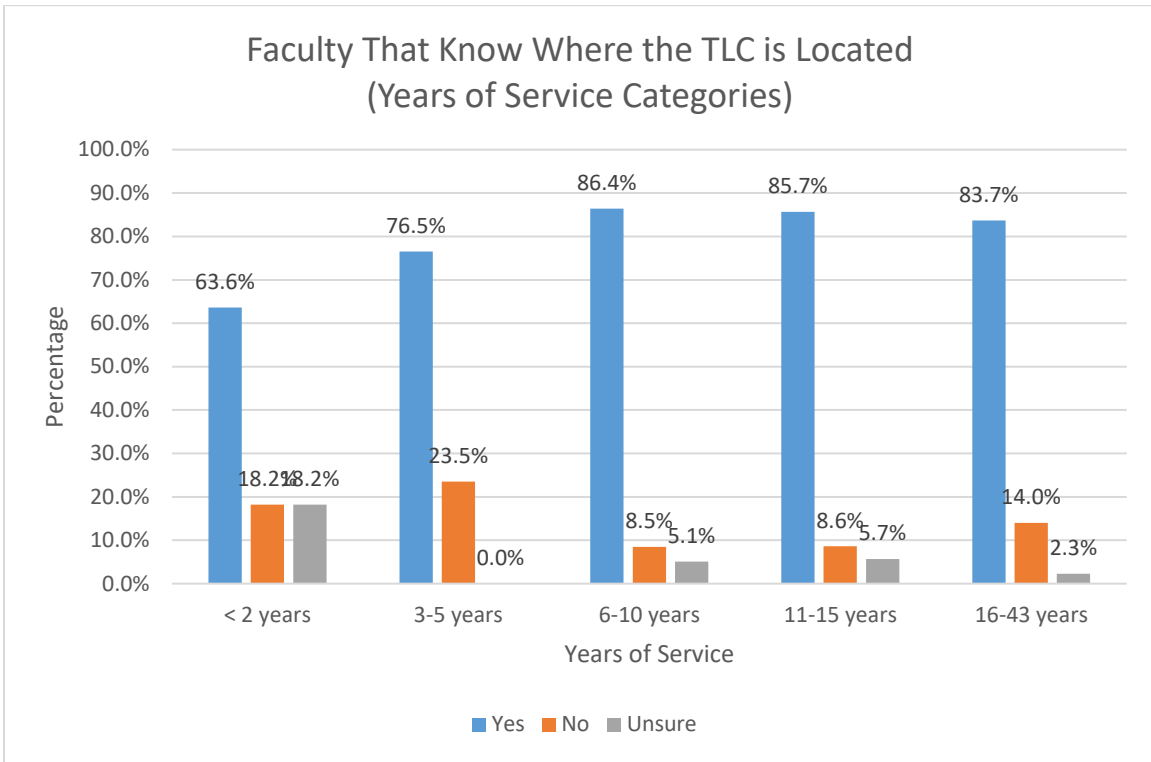


Figure 11. Faculty That Know the Location of TLC (Years of Service Categories)

Q8. I know the functions of the TLC. Three choices were given.

	Yes	No	Unsure	Total
n	142	17	51	210*
Adjusted %	67.6	8.1	24.3	100.0
*Note: 2 blank responses				

Table 15. Number of Faculty that Know the Functions of TLC

When almost one-third of these faculty do not know about the services that TLC offers, that poses a potential problem for this unit as it may be perceived as being under-utilized.

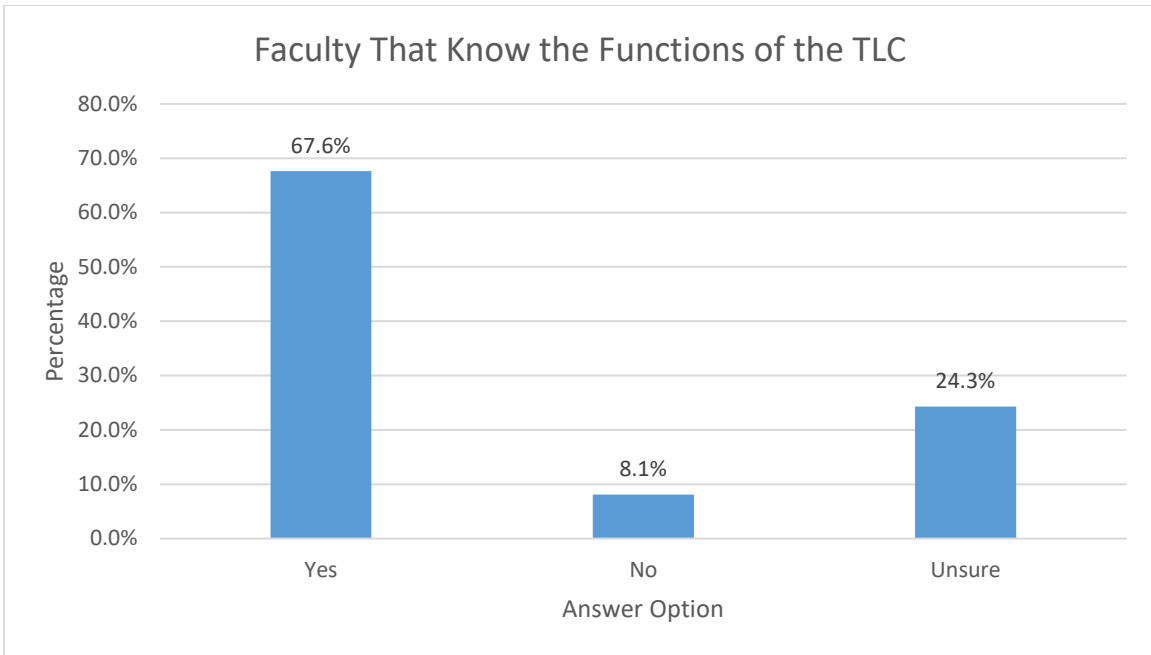


Figure 12. Number of Faculty that Know the Functions of TLC

Faculty that know the functions of the TLC – Full-time vs. Part-time:

		YES	NO	UNSURE	TOTAL
Full-time	n	88	7	27	122*
	Adjusted %	72.1%	5.7%	22.1%	100%
Part-time	n	51	10	18	79*
	Adjusted %	64.6%	12.7%	22.8%	100%
*Note: 11 blank responses					

Table 16. Number of Faculty that Know the Functions of TLC (Full-time vs. Part-time)

This table shows that almost three quarters (72.1%) of the full-time faculty and almost two-thirds (64.6%) of the part-time faculty know the functions of the TLC.

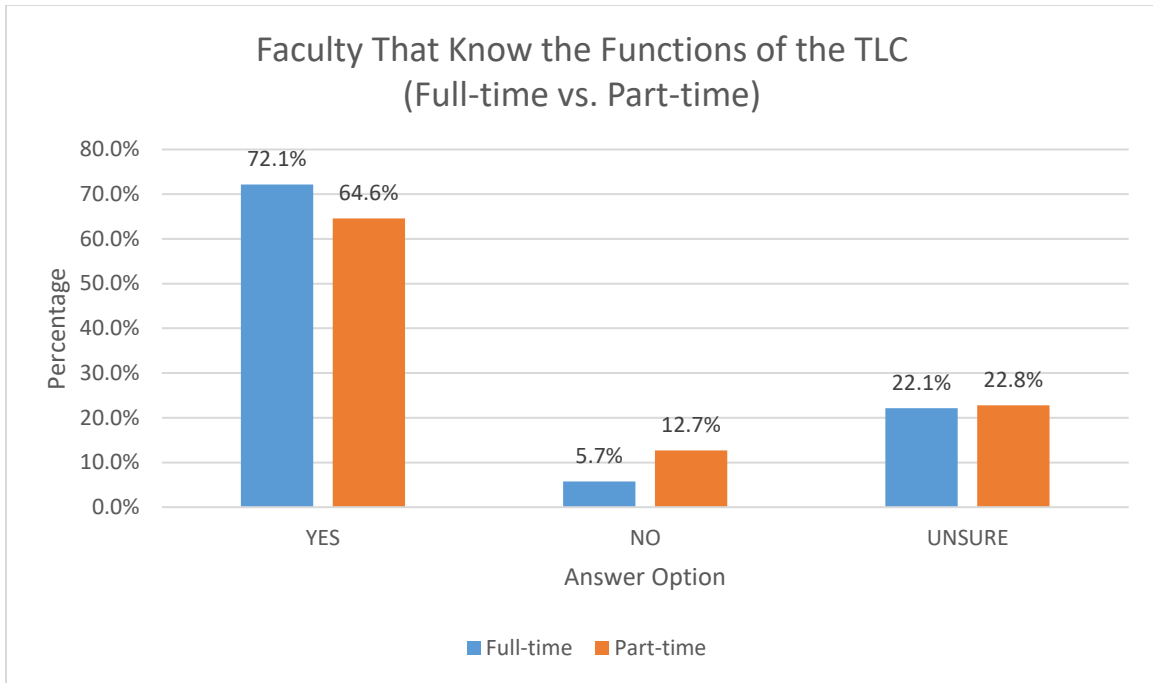


Figure 13. Number of Faculty that Know the Functions of the TLC (Full-time vs. Part-time)

Faculty that know the functions of the TLC (Years of Service Categories):

Category		Yes	No	Unsure	Total
< 2 years	n	12	3	7	22
	Adjusted %	54.5%	13.6%	31.8%	100%
3-5 years	n	21	4	9	34*
	Adjusted %	61.8%	11.8%	26.5%	100%
6-10 years	n	48	4	7	59
	Adjusted %	81.4%	6.8%	11.9%	100%
11-15 years	n	22	3	10	35
	Adjusted %	62.9%	8.6%	28.6%	100%
16-43 years	n	30	2	11	43
	Adjusted %	69.8%	4.7%	25.6%	100%

*Note: 1 blank response

Table 17. Faculty That Know the Functions of the TLC (Years of Service)

This table shows that most of the faculty from the 6-10 years of service category (81.4%) know the functions of the TLC, followed by the 16-43 years of service category (69.8%). The other three categories show a lower percentage (62.9% or below). For

faculty that have 5 or less years of service, they do not seem to know what the services the TLC can offer. It may indicate that the TLC personnel need to connect with these faculty members more frequently.

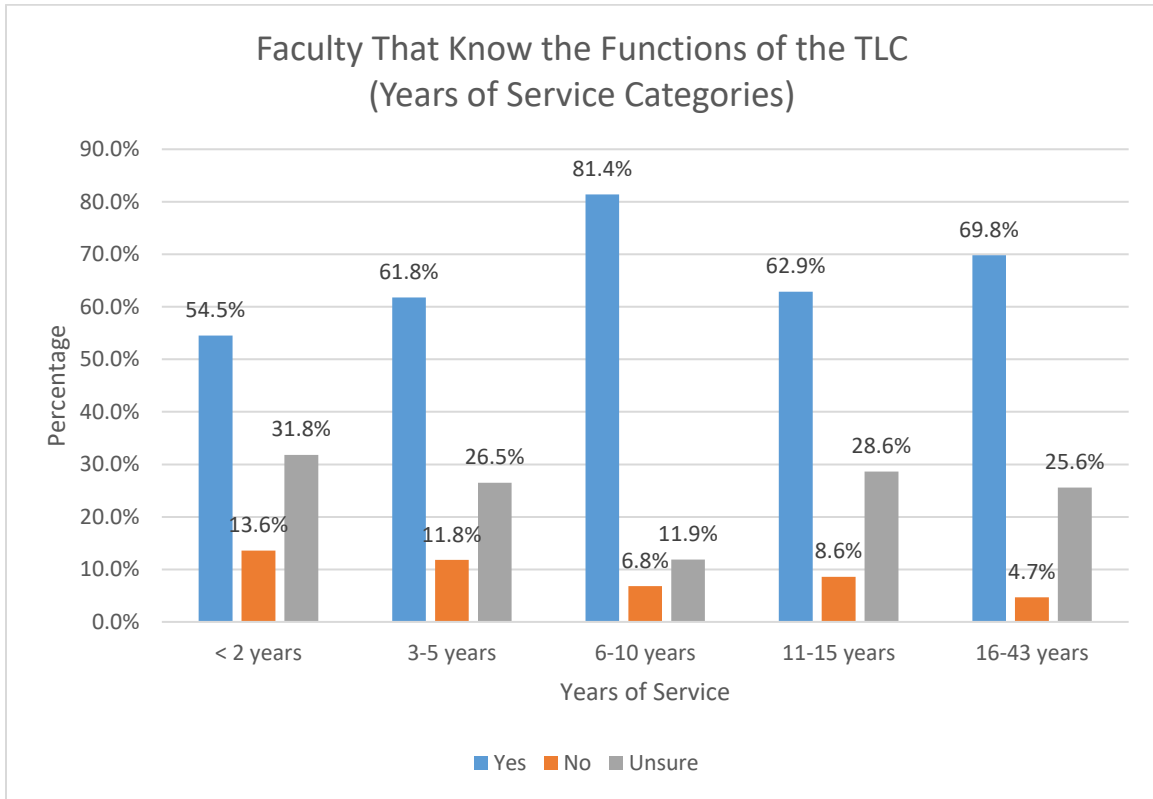


Figure 14. Faculty That Know the Functions of the TLC (Years of Service Categories)

4.6. Faculty Usage of the TLC Services

Q9. I have used the services of the TLC. Three choices were given.

	Yes	No	Unsure	Total
n	160	38	12	210*
Adjusted %	76.2	18.1	5.7	100.0
*Note: 2 blank responses				

Table 18. Faculty Usage of TLC Services

In Question 8, 67.6% of faculty have said that they know the functions of the TLC. Yet, 76.2% of them have claimed that they have used the TLC services. The

reason for this discrepancy is probably due to a possible misinterpretation of the question by the faculty. It is possible that some faculty may be thinking that they have been asked if they know “all” the TLC functions. Also, since about one-quarter of these faculty have not used the TLC services, that data may be perceived as an under-utilization of this service unit by some faculty within this HEI.

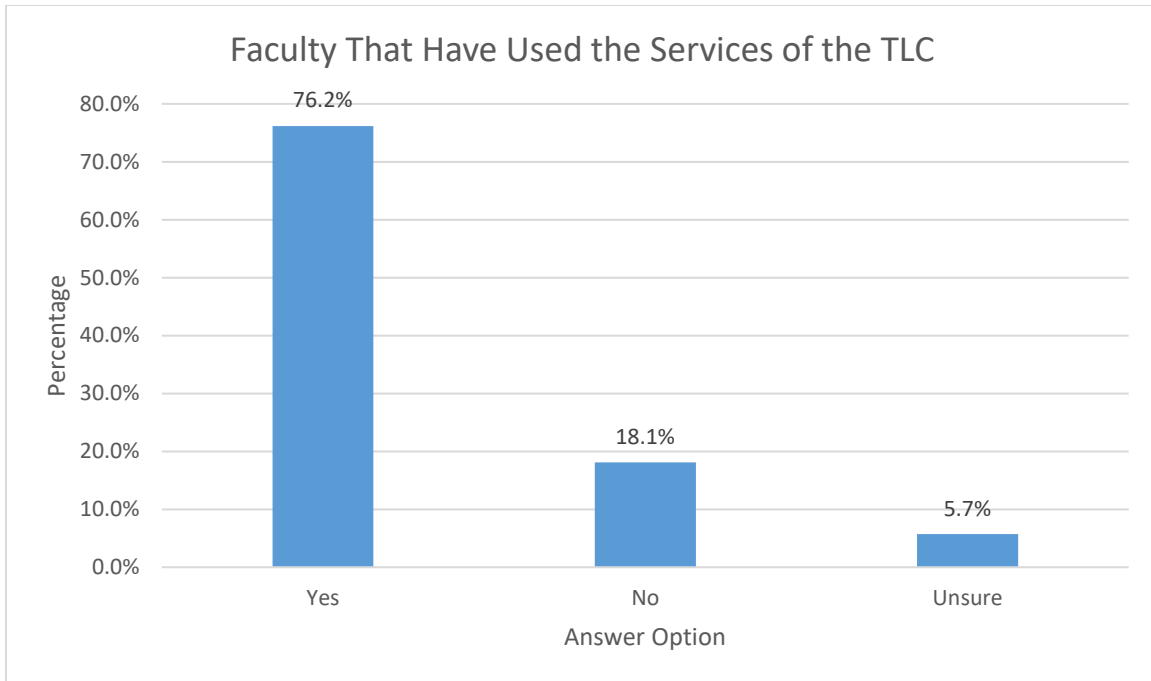


Figure 15. Faculty Usage of TLC Services

Faculty that have used the services of the TLC (Full-time vs. Part-time):

		Yes	No	Unsure	Total
Full-time	n	102	15	5	122*
	Adjusted %	83.6%	12.3%	4.1%	100%
Part-time	n	54	23	2	79*
	Adjusted %	68.4%	29.1%	2.5%	100%
*Note: 11 blank responses					

Table 19. Faculty Usage of TLC Services (Full-time vs. Part-time)

This table shows that the full-time faculty have a higher usage of the TLC services than the part-time faculty have (by 15.2%). This may indicate that almost one-

third of the part-time faculty are not interested in the TLC services. A possible reason is that part-time faculty may have problems accessing the unit in the evening.

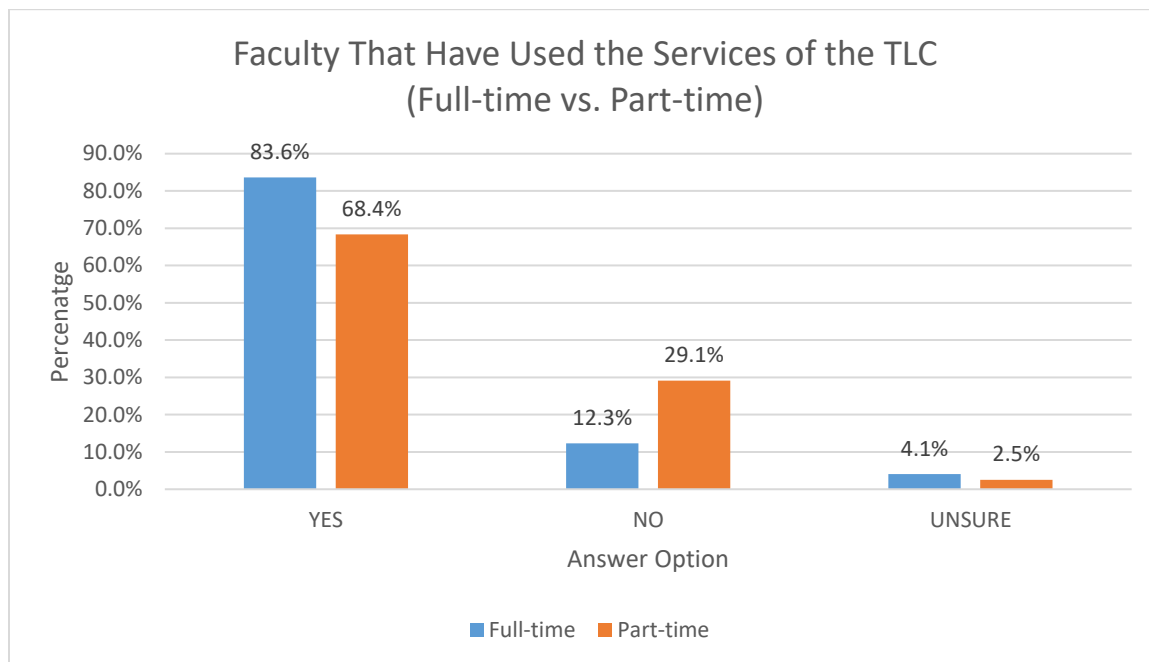


Figure 16. Faculty Usage of the TLC Services (Full-time vs. Part-time)

Faculty that have used the services of the TLC (Years of Service Categories):

Category		Yes	No	Unsure	Total
< 2 years	n	14	8	0	22
	Adjusted %	63.6%	36.4%	0.0%	100%
3-5 years	n	25	9	0	34*
	Adjusted %	73.5%	26.5%	0.0%	100%
6-10 years	n	51	5	3	59
	Adjusted %	86.4%	8.5%	5.1%	100%
11-15 years	n	23	10	2	35
	Adjusted %	65.7%	28.6%	5.7%	100%
16-43 years	n	35	6	2	43
	Adjusted %	81.4%	14.0%	4.7%	100%
*Note: 1 blank response					

Table 20. Faculty That Have Used the Services of the TLC (Years of Service Categories)

This table shows that the faculty in the 6-10 years of service category used the TLC services the most (86.4%), followed by the 16-43 years of service category (81.4%). Besides these two categories of faculty, the others used the TLC services less frequently

(73.5% or lower). This result may indicate that some faculty may not be familiar with the services that the TLC offers. The TLC personnel may want to communicate more with these faculty members so that they know about the available services.

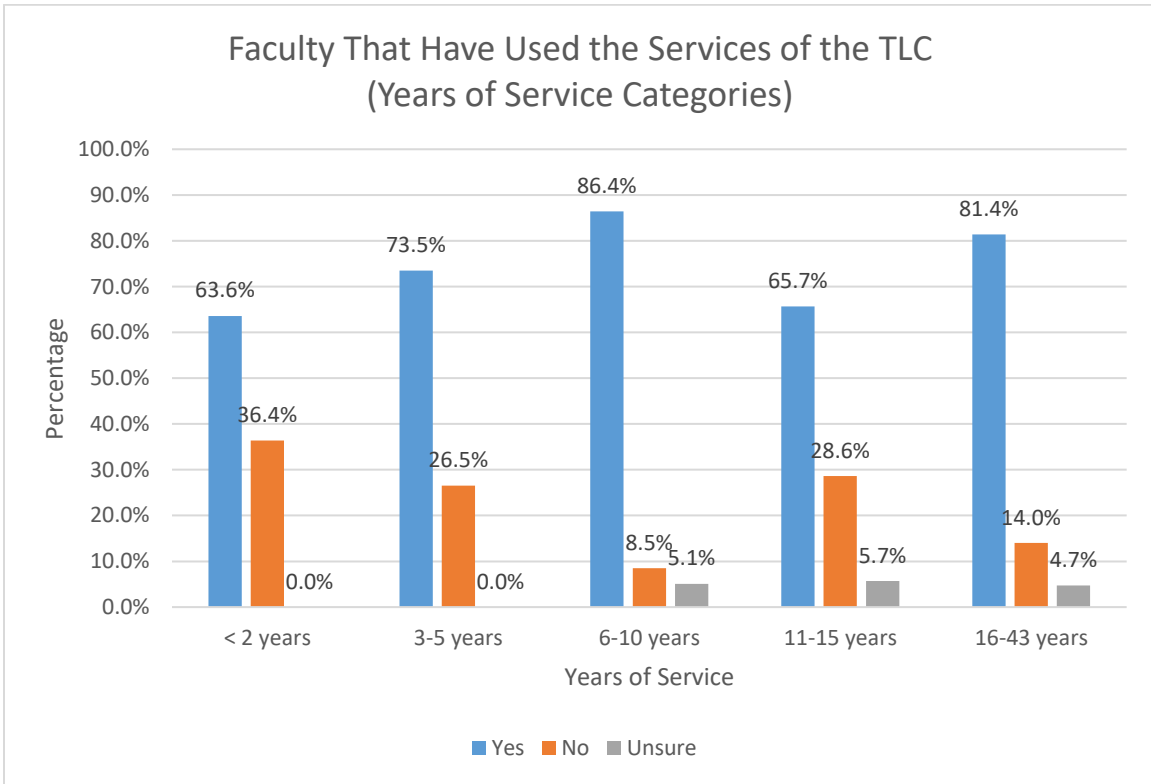


Figure 17. Faculty That Have Used the Services of TLC (Years of Service Categories)

Q10. Would you consider using any of the services of the TLC in the next academic year (2016-2017)? Three choices were given.

	Yes	No	Unsure	Total
n	127	31	45	203*
Adjusted %	62.6	15.3	22.2	100.0
*Note: 9 blank responses				

Table 21. Future Faculty Usage of TLC Services

Some faculty who have used the TLC services decided not to use them in this academic year. It is possible that they may use the services again in the future.

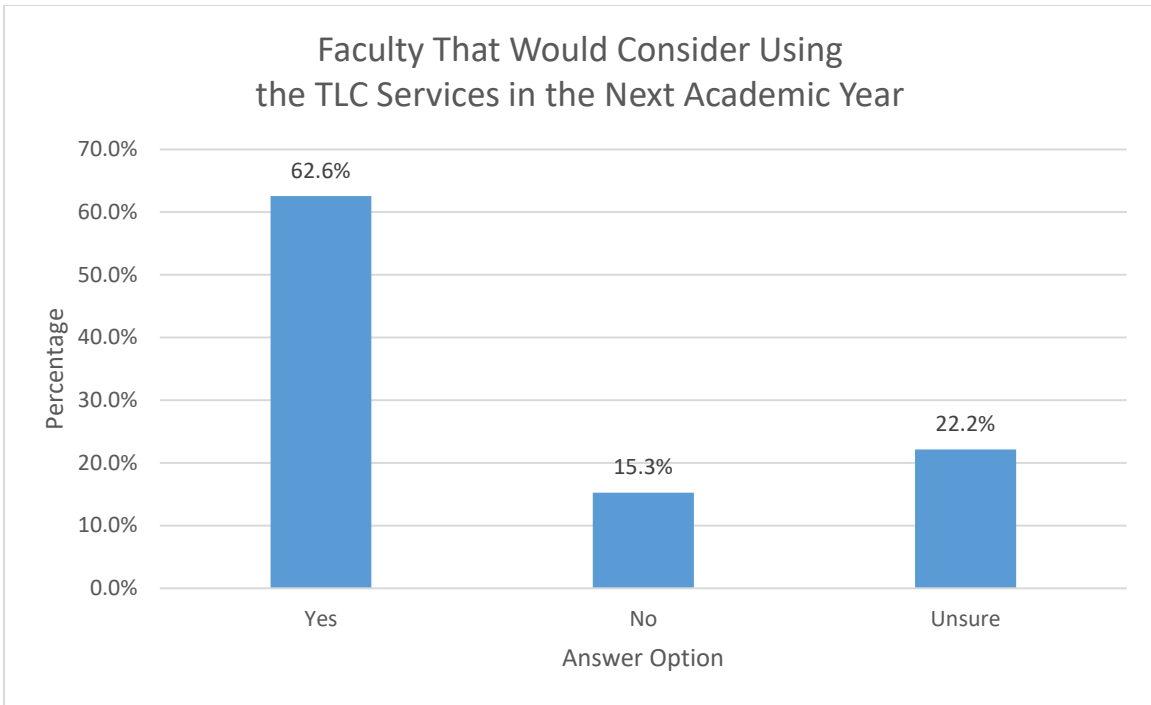


Figure 18. Future Faculty Usage of TLC Services

Future faculty usage of the TLC Services (Full-time vs. Part-time):

		Yes	No	Unsure	Total
Full-time	n	80	23	16	119*
	Adjusted %	67.2%	19.3%	13.4%	100%
Part-time	n	43	8	26	77*
	Adjusted %	55.8%	10.4%	33.8%	100%
*Note: 11 blank responses for faculty status, 5 blank responses					

Table 22. Future Faculty Usage of TLC Services (Full-time vs. Part-time)

This table shows that about one-third of the full-time faculty have decided not to use the TLC services for the next academic year while just under half of the part-time faculty have chosen not to use the TLC services for the next academic year. It is possible that they may use the services again in the future.

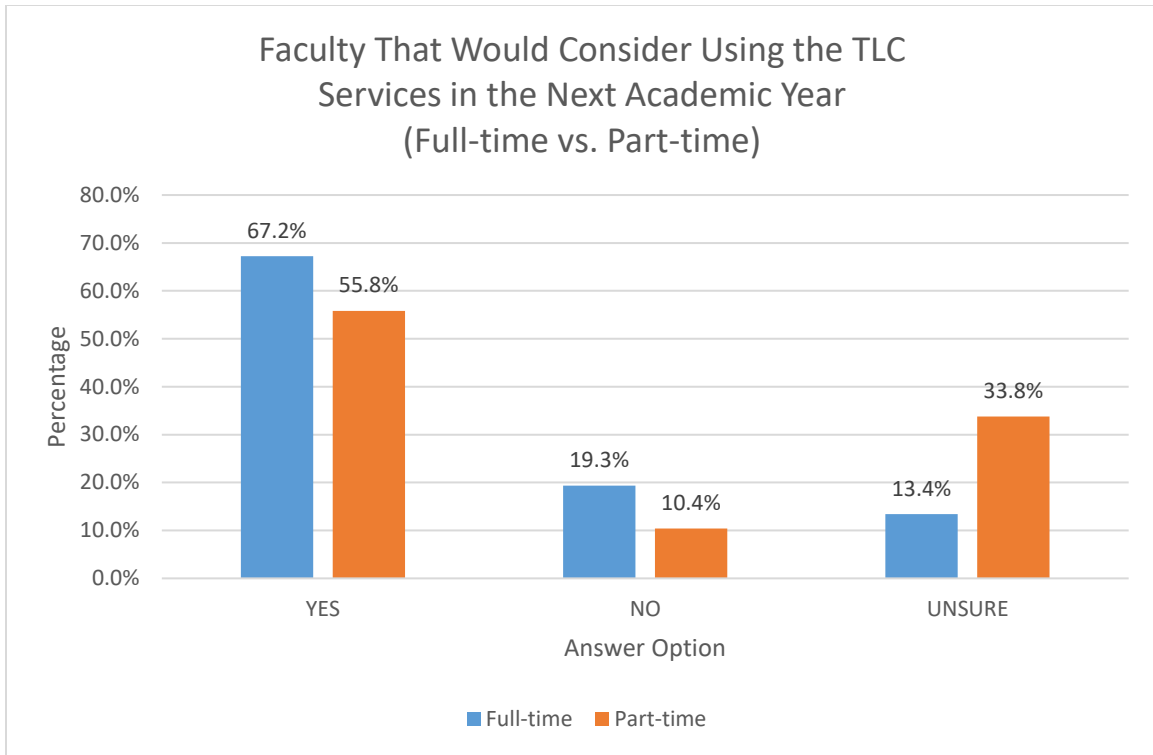


Figure 19. Future Faculty Usage of TLC Services (Full-time vs. Part-time)

Future faculty usage of the TLC Services (Years of Service Categories):

Category		Yes	No	Unsure	Total
< 2 years	n	15	1	6	22
	Adjusted %	68.2%	4.5%	27.3%	100%
3-5 years	n	23	3	8	34*
	Adjusted %	67.6%	8.8%	23.5%	100%
6-10 years	n	38	6	12	56**
	Adjusted %	67.9%	10.7%	21.4%	100%
11-15 years	n	20	6	9	35
	Adjusted %	57.1%	17.1%	25.7%	100%
16-43 years	n	26	11	6	43
	Adjusted %	60.5%	25.6%	14.0%	100%
*Note: 1 blank responses					
**Note: 3 blank responses					

Table 23. Faculty That Would Consider Using the TLC Services in the Next Academic Year (Years of Service Categories)

This table shows that the faculty’s usage of the TLC services in the next academic year will be low. The junior faculty (those have less than two years of service) plan to use the TLC more than the other categories do (at 68.2%) while the 11-15 years of service category shows a future usage percentage of under 60% (at 57.1%). This only indicates that many faculty do not need to use the TLC services in the next academic year. It is possible that these faculty may consider using the TLC services in the following academic year.

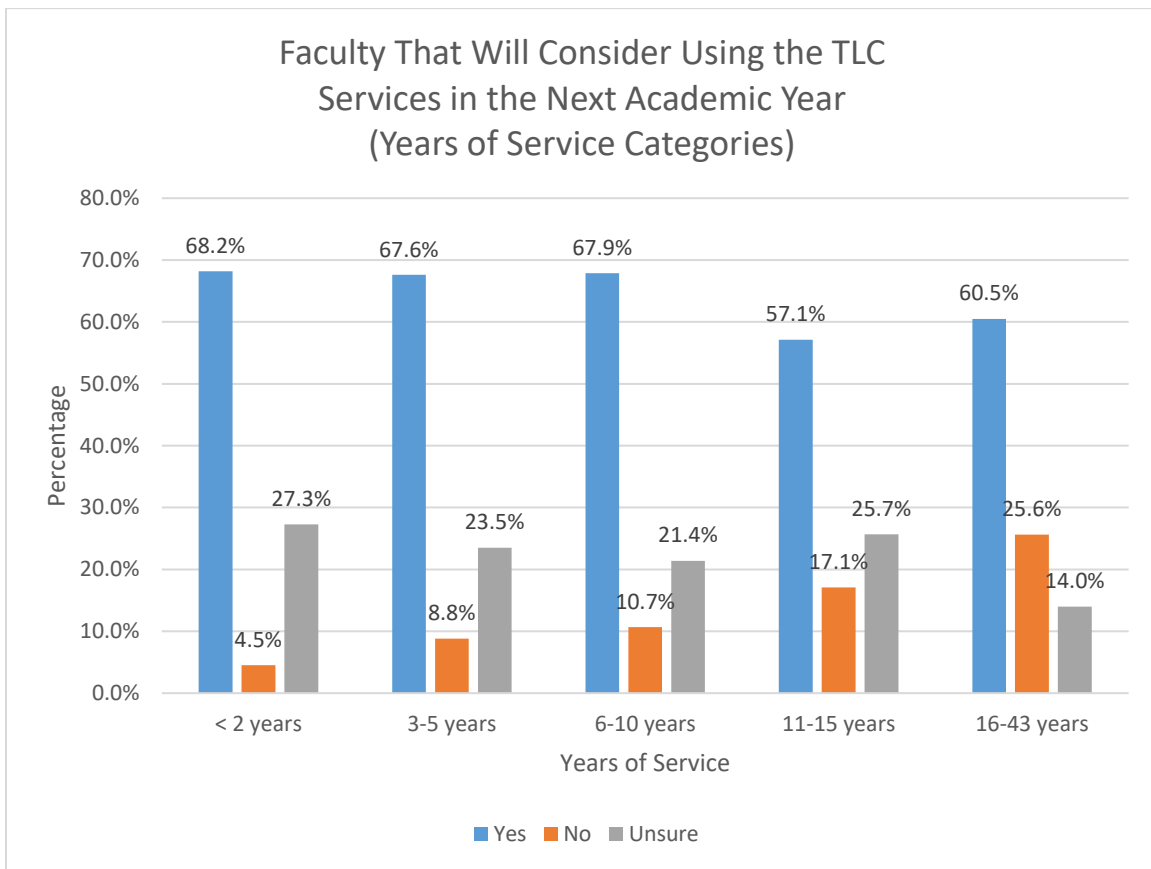


Figure 20. Faculty That Will Consider Using the TLC Services in the Next Academic Year (Years of Service Categories)

The tables from questions 6 to 10 displayed the comparisons across demographic groups. The results showed that there were not large differences and the results appeared to be fairly consistent across all groups.

Q11. Where do you go to look for innovative educational practices to enhance your teaching?

Result: Out of 212 responses, 181 (85.4%) provided an answer, 31 (14.6%) left it blank.

Note: Respondents could choose more than one category.

After the coding of the responses, there were 10 categories of sources. They are: Internet, Peers, TLC, Publication, Conferences, Industry, Workshops, Courses, Professional Organization, Library.

Source	Number of Times Mentioned	% of Total
Internet	83	29.5
Peers	53	18.9
TLC	40	14.2
Publication	35	12.4
Conferences	19	6.8
Industry	17	6.0
Workshops	12	4.3
Courses	10	3.6
Professional Organization	8	2.8
Library	4	1.4
Total	281	100.0

Table 24. Sources of Innovative Educational Practices

Of the ten categories, Internet was the most popular source (29.5%), followed by Peers (18.9%) and TLC (14.2%). This table indicates that faculty are interested in finding innovative ideas for their teaching from different sources. The fact that TLC is ranked third may indicate that faculty do rely on the TLC for new teaching ideas.

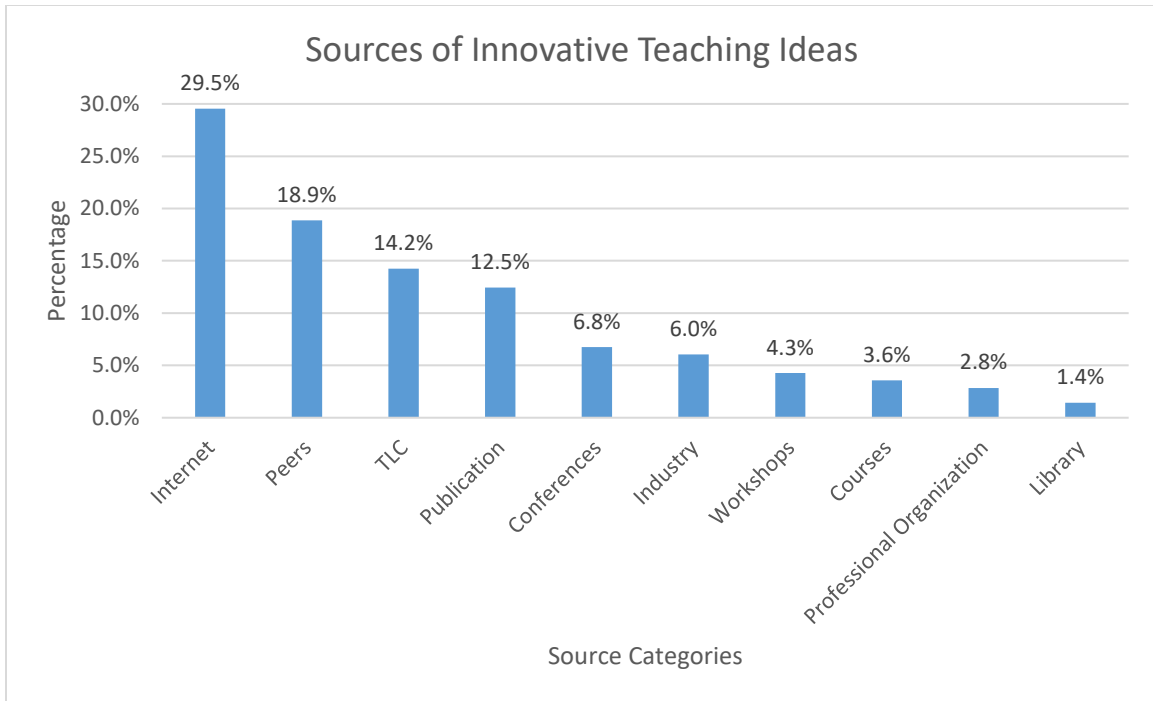


Figure 21. Sources of Innovative Teaching Ideas

During the online survey, participants were asked if they would be interested in being interviewed to provide more details about their experiences with the TLC. Out of the 228 responses, 39 participants volunteered to be interviewed. From this group, 15 of them from different schools were randomly selected for the interviews. The volunteered participants were randomly selected from each of the six schools. However, there were no part-time instructors available from three of the schools to be selected for the interview. Below is a breakdown of the participants selected to be interviewed.

School	Full-Time	Part-Time	Total
#1	2	1	3
#2	3	1	4
#3	2	0	2
#4	1	0	1
#5	3	0	3
#6	1	1	2
Total	12	3	15

Table 25. Selection of Interview Participants

After these participants had been selected, they were contacted for the interviews via telephone calls and e-mail messages. The interviews took place between July 9th, 2016 and September 23rd, 2016 either in the author's office or in the interviewee's office. For each arranged interview, the participant was asked to answer

thirteen questions. Of these questions, five of them had two parts (see Appendix). Each interview took between 25 to 45 minutes. Each interview was audio-recorded by the author and later transcribed by the author. After all the transcriptions had been completed, coding was carried out by the author to identify possible themes. Below is the analysis of the results from these interviews.

4.7. Interview Results

Q1. (a) How long have you been using the services of the TLC?

The average number of years for the fifteen faculty using the services of TLC is 8 years. The shortest time period is 1 year while the longest is 25 years.

(b) How many times have you used these services?

The lowest number is once (an answer from Respondent #5) while many others have used the TLC services a lot. Respondent #1 said, "A lot. Lately, yes, every term." Respondent #2 said, "It's been on and off. But I have used them regularly. I used them most intensively for the last six years." Respondent #3 said, "Many many times. In the 1990, we started a project in Thailand. We worked with TLC since then." Respondent #14 said, "50 to 60 times." Other than three faculty members who used the TLC services less than two times, the other twelve have used the TLC services ten times or more.

Q2. Why did you choose to use the services of the TLC?

There are several reasons why these faculty members chose to use the services of the TLC. The main reason was getting the TLC workers to help them with developing online courses. Since the institution uses a Learning Management System (LMS), instructors have to learn how to use this system to develop the online courses. The TLC workers would provide support regarding the set-up of the online courses and any related issues.

Because of the online courses. They gave instructional workshops on how to generate discussions on the LMS. (Respondent #2)

Because they were there. As experts in education, I thought they would be able to convey to my faculty something they didn't know. For something specific like LMS, assignments and technology as part of their training. (Respondent #4)

I was developing a course and there was something that I needed help with, like getting LMS to, for example, pool questions for another course. (Respondent #6)

I think some of the reasons I chose it because it was some particular event that I was using them for. Some of them is because that's what I was told that how we do it at this institution developing new courses, online courses. (Respondent #13)

Another reason was getting help from the TLC workers to do program change/revision. Since the TLC workers have the expertise and experience in curriculum development and student assessment, they could provide the assistance to faculty in making changes to existing programs.

Because there was a need to do some programming changes. And programming changes have to be consulted through the TLC with their consultants in terms of curriculum design, course change and the overall program structure. (Respondent #6)

For the program development and accreditation. How do we properly define our learning outcomes such that they will be reflected of the graduates' attributes of our program, as defined by the accreditation body?" (Respondent #10)

Some faculty would also need help from the TLC in course development, especially the new instructors. Here are the answers from some respondents:

If I was to develop a new course, I would start with the basic structure in terms of content. But then, I know that I can go to them to get ideas to know how to format. (Respondent #3)

It is one of the things that my chair or coordinator, I can't remember his title. He basically said you have to deal with TLC when there is a new course being developed. (Respondent #5)

Another reason for using the TLC was to attend the Instructional Skills Workshop (ISW) to develop more teaching skills. The ISW was especially useful for new instructors who have little or no teaching experience at all.

Because they provided me with the Instructional Skills Workshop to better my teaching skills. And it was highly recommended by my program head that all of us in our degree program would do this. (Respondent #11)

When I first started, someone did the small-group instructional feedback sessions with my classes. I did the ISW as well. (Respondent #15)

Lastly, faculty used the TLC because it offers seminars on using new technology in the classroom. This type of service would also help instructors to improve their teaching skills.

In the first case, ten years ago, they put up through the messaging system a seminar that seemed interesting, on education. They sent out something and I responded yes. This seemed interesting to me, I signed up for the workshop. (Respondent #8)

Q3. How did you know about the TLC at the beginning?

Faculty knew about the TLC through different avenues. The most popular reason was through the Program Head. Here are the three answers from the respondents:

I think it was probably my Program Head. (Respondent #3)

I was told by my Program Head. (Respondent #11)

At the beginning, it was actually the Program Head who oversaw the program that I was developing the curriculum for. He told me where I needed to go and what I needed to do. (Respondent #13)

The second source was through the employee orientation. A few of the respondents had the following answers.

Through my department. Part of my orientation when I got hired. (Respondent #1)

It was also through the employee orientation. (Respondent #2)

Through the employee orientation. (Respondent #10)

It was mentioned to us during the welcome dinner for the part-time instructors in September every year. (Respondent #11)

One note about the employee orientation is that the event is not mandatory. According to some of the part-time instructors, they did not go to any employee orientation due to time conflicts or they were not informed to attend.

The third source was through the Associate Dean of the school. Some faculty provided the following answers.

Through my Associate Dean. (Respondent #2)

It was basically recommended by the Associate Dean of the department. The AD basically suggested to me that we have to do all the programming changes and design changes with the TLC. (Respondent #6)

If my Associate Dean hadn't told, you know, requested that we worked together for the program review, I am not sure if I would have known them. (Respondent #14)

Another source was through the colleagues. Some of the interviewees provided the following answers:

Two or three years into my teaching, someone at my department told me that we have the TLC available for the Computing Department. (Respondent #4)

I just found it out from friends and colleagues what is the most viable resource to use when one encounters a problem or issue that needs resolution. (Respondent #9)

I was informed about the TLC by colleagues mostly. (Respondent #12)

The ISW was also another source. One faculty claimed that the ISW had helped them to learn about the TLC. Here are their answers:

I think through the Instructional Skills Workshop. When I was hired, I had to take the ISW. That's when I knew about the TLC. (Respondent #15)

One other source was through internal notification within the institution. Here is the answer from that faculty:

We used the Intranet here. So stuffs come through variously. One is the e-mail system. The other is a shared space where they can post messages". However, only one respondent provided this source. (Respondent #8)

Q4. (a) Which services from the TLC did you use? Faculty services? Technology Support? Consultation?

Faculty Services assist instructors with course design, course content and student assessment. Technology Support area provides faculty with help in using the LMS and other technical help such as using PowerPoint and other teaching software. Consultation services assist faculty when they have to develop a new program (i.e., curriculum design) or revise an existing program (i.e., program review). These three services make up the bulk of the work for the TLC personnel at this institution.

Most of the faculty interviewed had used all three services. They all seemed to fully understand the services offered by the TLC. They used those services whenever they needed help for their curricular activities. Technology Support was the most popular due to the fact that faculty need a lot of support from the TLC when they teach online courses using the LMS at this institution. Here are their answers:

I have used Technology Support because of the LMS. (Respondent #2)

And I used the Technology Support for designing couple of courses on the LMS. (Respondent #6)

I have used Technology Support for the LMS. (Respondent #7)

I definitely used the LMS technology services because I have courses that are online. (Respondent #11)

I have used the Technology Support because I use the LMS for my class.
(Respondent #15)

Faculty also use Consultation services for program review and curriculum development. Here are their responses:

For program revision, I would use the Consultation. (Respondent #1)

I have used Consultation when we did the curriculum review. (Respondent #2)

I have used Technology Support for the LMS and Consultation for program review. (Respondent #7)

Consultation was for engineering accreditation. (Respondent #10)

We went through a curriculum review exercise two years ago. So, there was a consultant from that group came to help us. (Respondent #11)

Instructors also used the Faculty Services when they needed help in course design. Here are their answers:

Faculty services, I used them for the workshop, for the word processing in the initial days. (Respondent #1)

For Faculty Services, I probably have it some point gone to them for my particular course. Just to see if there is a particular way to show this across to my students. (Respondent #4)

For Faculty Services for myself, it was my own course development. So, properly defining some of the learning outcomes. (Respondent #10)

Q4. (b) Can you elaborate on your usage of the service?

Most respondents provided details on the technology support they received for LMS from the TLC workers. They stated that the TLC workers helped them with setting up the online courses and assisting them in any related technical issues.

Everyone is online now. We are doing a fair bit of innovative education as well. So we require a lot of support from TLC. (Respondent #1)

I think the LMS is great. It's a very good system. And of course, there are technical issues that I had. Questions and then things that I wanted to do were more advanced than the program allowed. So, when I did ask them for help, they were helpful. (Respondent #12)

So they helped me with all of the editing and actually doing all the probing there, online and everything. (Respondent #13)

The respondents also provided a lot of details about how they received consultation services from the TLC workers when they were doing program review/revision. Here are some of their answers:

For program review, you use Consultation services. As faculty, I went through a few curriculum reviews. TLC supports that and it helps with the process. (Respondent #3)

For the curriculum review, we have to use the TLC. (Respondent #4)

Basically, the first thing of course is the structure of how the program change has to be done. So the consultants kind of guided me through". This respondent also mentioned the following, "To design or to make program changes, obviously consultation has to take place. (Respondent #6)

For program review, we took full advantage of it as a department. (Respondent #9)

The consultation, I mean, we did our own program review for our diploma program. So, we have just undergone that. So, the consultant is heavily involved in that. (Respondent #10)

As for Faculty Services, the respondents did not provide much details. They only mentioned this when they worked on course content. Here are their answers:

For course outline, you use Faculty Services. (Respondent #3)

I used the Faculty Services for the program design. (Respondent #6)

For Faculty Services for myself, it was my own course development. So, properly defining some of the learning outcomes. (Respondent #10)

Q5. (a) How often do you currently use the services of the TLC?

For the usage of the TLC services, it varies among the respondents. Three faculty members do not use the services at all at the time of the interview. Another three faculty members only use the TLC services less than three times a term. Three other faculty members use the services on a weekly basis. Five faculty members use the services almost every day. One faculty member uses the services only when needed.

Q5. (b) During which time period of the school year do you use the services the most?

For high usage of the TLC services, almost half of the respondents said the time period would be the beginning of the term. Three respondents said some time in September. Two said that they would use the services throughout the term. One said the middle of the term. Two reported that they did not use the services at the time of the interview.

Q6. Which types of innovative ideas does the TLC use to assist the faculty with their teaching and learning?

More than half of the respondents (eight) said that no innovative teaching ideas were introduced. Three mentioned the LMS. One mentioned that the lunch-and learn sessions were good. Another faculty mentioned that the ISW created good teaching ideas. The general consensus was that the TLC did not offer any innovative teaching ideas to assist faculty with their teaching and learning.

Q6. (a) How did you find out about these ideas?

For innovative teaching ideas, six respondents said that they were not informed about them from any sources. Four said that they were informed by colleagues. Two said that they were informed through e-mail and the intranet (internal network for the institution). One said he was informed by the Program Head while the other was informed by the Associate Dean. Two respondents said that they found out about the new ideas when they talked to the workers at TLC. One said that he found out those new ideas during a public display by the TLC on a Forum Day. The general feeling was that the TLC did not do enough to promote any innovative teaching ideas to the faculty or advertise those ideas more openly.

I think if there is some way to disseminate that from the top down, just to make sure that in a program review meeting. I think it's a communications issue there.
(Respondent #7)

I agree with Respondent #7's assessment. If the TLC workers resolve the communications problem and start to promote their innovative teaching ideas more openly to the faculty, they will receive more favourable feedback on this matter. By simply relying on management (such as Program Head and Associate Dean) to help advertising those ideas is quite limiting. The TLC workers need to do more in promoting those innovative teaching ideas.

Q6. (b) Have you implemented any of these ideas in your teaching?

For implementing innovative teaching ideas, sixty percent of the interviewed faculty (nine respondents) claimed that they did so after they had learned about those new teaching ideas. Forty percent (six respondents) mentioned that those new ideas did not affect the way they were teaching. For those faculty members who felt that the innovative teaching ideas were worth a try, they would implement those ideas. The others did not want to put in the time and efforts.

Q7. To what extent did the service(s) you received change how you approach your teaching?

When it comes to change the way of teaching upon receiving innovative teaching ideas, forty percent of the interviewed faculty (six respondents) claimed that those ideas did not change the way they approach teaching. Another forty percent of the respondents said that the new ideas changed their way of teaching a lot. Three respondents claimed that the change was moderate. Overall, sixty percent of the interviewed faculty (9 respondents) said that the innovative teaching ideas did affect the way they approach their teaching. Here are their answers:

I would say to quite a significant extent because it's sort of expanded the realm of things that we could do with support. (Respondent #9)

The LMS helps me to be a better instructor online. (Respondent #11)

I think I am more willing to use online learning and to learn things a little bit more than in the past. (Respondent #12)

Q8. How does the TLC make faculty aware of its innovative ideas?

When it comes to promoting innovative teaching ideas, the general consensus is that the TLC is not doing enough to promote its innovative ideas. More than half of the interviewed faculty (8 respondents) said that the TLC did not do much to make them aware of anything.

They don't do enough to make the unit known. (Respondent #1)

I have no approaches from TLC to me. (Respondent #6)

They don't send me anything. (Respondent #8)

I can't really say that I have seen any. (Respondent #12)

However, forty percent of the interviewed faculty (six respondents) said that the institution's intranet does promote the TLC's innovative ideas. Three respondents said that the new ideas were sent to the faculty via the e-mail system. Two said that the workshops offered by the TLC did make them aware of the innovative ideas.

Q9. (a) What is your estimate of the percentage of faculty who know about the services of the TLC at your school?

This question is used to see the faculty awareness level of the TLC’s services. Three respondents (#5, #11, #15) did not provide an estimate. Four respondents said 100%. One said 90%. Two said 75%. One said 60%. Two said 50%. Two said 40%. The average estimated percentage is 72.9%. The median is 72.5%. These two estimates show that there is a perception that there exists a reasonable level of faculty awareness of the TLC’s existence within a school. The chart below shows the distribution.

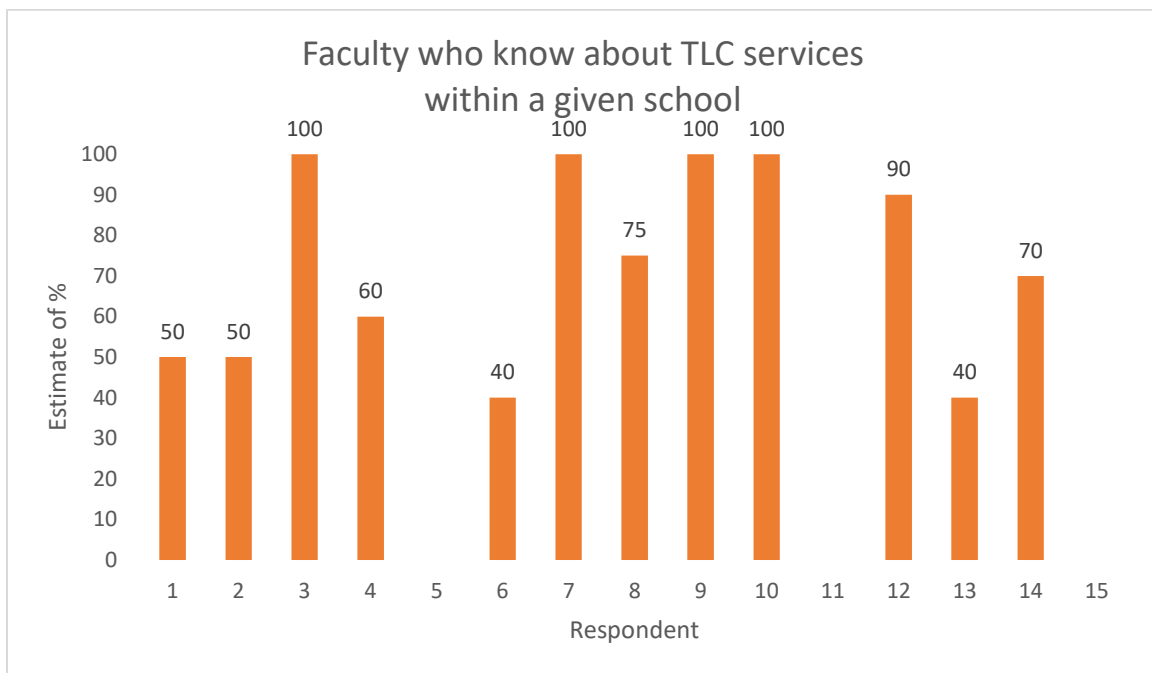


Figure 22. Estimated % of Faculty from a School Who Know About TLC Services

Q9. (b) What is your estimate of the percentage of faculty who know about the services of the TLC at your institution?

The answers to this question were spread out. Two respondents (#5, #11) did not provide an estimate. Two respondents said 100%. One said 90%. One said 80%. One said 75%. One said 70%. One said 50%. One said 45%. Two said 40%. One said 30%. One said 25%. One said 20%. The average estimated percentage is 58.9%. The median is 50%. These two estimates indicated that there is a perception that there is a high percentage of faculty who are not aware of the TLC’s existence within the institution. The chart below shows the distribution.

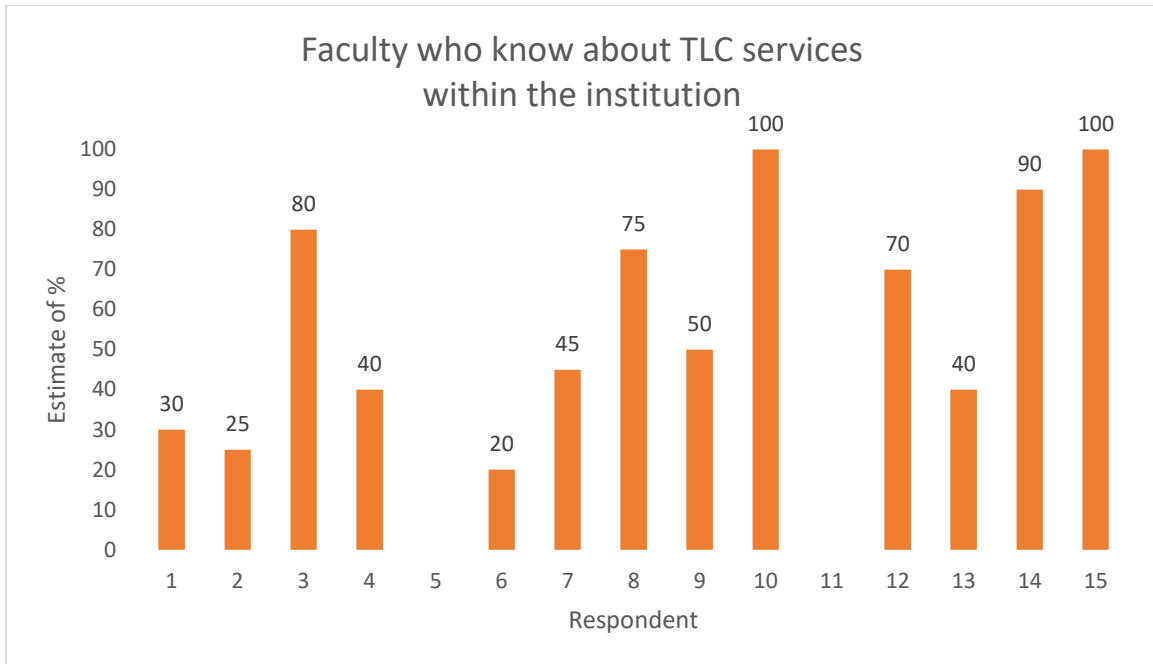


Figure 23. Estimated % of Faculty Who Know About TLC Services Within the Institution

Q10. Can you provide any reason(s) why some faculty choose not to use the services of the TLC?

The interviewed faculty provided many reasons why some faculty choose not to use the services of the TLC. After the coding of the respondents' answers to this question, a total of seventeen reasons was developed. Below is a list of all the reasons:

	Reason	# of rep.	%
1	It takes time.	13	20.0
2	They don't think they need to know anything - no change.	7	11.0
3	They don't know what TLC can do.	6	9.4
4	They can figure stuffs out by themselves.	5	7.8
5	Ownership/control issue.	5	7.8
6	Bad experience.	4	6.3
7	You cannot access them.	4	6.3
8	Discomfort level someone can develop.	4	6.3
9	TLC is not equipped to deal with pedagogical issues.	3	4.7
10	There is not a lot of trust.	3	4.7
11	They don't know TLC exists.	2	3.1
12	Ego.	2	3.1
13	TLC is not equipped to deal with subject matter issues.	2	3.1
14	Faculty not understanding the technical to access and to use the tools.	1	1.6
15	TLC don't understand what the user wants.	1	1.6
16	TLC don't seem to be oriented towards service.	1	1.6
17	There is no mandate for PD.	1	1.6
	Total	64	100

Table 26. Reasons for Not Using TLC Services

Of these answers, time is the most frequently mentioned answer (20%) as to why faculty choose not to use the TLC services. The faculty who were interviewed reported that other faculty reported that they simply cannot afford to spend time on either learning to use new ways to teach or learning to use the online LMS because they are already very busy with their daily curricular activities.

I think part of it is it all takes time. Say, if I want to learn something, I have to take time to go to a seminar. And then I go to the seminar, I got to do some more work about learning how to implement it. And that takes time. A lot of the faculty don't feel that they have the time. And, it is easier to keep going, and teaching, doing exactly what they have been doing. Time, is the key thing. (Respondent #3)

If I am working at eight o'clock at night and I have to wait until tomorrow or the next day or the day after. Maybe not even then, I have to wait a week before they get back to me, before they anything gets done. (Respondent #5)

But it's just that the stakes are high. You don't have a lot of time and you are going in. And then, what if it doesn't work? And if you don't understand why it's not working, now you got to go down and try to find somebody at TLC, and you

got to make an appointment. But you don't have time for that. (Respondent #7 on using LMS)

If I were to speculate, I would say maybe a time conflict. You know, time committed, other time commitments so they can't fit into their respective schedule. Probably, that is the biggest one. (Respondent #9)

I think people think it's going to take time for me to understand this new technology. It's going to take time for me to actually adopt this box model or whatever the model might be or any other innovative idea. (Respondent #12)

They are very swamped. So, these projects need to be done immediately or generally and they don't have the capacity to take it on. ... It's a time factor. (Respondent #13)

Maybe time constraints. (Respondent #15)

While time is the leading reason for faculty not to choose the services of the TLC. The number two reason (11%) is that faculty do not think that they need to change since they have been teaching for a long time. Here are the answers for this reason:

There is a faculty who just wants to do things her own way. (Respondent #2)

And I think that there will always be people who would just slip into a comfort zone. They don't see the need for change. ... Some people think they know what they are doing. (Respondent #10)

I would say, some people, you know, think that they have beliefs how teaching, they can teach best in their own ways. Maybe, some of the unwillingness to change. (Respondent #12)

There are definitely people who are, have entrenched old-fashioned teaching practices and they are not interested in. They do not want to change. (Respondent #15)

The third reason (9.4%) for faculty not to choose the services of the TLC was that faculty do not know what TLC can do. That is, they do not know what services the TLC can offer them to assist them with their teaching. Here are some of the answers:

They don't know what TLC can do. (Respondent #1)

They wouldn't know about TLC. (Respondent #2)

I think sometimes they don't recognize the expertise is there. (Respondent #3)

Maybe they just not see the value in the services. Maybe they are not recognizing. (Respondent #15)

Two reasons tied for fourth place (at 7.8%). The first one is that faculty can do things on their own without the help of the TLC. Some choose to solve their own teaching problems without any assistance from anybody. Here are some of the responses:

They just think they can figure stuffs out by themselves. (Respondent #1)

He did it on his own. (Respondent #4)

Some people think they know what they are doing. (Respondent #10)

The other reason is the ownership and control issue. Some faculty reported that the work they have done belong to them. They do not want to share with anyone what they have completed (e.g., online course content). They feel somewhat threatened when they realize that they may have to share their work. Here are some responses:

... sometimes it doesn't feel like it's your work. They are helping you but it feels like they are the ones that are in control of how you are going to create a course. ... So, I know a lot of instructors don't want to lose that control. ... So, control is one reason. (Respondent #5)

I want control of my course in terms of making changes to it. If I can't change it and if I have to depend on them to change it, which means I have to wait, for

them to get to it, and changes to it, and I feel like I have to justify why I am doing the change, what's going on? So, I lose some control of the course. And that is a big thing for me. And I think that is a big thing for other instructors. (Respondent #5)

Whose course has it become? So, it's the ownership? Yeah, the ownership. I know instructors, when they create a course, they want to own it. (Respondent #5)

I think that some people are quite concerned about putting things online. You know, there is a sense that it's mine, it's been my book. Ownership and individual property rights. (Respondent #7)

Three reasons tied for fifth place (at 6.3%). They are: (1) Bad experience with the TLC, (2) faculty have little/no access to the TLC, (3) TLC make people feel uncomfortable. Some faculty had a bad encounter with the TLC workers. Here are some responses:

One person I know. He had the experience. He didn't think that the TLC staff that he worked with was terrible helpful. And so, he just sort of had an experience that he didn't think was great. He felt that it was a waste of time. (Respondent #3)

Bad Experiences. Someone who did a program review and had a bad experience with TLC. So he did it on his own. He might mention it to others. (Respondent #4)

Some faculty reported that they have little or no access to the TLC workers. They do not think that they can use their services even if they want to. Here are some responses:

For all my courses, they are part-time in the evening. Although a lot of my faculty will call in for help, the Help Desk closes at five. My courses run from 7 to 9 pm. This is an availability issue. (Respondent #13)

I think also others know, other than the Help Desk, there is no easy access to people. (Respondent #14)

Two reasons tied for sixth place (at 4.7%). They are: (1) TLC workers are not trained to deal with pedagogical issues, (2) there exists a trust issue. For the first one, some faculty reported that the TLC workers do not have an understanding of the pedagogical issues that faculty have to deal. Here is a response:

Also, instructors face issue of pedagogy and pedagogical issues in the classroom. That is, people's learning style. So, to that extent, TLC is equipped to deal with these issues? I am not too sure. (Respondent #6)

Q11. What do you think the TLC needs to do in order to make itself better known within the institution?

There are many ideas provided by faculty to help the TLC to become better known within the institution or to raise the faculty's awareness of the unit. Most respondents provided more than one idea. Below is a summary of these ideas:

Rank	Idea	# of rep.	%
1	E-mail	5	14.0
2	Meeting faculty monthly - personal presence	5	14.0
3	Use the Intranet	4	11.0
4	Don't use the Intranet	3	8.3
5	Interview/meet with faculty	3	8.3
6	Management helps to promote	3	8.3
7	Use its own website to promote	3	8.3
8	Marketing	2	5.6
9	workshops	2	5.6
10	TLC leaves things as is	2	5.6
11	Weekly newsletter	2	5.6
12	Showcase successful projects	2	5.6
13	Use ISW to promote TLC	2	5.6
14	Flyers	1	2.8
15	Orientation sessions	1	2.8
16	Mini-sessions	1	2.8
17	Student testimonials	1	2.8
18	Front page of institution's website	1	2.8
	Total	36	100

Table 27. Ideas to Raise the Awareness of TLC

Two ideas tied for the top spot (at 14%). They are: (1) e-mail, and (2) meeting faculty in person. Some faculty reported that the TLC should use the e-mail to inform everyone within the institution about its services. Here are some responses:

Odd e-mail here and there. (Respondent #1)

I think e-mail will help. (Respondent #3)

Also, someone be also making sure that through e-mail, people know about the workshops. (Respondent #4)

What marketing strategies? E-mail. (Respondent #15)

Besides e-mail, faculty reported that another useful way for the TLC to make itself better known will be doing more meetings with faculty in person. That is, the TLC should set up personal meetings with the faculty to provide more presence. Here are some of the responses:

I think they could interview faculty and get faculty to talk about like a 5-minute clip. (Respondent #2)

May be once a month visiting the schools when they have department meetings and showing and demonstrating how things could be done in the way of delivery of content and curricula. (Respondent #6)

I mean, I really believe, face-to-face interaction with the instructors from different schools. (Respondent #11)

We have another TLC representative who comes out to our campus, I think, once every week or two. And she spends a day over there. So I know she is trying to increase the presence and the awareness. (Respondent #13)

The second most suggested idea is using the intranet within the institution (at 11%). Some faculty reported that using the intranet to promote the TLC will be helpful. Here are some responses:

We have several very popular interfaces that here faculty and staff use: e-mail, newsletters, the intranet. (Respondent #8)

And also, on the intranet, it needs to have a stronger presence there. (Respondent #10)

I don't think the intranet is a bad place to start. But I think they need to, actually, increase what they are able to do for people and how to process. (Respondent #13)

Four ideas tied for third place (at 8.3%). They are: (1) do not use the intranet, (2) interview the faculty, (3) management should help to promote the TLC, (4) TLC should use its own website to promote the unit. Some faculty reported that the intranet is not useful to help the TLC to make itself better known within the institution. Here are some responses:

Hate the intranet. (Respondent #1)

The intranet is not a great way because not a lot of people use it. (Respondent #3)

So they need to come to a different level of communication. I don't think the intranet or the e-mail will do that. (Respondent #6)

Some faculty believe that interviewing the faculty is useful in helping the TLC to make itself better known within the institution. Here are their responses:

I think they could interview faculty and get faculty to talk about like a 5-minute clip. Did you know about TLC? This is how TLC helped me. If they use the faculty that they work with as promoters, they could have 5-minute clips come out

copied with so and so. If they could do those kind of things regularly, I think it would be helpful if other faculty heard what and how they helped. (Respondent #2)

If they can somehow let faculty know how they can help them, a success story will help. (Respondent #3)

I really believe, face-to-face interaction with the instructors from different schools. (Respondent #11)

Some faculty reported that management should help to promote the TLC because management work with faculty a lot and they can advertise on behalf of the TLC. Here are their responses:

I think a lot have to do with Management. I think management has to make it clear to the faculty that (1) they value pedagogy and (2) they value education and there are support available for that. (Respondent #4)

I think some of the communications from the Associate Dean and the Program Head. They have to kind of push to disseminate the information to us. (Respondent #7)

Management can help out with the TLC to promote the services. (Respondent #12)

Some faculty reported that the TLC should use its own website to promote the unit. Since the TLC has an existing website, some faculty believe that the TLC should take advantage of the available facility. Here are their responses:

Go to their website. (Respondent #1)

Maybe a common website where people can go to and see, like an ongoing blog. People can profile what they've done and create this online community to share. Telling stories of what they have done. (Respondent #7)

They are trying. You know, they had their own website that they started early in the year. They started with a micro-site and they interviewed a number of professors or instructors with specific techniques. (Respondent #10)

Four ideas tied for last place (at 2.8%). They are: (1) flyers, (2) orientation sessions, (3) mini-sessions, (4) student testimonials, and (5) promote the TLC on the front page of the institution's website. These are different suggestions from different faculty members. Here are their responses:

Send out flyers about events. (Respondent #1)

Perhaps have some orientation sessions with part-time and full-time faculty explaining what their roles are, and how they can help faculty and schools to enhance and deliver knowledge and the curricula. (Respondent #6)

And validate with faculty that there is a need to enhance. And demonstrate through some mini-sessions, maybe some mini-seminars, or mini-workshops showing what can they do to enhance the deliverables in the classroom. (Respondent #6)

Student testimonials. (Respondent #7)

The TLC needs to promote itself better. It needs to be on the front page of the institution this year or at the website which is for the instructors. (Respondent #10)

Q12. What do you think the TLC needs to do in order to have a bigger impact on the institutional community?

There were many ideas suggested by the faculty to help TLC to have a bigger impact on the institutional community. Below is a summary of these ideas:

Rank	Idea	# of rep.	%
1	TLC needs to promote the unit	8	24.0
2	TLC needs to reach out to faculty	6	18.0
3	TLC needs to demonstrate what they can do	5	15.0
4	Faculty must do PD that ties to TLC	3	9.1
5	Management needs to help out	2	6.1
6	Have more workshops	2	6.1
7	TLC give faculty release time to learn	2	6.1
8	Need more resources	1	3.0
9	Intranet is the wrong tool to use for promotion	1	3.0
10	TLC needs to enable the instructors	1	3.0
11	Have a temporary in-house specialist from TLC	1	3.0
12	TLC people need to have teaching experience	1	3.0
	Total	33	100

Table 28. Suggestions from Faculty

Of these ideas, the one that most faculty suggested (at 24%) is that TLC needs to promote itself. These faculty members reported that it is necessary for the TLC to do some sort of promotion to make the unit be more known to the faculty so that more faculty members may use the TLC's services to improve their teaching, which may impact the students' learning within the institution. Here are some of their responses:

Throw a flyer update to let people know what they do. They also push for their unit. No time to promote TLC because they are so busy. (Respondent #1)

They showcase their work to the faculty. Showcase what they have done. (Respondent #2)

Coming to the department meeting to join the faculty to let them know what TLC services are available. TLC needs to let faculty know that their services are available for free any time. TLC never advertise what they can offer. (Respondent #4)

It has to do with how much they can market themselves to make sure people would take advantages of the services that they provide. (Respondent #15)

The second most suggested idea (at 18%) is for the TLC to reach out to the faculty. Some faculty members reported that the TLC people need to contact faculty to make them aware of the unit's existence. Here are some of the responses:

Maybe they need to reach out more to faculty. (Respondent #2)

A need to reach out to the greater community of learning, which is basically part-timers, full-timers, the lab instructors, where might be involved in the process of teaching and learning. Build the awareness. (Respondent #6)

They need to be more present. We need to have more awareness. (Respondent #11)

How do you get enough people to become aware of what's going on? Face-to-face contact with faculty. (Respondent #12)

It will be good for TLC to set up appropriate time frame for faculty to access. (Respondent #14)

The third most suggested idea (at 15%) is that the TLC needs to demonstrate to faculty what they can do. Some faculty members reported that the TLC needs to show faculty how their services can help to solve faculty's curricular problems. Here are their responses:

Demonstrate to instructors how TLC can help them to enhance what they do. Mainly improve what they do and how they do things. (Respondent #6)

We also need to see what TLC can do for us. (Respondent #11)

For more themselves is a very open-minded branch, say it comes with ideas or issues or problems, you know, to solve them pedagogically, not a psychological problem. To solve your pedagogical problem. Pure pedagogical problems. (Respondent #12)

But I suspect that being able to show people how easy it is to put your content online might get people more engaged, more involved in doing stuffs online.
(Respondent #13)

The fourth most suggested idea (at 9.1%) is that faculty must do professional development that ties to the TLC. A few faculty members reported that they should undertake professional development that relates to what TLC does to improve themselves. Here are their responses:

Faculty must do PD which ties to the TLC. (Respondent #10)

If we have some sort of a mandatory once-a-semester be where we had to go learn about new teaching and learning techniques or something more, like a PD day. (Respondent #13)

So, I think, and obviously, budget. But things, more like those kind of things, that might deal with some of the PD issue. (Respondent #15)

Two ideas tied for fifth place (at 6.1%). They are: (1) have more workshops, and (2) give faculty time release to learn more from TLC. For the first idea, some faculty members suggested the TLC should run more workshops so that more faculty can learn about teaching and learning. Here are their responses:

On an institutional scale, probably be, sort of, more workshops, I would say.
(Respondent #9)

A lot more emphasis on all of the workshops and their services that are available, I think that would be useful. (Respondent #13)

The second idea from some faculty members is to give faculty time release to learn from the TLC. They reported that giving faculty extra time to learn from the TLC will be helpful to their teaching. Here are their responses:

I think there are some ways to streamline access to resources so that programs can have a faculty who is keen to have half-time off to work with other faculty to develop a course. (Respondent #7)

If there was some way that the TLC could provide, I don't know, release time, or something like that for people actually accomplish a goal. (Respondent #14)

Finally, five ideas tied for the last place (at 3%). They are: (1) TLC needs more resources, (2) do not use the intranet for promotion, (3) TLC needs to enable instructors, (4) have a temporary in-house specialist from TLC, and (5) TLC people need to have teaching experience.

Q13. Do you have any other comments you would like to share about the TLC?

There were many comments provided by the respondents about the TLC. Below is a summary of these comments:

	Idea	# of rep.	%
1	TLC people are good and helpful	15	31.0
2	TLC needs to promote the unit	12	25.0
3	TLC provides resources for faculty	8	17.0
4	TLC needs to make contact with faculty	4	8.3
5	TLC needs to hire people with teaching experience	2	4.2
6	TLC needs to improve some services	2	4.2
7	TLC needs to focus on enhancing teaching and learning	2	4.2
8	TLC needs to enable instructors	1	2.1
9	Bureaucratic issues	1	2.1
10	Some faculty don't take teaching seriously	1	2.1
	Total	48	100

Table 29. Comments/Suggestions from Faculty

The most frequently mentioned comment about the TLC (at 31%) was that the TLC people are good and helpful. Most respondents reported that the TLC people managed to help them solve their problems. Here are some of their responses:

Every single time I access them, they are super receptive, they are very friendly, they are welcoming. They have great ideas. Innovative ideas came from TLC. I have an idea and they helped me to flesh it out. (Respondent #1)

For the LMS, I really appreciate that they usually pick up the phone. There is not usually a delay in getting the answers. For the LMS, they are quite good about it. (Respondent #3)

They've been really good. They have been really instrumental in helping our program. So that's why our Program Head trying to just get them involved as much as possible. (Respondent #4)

Positively, they are all very nice people. I truly believe they do want to help. (Respondent #5)

I have personally been very well served by the TLC. I consider them strong supporters of our program and of the school. And I enjoy working with all people at the TLC. (Respondent #9)

The consultants are fantastic. Really, really hardworking. Great people. Excellent experience. (Respondent #10)

I think, I mean, the people that I have contact with are extremely helpful, extremely talented. (Respondent #12)

You know, the people that I have met that were very nice certainly I haven't met all. But the people that I met that work there are so very talented. I really, I think they are amazing. (Respondent #14)

The second most frequent comment (at 25%) about the TLC is that TLC needs to promote itself. Some respondents reported that the unit needs to do more promotion so that faculty will become more aware of the TLC and be able to use its services. Here are some of their responses:

Need to know what kind of services they can offer and how you can access them. (Respondent #1)

They don't communicate. I never had LTC people show up at my door, I come to talk with you about how you teach, how you deliver your course. (Respondent #8)

I just wish that they have more teeth. Their connection with how we do our job was something that would be more recognized. (Respondent #10)

I think there needs to be more consistency in promoting this. And I think that if the LTC is focused on learning new skills or promoting new skills, they need to have a stronger voice. They need to have a newsletter. They need to have their own page. They are on areas on the intranet. And the community at large needs to hear more about them. I would like to see that. (Respondent #11)

The third most frequent comment (at 17%) about the TLC is that TLC needs to make more contact with the faculty. Some respondents reported that the TLC needs to put in more efforts to approach the faculty to let them know what services are available and how the TLC can assist faculty with their teaching. Here are some of their responses:

For some people to know who is the contact people from TLC to help. (Respondent #1)

Maybe they need to get out of their offices more often and actually sit in. Sit in classes to see what we are doing and how we are doing it. That might help. (Respondent #7)

And, I think, as I said, more face-to-face contact. (Respondent #12)

The fourth most frequent comment (at 8.3%) about the TLC is that TLC provides resources for faculty. Some respondents reported that the TLC is available to assist faculty with their teaching problems and faculty should take advantage of that. Here are some of their responses:

And I think, just to acknowledge the TLC that they stayed the course. They kept it going. They, and you know, even the platform has changed, their mission, their commitment to it. Their interest and the funding and staffing at the institution has put in place. I think, just acknowledge that. I think, I like the minor and the

blended learning is great. I really appreciate the fact that there is resources available. (Respondent #7)

In general, I think that we can all, always, we should be proud of our job. Always try to improve our ability to teach. We should always be improving. And the TLC is a clear resource. (Respondent #10)

You know, I think that the TLC has a lot of services and that they are really valuable. We have all these services that exist. And we just have to make sure we are using them. But, I think that there are a lot of things valuable that people don't realize. (Respondent #13)

Three comments tied for fifth place (at 4.2%) about the TLC are: (1) TLC needs to hire people with teaching experience, (2) TLC needs to focus on enhancing teaching and learning and (3) TLC needs to improve some services. One respondent feels that the TLC lacks workers who have actual teaching experience.

Finally, three comments tied for last place (at 2.1%) about the TLC. They are: (1) TLC needs to enable instructors, (2) bureaucratic issues and (3) Some faculty do not take teaching seriously.

4.8. Key Findings

The results of this study confirm the importance of the TLC at this institution. The majority of the faculty interviewed seemed to appreciate the services offered by the TLC. Other than a small number of faculty who had minor concerns with the TLC, most of the interviewed faculty members were satisfied with the services they received. However, three major issues were discovered through the interviews. The first one was the overall estimated faculty awareness level of the TLC for the institution was low (the estimated median was 50%). The second issue was that most faculty felt that the TLC did not do enough to inform them about innovative teaching ideas. The last issue was the communication between faculty (i.e., the clients) and the TLC (i.e., the service unit) could be improved.

During the interviews, it was found that the mean number of years for the fifteen faculty interviewed using the TLC services was eight years. The median was five years. The shortest time period was one year while the longest was 25 years. The results indicated that there existed a high degree of variability in TLC usage levels. Although many faculty were aware of the services offered by the TLC, the results indicate that there was a high percentage of faculty who were not aware of the TLC services within the institution. For those faculty who used the TLC's services, there were several reasons given why they chose to use the TLC services. The main one was to offer online courses through the usage of a LMS. Another reason was to get help from the TLC to do program revision. Faculty also used the TLC services when they developed a new course and this held true especially for the new instructors. As well, faculty took advantage of the TLC's offering of Instructional Skills Workshops and seminars on using new technology in the classroom. Again, these results indicated that faculty were aware of the existence of the TLC and the services it offered. Also, most of the faculty learned about the TLC from their Program Head. Some heard about the unit during employee orientation as this event introduced the unit to new employees. Another source to inform faculty about the TLC was the Associate Dean of the school.

Regarding the estimate of the percentage of faculty who knew about the TLC services within a given school, the mean was 72.9%. However, for the entire institution, the mean estimate was 58.9% while the median was only 50%. These numbers indicated that there was a perception that there existed a high percentage of faculty who were not aware of the TLC services within the institution. When asked to provide reasons for not using the TLC services, one reason was that the faculty did not know what TLC could do for them. As for making the TLC better known within the institution, it was suggested that TLC workers should inform the faculty more about the services that they offer. Besides using e-mail, the interviewed faculty felt that the TLC personnel should meet with faculty in person more often to explain the services that they could offer to raise the awareness level. To have a bigger impact on the institutional community, many interviewed faculty felt that the TLC really needed to promote itself so that more faculty would become aware of its existence. Another suggestion was that TLC personnel needed to reach out to more faculty so that faculty could understand what services the TLC could offer to assist them with their curricular tasks. Faculty also suggested that the TLC needed to demonstrate what they could do to help the faculty

with their teaching. Finally, when the interviewed faculty were asked to provide their additional comments, many felt that the TLC needed to promote itself more than what they had been doing. Some faculty felt that the TLC personnel needed to make more contact with faculty so that the faculty would understand what the TLC could do for them. Results indicate that the TLC workers need to do more to raise the faculty awareness level of the unit.

Chapter 5. Discussion

There were three goals in my study. The first goal was to investigate the faculty awareness level of the TLC within the Canadian College. The second one was to uncover how innovative teaching ideas were being diffused within this HEI. Finally, the third goal was to investigate the perception of faculty (who were treated as clients) regarding the services of the TLC (that was considered as a service unit).

In this study, I administered a survey to collect data from faculty regarding their awareness level of the TLC and their sources of innovative teaching ideas. This survey was limited to faculty only because I was interested in finding out how much faculty knew about the TLC of this HEI and the sources from which they had learned about innovative teaching ideas. I also conducted interviews with fifteen faculty members from various schools within the HEI. During the interviews, I asked these faculty members about their awareness level of the TLC, and also if the TLC services had affected their teaching. I inquired about the sources of innovative teaching ideas and how the ideas were diffused as well. Furthermore, I questioned them about why some faculty would not use the services offered by the TLC based on their working experience at the HEI.

Once I collected the survey data, I used SPSSv23 to do a quantitative analysis of the data. As well, I transcribed all the interviews to look for themes (via coding) in the faculty's answers to my questions relating to the faculty awareness level of the TLC, the diffusion of innovative teaching ideas, and faculty's perception of the TLC's services.

The results indicate that the TLC needs to do more to raise the faculty awareness level of the unit. The relatively low level of faculty awareness of the TLC at this institution can be explained by Lewin's (1938) Force Field Analysis. To explain this finding, I will assign two groups of faculty to two different forces. I will assign the driving force to those faculty who wish to use the TLC services to improve their teaching and are willing to promote TLC and those administrators who support the TLC services. I will then assign the restraining force to those faculty who do not wish to use the TLC services and are not willing to promote the unit and those administrators who do not support the TLC services. At this time, since the driving force is equal to the restraining force, there is a low level of faculty awareness of the TLC and its services at this institution. When the forces are at an equilibrium, no changes will take place.

Lewin's (1947) Change Theory can also be applied to the current situation at this HEI. According to his theory, for the first stage of change (the Unfreeze stage) to occur, there must be 'a need to change' existing so that the status quo state will be disturbed. However, based on the collected data, there is no indication that faculty want to make any changes regarding the current TLC services offered. In this case, the status quo has not been disturbed by anyone at this institution. Therefore, no changes will take place since the first stage of change has never started. For the current situation to change at this institution, the majority of the faculty need to fully understand the impact of a TLC within a HEI and agree to do something about the situation.

5.1. Impact of a TLC within a HEI

If faculty need some help with their teaching (e.g., student assessment or lecture planning) or an online student needs some help with one of his/her courses, where will they go? The answer is: To the TLC. The purposes of a TLC are to help to develop/improve faculty's teaching abilities as well as to enhance the students' learning. The impact of a TLC on faculty and students is significant. Without the services of a TLC, many faculty and students may struggle with their educational endeavours. Many studies have shown that the FDPs offered by the TLC help to improve faculty's teaching as well as students' learning (Braskamp, Fowler and Ory, 1984; Doren, Flannery, Lombardi and Kato, 2012; Goldenberg and Parry, 1996; Rutz et al., 2012; Steinert et al., 2006; Stes, De Maeyer, Gijbels & Van Petegem, 2012). Bligh (2005) stated that "The principal purpose of faculty development is to improve practice. We use faculty development to manage change and to develop strengths and skills" (p. 120). FDPs are useful and will bring potential paybacks to faculty and their HEI. In their study, Braskamp, Fowler and Ory (1984) acknowledged that "If faculty development is attempted, the possibilities of mutual benefits to the faculty and the institutions will be enhanced" (p. 221). As mentioned in Chapter 2, there are major effects of FDPs on a HEI, its faculty and students. However, the source of these important FDPs is the TLC since TLC is the unit that typically offers FDPs to assist the faculty with their teaching and to enhance students' learning. The role of a TLC is crucial in a HEI. In their study, Atkins, Koroluk and Stranach (2017) confirmed that "Teaching and Learning Centres (TLCs) play a role in the professional development of faculty, staff and teaching assistants in higher education institutions" (p.

253). Therefore, using the services of a TLC within a HEI should be considered by both. The results of this study confirm the importance of the TLC as faculty have found the usefulness of the TLC's services and how those services have helped them with their teaching tasks. For this particular HEI, faculty agreed that the three types of services offered by the TLC have assisted them in different aspects of their curricular activities – teaching, assessing student performance, course development and program revision. While faculty agreed that the TLC services offered were important, they raised the concern of faculty awareness level of the TLC at this institution. They felt that the TLC needed to do more to “connect” itself with the faculty. The conclusion based on the interviews was that a limited number of faculty (i.e., only those faculty who have used the TLC services) seem to understand which services the TLC could offer while the majority of the faculty was not aware of the functionalities of the TLC at this HEI.

So why is the TLC not being recognized more? In the TLC's defense, as Lieberman (2011) explained, “Perhaps this lack of recognition lies partially with the center leadership, name of the centers, and the ones who craft the center's mission” (p. 62). Her explanation may be considered acceptable to some people. Another possible explanation is that there is a lack of promotion for the TLC within the institution, based on the comments of the interviewed faculty members. The lack of promotion of the TLC may possibly reduce the faculty's awareness level of the unit. If such awareness level is low, that may explain why the TLC is not well recognized by the faculty within the institution.

Another issue that arises from the lack of recognition for the TLC is the possibility that the unit is being perceived as under-utilized. If the TLC is perceived as being under-utilized, that may be a concern to the administrators because the situation may be viewed as “wasting” resources to some people within the institution. To avoid receiving complaints from these people, for political reasons, the administrators may go to the extreme by shutting down the TLC. Therefore, a low level of faculty awareness of the TLC has a potential serious implication to the unit. It is important for the TLC personnel to understand such implication and do something about the issue. For the TLC to be accessed more frequently by faculty, the TLC personnel need to address this situation and the faculty also need to make some changes to maintain the existence of the TLC.

5.2. Impact of Changes for Faculty

The world is changing and so are educational environments. Without changes in life, things would not improve, so change is necessary. In their study, Camblin & Steger (2000) stated, "Change, in many ways, is the engine that drives the academic enterprises of colleges and universities; and it is a cardinal responsibility of faculty to be the primary innovators and initiators of change in academe" (p. 1). I concur with this statement because I believe that faculty are the individuals who should make the changes in the educational environment so that their educational lives and those of their students will improve. They are also the people who will know best if those changes will work or not because they are the practitioners who interact with the students regularly.

As mentioned in Chapter 2, any changes to the current way of teaching will be a challenge for faculty – especially for those who have been teaching for a long time. For some long-time faculty, the TLC services are deemed unnecessary as these veteran educators have managed to solve their teaching problems on their own over the years. This is one of the reasons given by the interviewed faculty members why some of their colleagues do not use any TLC services. This change – regular usage of TLC services by faculty – will be a possible challenge for some faculty. For the TLC services to be used by the majority of the faculty on a regular basis within a HEI, faculty must go through the three stages as prescribed by Lewin (1947) for the change to happen. Lewin's (1938) Force Field Analysis can also be applied to further explain the change. If the majority of the faculty want to make the change, this driving force will prevail since the restraining force will become smaller and eventually the resistance will drop. When that happens, the change will become a reality.

As a long-time instructor myself, I am in favour of making changes. Although there are many challenges that faculty will face when they make changes, in the long run the efforts will be worthwhile. Once faculty have made the changes successfully, they will find that the quality of their teaching will improve and the students will learn better. For those dedicated educators, that should be a rewarding outcome.

5.3. How are the Innovative Teaching Ideas of the TLC Diffused within the Institution?

During the interviews, faculty members answered the question about how innovative teaching ideas of the TLC were diffused. More than half of the interviewed faculty claimed that no innovative teaching ideas were introduced by the TLC. There are a few potential reasons why there is a lack of innovative teaching ideas provided to the faculty from the TLC. First, the TLC personnel have not been able to do enough research on new teaching ideas due to the heavy workloads assigned to them. Similar to the problem that many faculty face, the lack of time is an issue for the TLC workers. Secondly, the TLC personnel may not have the necessary expertise in acquiring innovative teaching ideas from other sources since they may not have the opportunities to take on any professional development activities themselves to improve their knowledge. Studies have found that the lack of PDAs will hinder the teaching performance of faculty (Cordon et al., 2015; Hamilton and Brown, 2003; Hendricson et al., 2007; Levin-Sauberman, 2014; Wilkerson and Irby, 1998). This is no different for the TLC personnel. Three, it is possible that there exists a communications problem within the TLC as faculty have not been informed of any innovative teaching ideas through the proper communications channels within the institution even though in fact the TLC personnel have managed to find some innovative teaching ideas. If an improper or a less effective communications channel is being used by the TLC, faculty may not receive the information that they seek. Based on the collected data, this reason is highly probable.

Implications will exist when no innovative teaching ideas are being passed on to faculty by the TLC. First, the under-informed faculty will not be able to acquire any useful and helpful teaching ideas that will improve their teaching performance. As a result, the faculty may not be able to enhance their students' learning in their classes. This will have a significant impact on the institution as a whole. Second, the lack of communicating with the faculty will draw less interest from the faculty to the unit. Consequently, it is possible that the overall faculty awareness level of the TLC will drop – which may lead to less utilization of the TLC services by the faculty. If that happens, it may cause the administrators to consider shutting down the unit in the long run. This result should raise the concern for the administrators who supervise the unit. It is important for the TLC to help to diffuse useful, innovative teaching ideas within the

institution so that the faculty can benefit from those ideas which may in turn enhance the students' learning.

5.4. Diffusion of Innovative Teaching Ideas

Studies have shown that innovative teaching ideas such as PBL (Blumberg, Michael & Zeitz, 1990; Boud & Feletti, 1991; Eagle, Harasym, & Mandin, 1992; Johansen, Martenson, & Bircher, 1992; Kaufman, 1995; Tiberius, 2002) and CRS (Paschal, 2002; Siau, Sheng & Nah, 2006; Morerich & Moore, 2007; Yourstone, Kraye, & Albaum, 2008; Salemi, 2009) will help faculty to improve their teaching and students' learning. Based on the data collected, innovative teaching ideas come from many sources (e.g., Internet, faculty, TLC, library, conference) at this institution. It is a matter of how some of these ideas will get diffused within the institution.

If an innovative teaching idea becomes available and is perceived to have high relative advantage, as Rogers (2003) explained in his theory, this innovation will have a better chance of being diffused quickly. However, for this new idea to be diffused, a change agent also needs to exist. Rogers called the change agents "linkers". (Rogers, 2003, pp. 368-369) He also identified a seven-step sequence of change agent roles to show the complex function of a change agent (pp. 369-370). Ideally, this change agent should be a trustworthy faculty member who is willing to convince others to adopt this new idea. It is also possible that this change agent is an administrator whom the faculty respect. Based on the interviews with the faculty, there is a potential change agent at this institution – the Associate Deans from different schools. These individuals were mentioned several times when the interviewed faculty were asked about who introduced them to the TLC. And the interviewed faculty seemed to respect what their Associate Deans did to connect them with the TLC.

Barker (2004) stated that "Diffusion of Innovations theory shows that known and trusted opinion leaders in a group or community have tremendous influence with respect to the acceptance or rejection of innovations" (p. 131). In essence, this opinion leader (Rogers, 2003, p. 27) will do some marketing of the innovative teaching idea. Therefore, having such an individual will help to promote the new idea. If that happens, then it is possible for this innovative teaching idea to be diffused within a HEI. The change agent needs to convince the early adopters (called innovators by Rogers) to try out the

innovative teaching idea. Once that has started, it is possible that this new idea will be diffused throughout the HEI. Therefore, the existence of a change agent (who is also an opinion leader) is important for any change process to take place. In this institution, it appears that the Associate Deans from different schools can play the role of the change agent to assist the TLC to diffuse any innovative teaching ideas. If the Associate Deans do act as the change agent, the implication is that possible diffusion of new teaching ideas within the institution may happen. The question is: Will the Associate Deans take on the role of change agent?

While the existence of a change agent is necessary, there is also one other important factor. Of the five characteristics that will affect an innovation's rate of adoption as identified by Rogers (2003), besides complexity and observability, I would also consider trialability is a critical factor. For any innovative teaching idea, the factor of trialability may make a difference to the faculty. Robinson (2009) stated that "An innovation that is trialable represents less uncertainty to the individual who is considering it" (p. 2). I agree with his assertion because if faculty cannot try out an innovative idea first, they will not know how good or bad that idea is. This is especially true if the innovative idea relates to technology (e.g., a software or a teaching tool such as a wireless presenter). It is very important for faculty to have the hands-on experience to see the value of this new idea. As Spacey (2017) suggested, "Any product or service that has the ability to wow customer benefits greatly from trialability" (p. 1). In this study, the result indicated that the Diffusion Theory did apply within the institution since certain innovative teaching ideas (e.g., the usage of LMS, clickers) did get adopted, especially when the faculty had the chance to try out the new idea. The implication of allowing faculty to try out new teaching ideas will give them the opportunity to explore those ideas as well as potential promotion of such ideas, which in turn will help to diffuse those ideas. In my opinion, trialability is a key to the potential diffusion of any innovative teaching idea.

The diffusion of innovative teaching ideas will lead to many cycles of changes as long as new ideas appear. Once a new innovative idea has been accepted, it will eventually fade away. Then another innovative idea will come along, and the cycle continues. In an ideal situation, innovative teaching ideas should be introduced by either the TLC personnel or faculty so that the supply of such ideas will remain constant. Of course, many of the innovative teaching ideas nowadays relate to technology. As a

result of this technological trend, the TAM also needs to be applied in order for any innovative technological teaching idea to become adopted. The two main components of TAM are: (1) perceived usefulness, (2) perceived ease of use. Without one of these components, it is highly unlikely that the new technology will be accepted. TAM is discussed below.

5.5. Technology Acceptance Model (TAM) Revisited

As mentioned in Chapter 2, many studies have shown that Davis' (1986) TAM has been applied in explaining the adoption and usage of new computer technology (Gefen, Karahanna & Straub, 2003; Koufaris, 2002; Lederer, Maupin, Sena & Zhuang, 2000; Legris, Ingham & Collerette, 2003; Pavlou, 2003; Pikkarainen, Pikkarainen, Karjaluoto & Pahlila, 2004). The two main components of TAM are: (1) perceived usefulness, (2) perceived ease of use. Without one of these components, it is highly unlikely that the new technology will be accepted. For any new technological teaching tool to be introduced by the TLC, such tool must have these two characteristics. A good example of such tool is the CRS (called the 'clicker' later) used by the students to select their pre-specified answers for each question given in the classroom.

Based on the interviews, it seems that faculty are willing to adopt innovative teaching ideas as long as those ideas are useful and easy to use (i.e., it will not take up a lot of time to learn its usage). If the TLC were to introduce any new technological tool for teaching purpose, its staff would need to ensure that this new tool will be perceived as useful and easy to use. Otherwise, the faculty may not accept this new tool even though this new tool may in fact be very useful for teaching purpose. Besides the application of TAM to any innovative technological teaching idea, the TLC personnel also need to understand the behaviours of the potential adopters (i.e., the faculty) of such ideas from a service-unit perspective.

5.6. Meeting the Conditions

For this change (i.e., the regular usage of TLC services) to happen, two conditions need to be met. First, the faculty awareness level of the TLC needs to be high. If the majority of the faculty is not aware of the TLC's existence and the services that the TLC can offer, no changes will happen. Therefore, the TLC needs to do promote

itself to raise the faculty's awareness level. The TLC needs to present its services to faculty and show them how the TLC can help the faculty with their teaching. Second, a change agent, as suggested by Rogers (2003), needs to be present. It may even be necessary to have one in each program unit. This change agent is the catalyst to the entire change process. This individual needs to start the driving force for the change and to push forward by promoting the TLC services to the faculty within the HEI. The more this change agent can communicate with faculty about the TLC services, the higher the faculty awareness level will become. Furthermore, this change agent needs to be an opinion leader as identified by Rogers (2003) in order for others to accept the potential change. Van Eck, Jager and Leeflang (2011) found that "opinion leaders, in addition to having a more central network position, possess more accurate knowledge about a product and tend to be less susceptible to norms and more innovative" (p. 187). For an innovative teaching idea to be diffused, an opinion leader is needed.

Other studies (Burt, 1999; Cho, Hwang and Lee, 2012; Valente and Davis, 1999; Valente and Pumpuang, 2007) showed that opinion leaders have great influences on other people's decision on adopting products/services. An opinion leader can clearly affect the adoption decision of an innovative teaching idea within a HEI. There are two possible candidates for a change agent. This change agent should be a long-time faculty member who has earned the respect of his colleagues. Another possible candidate could be an administrator whom most faculty will listen to and respect, although this is rare. Once the above required conditions have been met, there is a good chance that the change will happen.

According to the data collected, innovative teaching ideas usually come from the Internet (ranked first) and peers to faculty (ranked second), followed by the TLC at this institution. If these new ideas have been shown to be valuable to faculty, there will be possible changes within the HEI. However, such changes may not be easy. Cox (2004) identified the difficulties of changing an educational institution to become a learning institution. However, he maintained that such change is good for both faculty and students. As well, due to many internal factors (such as politics and faculty interests) and external factors (such as government funding and student demographics change), the TLC of a HEI faces many ongoing challenges. This is why the diffusion of innovative teaching ideas needs to happen so that faculty can take advantage of these good ideas to improve their teaching and help to enhance the students' learning.

5.7. How do Faculty View the Services of the TLC as its Clients?

Based on the data collected, most of the interviewed faculty (i.e., the clients) provided positive reviews on the services provided by the TLC (i.e., the service unit). From a client's point of view, many faculty members reported that the TLC has served them properly as the TLC personnel manage to provide the appropriate information and assistance that the faculty are looking for. This is important to the TLC because providing good services to the clients means two possibilities:

1. Existing clients will return for more services in the future.
2. Existing clients may promote the unit to others which may result in new clients coming to the unit for services.

It seems that the major complaint from these faculty members is the way the TLC communicates with the faculty within the institution. As clients, faculty members reported that they have not been well informed by the TLC regarding any possible new services or special events from this service unit. The implication of this lack of communications by the TLC will lead to less faculty awareness of the unit that in turn may lead to lower utilization of the services offered by the TLC.

5.8. Looking at a TLC from a Service Unit Perspective

Traditionally, the majority of faculty and administrators have looked at a TLC as an educational unit that serves faculty, staff and students. However, given the fact that financial constraint has become a critical factor for the operations of a HEI, it is time to look at a TLC as a service unit and its users (i.e., the faculty) as clients. By looking at a TLC from a service unit-client perspective, perhaps administrators, faculty and TLC workers can re-evaluate their positions in relation to the TLC and thus be able to make the relative adjustment in this currently challenging educational environment. For this discussion, we will limit the clients to faculty only.

For the administrators, if they can shift their viewpoint of a TLC being a purely cost centre and treat it as a service unit, they may be able to justify the cost of running this unit to their board of directors. Since many TLCs conduct FDPs, administrators can determine the estimated monetary impact of these FDPs by using the Return on

Investment (ROI) process. In their study, Bothell and Henderson (2004) used this process to calculate the ROI based on student retention in a FDP. They stated that “ROI analysis is an effective, well-grounded analysis technique that can be used as a formative assessment tool to show the return of a program and highlight possible areas of improvement” (p. 68). By using this tool, administrators can justify their usage of funds on running a TLC to the board.

For the TLC staff, they have to shift their viewpoint of the faculty from educators to clients. They have to show their clients what services they can offer to make the lives of the faculty easier and more effective. As long as the TLC workers understand what services their clients want, hopefully, the unit will be able to satisfy the needs of its clients with the condition that they offer *quality* services. They will also need to do marketing to promote the unit so that their clients know what services they can offer.

In their study, Neal and Peed-Neal (2010) stated that “applying marketing principles to faculty development can yield highly successful results, as many nonprofit organizations have learned” (p. 102). They suggested the use of marketing strategy to develop partnership with faculty so that they will possibly participate in the FDPs. Similarly, Kuhlenschmidt (2010) asserted that “Marketing is a critical component of a successful center” (p. 269). Chism (2011) also suggested faculty developers to market themselves and the TLC (p. 56). I concur with the suggestions of these researchers. There is no doubt that their suggested idea of marketing is very different from the traditional way of announcing the existence of a TLC. Furthermore, Neal and Peed-Neal (2010) pointed out the normal, negative perception of educators about marketing. They stated that “In Academia the words *marketing* and *promotion* often have distasteful connotations; we associate them with exaggerated claims about products advertised in the mass media” (p. 102). That statement is very true since I have encountered some long-time faculty members who openly object to the idea of marketing. To these faculty members, they somehow relate marketing to sales, which is a different business function. Faculty must realize that times have changed and they must adjust to the new way of doing things in a HEI.

Speaking from personal experience, I have implemented many of marketing events throughout my career as a department chair/program coordinator. There is absolutely nothing shameful or negative to promote what your unit can offer. Long-time

faculty have to accept the fact that the educational environment has greatly changed over the years. It is totally acceptable if the TLC personnel carry out marketing events to promote their unit. As Sashikala (2007) said, “marketing means the wide range of activities involved in making sure that you are continuing to meet the needs of your customers and getting value in return – actually, marketing means winning the warfare” (p. 48). To sustain the TLC’s survival, its personnel must do some marketing.

For the TLC workers, the disadvantage of not promoting their unit is that potential clients will not know what the TLC can offer and thus most likely will not use their services. As a result, due to low utilization or under-utilization, the TLC will either be shut down by management or will barely survive with a lot of uncertainty about its future existence. For those TLC workers who are in that position, I am sure that is not a good feeling for them. However, by marketing itself, at least the TLC has tried to point out its existence to the clients (i.e., the faculty). If the TLC does a good job in promoting its services, maybe the clients get attracted and start to utilize its services. Whereas by not doing any marketing at all, it is certain that a TLC will have minimal presence in a HEI and hence there is a possibility that it may not exist for long.

For the faculty, they need to act as if they are clients of the TLC. They should take advantage of what the TLC can offer to improve their teaching. They should access the TLC often since their services are free. They should let the TLC know if they like the services offered or not. However, the faculty also need to change their mindset regarding the TLC. The educational world is constantly changing and the TLC can offer innovative teaching ideas to improve the faculty’s teaching and students’ learning. As educators, faculty should not limit themselves to their own abilities to do the work. They should consider using the TLC services to make their teaching tasks easier. If the faculty are willing to give the TLC a chance, they may gain some rewards (e.g., marking student tests faster, receiving compliments from their students). For a TLC to become successful or more productive, administrators, faculty and the TLC personnel all need to do their parts. If each entity is willing to contribute to make the TLC become a more viable part of the HEI, everyone will win in the long run.

5.9. Considerations for All Parties

Through the analysis of the qualitative data for this study, here are a few things that the administrators, faculty and the TLC workers may consider:

1. Faculty are usually very busy with their teaching activities. They will also need to participate in other curricular activities (e.g., meetings and committee work). They have little time to learn about new innovative teaching ideas. When possible, they prefer to learn innovative, good teaching ideas that are *useful and easy to use*.
2. Due to the limited time that many faculty have, it is safe to assume that many of them prefer to see innovative teaching ideas presented to them instead of having to do the research themselves. Therefore, the introduction of innovative teaching ideas to the faculty by the TLC is crucial. This type of behaviours is no different from normal consumer behaviours. Most clients would prefer a company to sell them products and services (i.e., a push approach) while fewer people would want to do research on their own simply because they want to save time to do other things in life. If the TLC wants the faculty to adopt any innovative teaching idea, they must approach the faculty and “sell” this new idea to them. When the faculty do not need to do their own research, they may find the innovative teaching idea more receptive for adoption, especially if the new idea is useful and easy to use.
3. Ongoing contact with clients is important in the business world. Results of this study have shown that the TLC did not contact faculty as much as faculty would prefer, even for those who have been using the TLC’s services. There is a gap in the communications process between faculty and the TLC. Faculty suggested that the TLC should notify them of the TLC events regularly so that everyone knows what services are available from the TLC. From a service unit-client perspective, this is similar to a company that uses promotional avenues to inform its clients about its new products and services. It is up to the company to decide how much marketing is needed in order to attract the clients. As long as the clients are informed by a company on a regular basis, there is a good chance that the clients will be interested in using the products and services.

The TLC workers need to stop being passive and simply wait for the faculty to show up with questions for them. They need to be pro-active. If the goal of the TLC is to assist faculty in improving their teaching, then the TLC workers must elevate the faculty awareness level of the TLC so that the faculty can find out what the unit can do for them. This is just a matter of communications and marketing is one form of communications to send out certain messages to others. Perhaps the TLC workers can try to use social media as a way to do their marketing. Sullivan (2008) identified the development and use of social media is one of the top three trends for marketing in 2008. According to her report, both big and small businesses used Facebook to attract their potential customers. It may be worthwhile for the TLC personnel to follow suit by connecting with the faculty via social media instead of simple e-mail. The key is to make the unit to be known to the faculty.

As more faculty become aware of the TLC and its functionality, they can rely more on the services that the TLC provides, thus improve upon pedagogical and communication channels which ultimately have the potential of improving educational delivery within the HEI. For those faculty who take advantage of what the TLC offers, they will benefit from using this unit's services as confirmed by many studies.

4. Faculty want positive experience from the TLC. This is no different from a client who wants to be treated nicely by a company. Therefore, TLC should train its workers to provide appropriate client services to the faculty. If faculty receive good experience, most likely they will tell their colleagues about it (i.e., the word-of-mouth effect) and it is also possible that they will promote on behalf of the TLC. That is a powerful channel for free marketing. It will certainly help the TLC to become more known to the faculty if that happens.
5. Faculty need to accept changes in order to improve their own teaching and their students' learning. Long-time faculty should not be complacent and should strive to improve their teaching. Faculty must also remove their negative thought of using the TLC services implies that they are bad or ineffective instructors. As well, they should not let peer pressure affect them. A dedicated educator will always try his/her best to teach his/her students by using the best approaches possible. By willing to accept innovative teaching ideas that will improve his/her teaching (i.e., accepting changes) and his/her

students' learning, he/she will become a better educator. As a result, his/her improved teaching will help his/her students to learn more. If that happens, it will be a win-win situation.

6. Management support of the TLC is very important. If management runs a TLC simply for political reasons, then the unit may not get the best support from the administrators. There are reasons why management may not support the TLC. One of them is that administrators are not aware of their faculty's need of professional development. Depending on the union's collective agreement at a HEI, in the case where senior faculty members do not have to do an annual performance review, it is impossible for the administrator to find out that his faculty members do need help in their teaching unless he/she receives complaints from the students. Murray (2002) pointed out that "... administrators of faculty development programs are oblivious to the real needs and desires of faculty" (p. 94). The lack of awareness of an administrator will lead to no support of FDPs for his faculty members which in turn will lead to no support of the TLC. The second reason is administrator apathy, as introduced by Arreola (1983). The administrator is not interested in the success of FDPs at all. Arreola (1983) maintained that "If the administration is apathetic toward or actively against the whole program, it will not succeed" (p. 84). If an administrator adopts this attitude, no support will be given. And in turn, there will be no support to the TLC. Of course, it is also possible that the TLC may not be a priority to the administrators. Having management support for the TLC is beneficial to administrators for two reasons: (1) faculty will feel that management is on their side and thus may cooperate more when potential conflicting situations arise within the HEI; (2) TLC services will be used more by faculty – the administrators may be able to justify the existence of the TLC. In this study, the Associate Deans did their job to promote the TLC as their introduction of the TLC to faculty were mentioned multiple times during the interviews. Although the Associate Deans belong to lower management, their willingness to support the TLC was clearly identified by the faculty and these faculty showed their appreciation of the support.

For those administrators who are willing to provide support to the TLC, their job may not be easy because they will probably need to go through some sort

of an organizational change. Experienced administrators all know that making an organizational change is not an easy task. However, these administrators need to realize that the change is worthwhile because the result will be rewarding.

7. Management support of faculty to improve themselves is equally important. Since many faculty are busy with their curricular activities and have little time for PD events, administrators may want to consider giving faculty incentives to improve their teaching. Administrators may want to consider giving faculty time release (as suggested by some interviewed faculty) so that they can take on some FDPs to learn more about teaching and learning. By doing so, administrators may be able to improve a better working relationship with faculty in the long run while faculty get to improve their teaching and their students' learning. If that becomes a reality, it will be a win-win-win situation for all parties.
8. Faculty should try to use the services offered by the TLC when possible. They may benefit if they participate in the faculty development activities offered by the TLC.

Besides providing support to the TLC and faculty, administrators also need to fully understand the existence of a TLC and its purposes. If an administrator can run a TLC as a business unit, he/she may be able to achieve some success in optimizing her resources. He/She also needs to be a visionary so that he/she can see the future of the TLC. However, being a visionary leader is not enough to guarantee the success of the TLC. To be successful, a leader must also understand how to make changes in an organization. Mundy, Kupczynski, Ellis and Salgado (2012) pointed out that the HEIs are being forced to alter the way they run their operations. They stated that "Institutions of higher education are being pressured to change the way they do business. Doing business means being in the business of educating students" (p. 3). I agree with this statement. The educational landscape has changed over the years due to technological changes as well as policy changes in governments. Many HEIs are now being run as if they are businesses because of the financial constraints set by the governments. HEIs need to operate as if they were business organizations and treat students as their

clients. (This statement may be difficult to accept for some old school educators!) Part of running a successful business is to be able to make changes and hopefully those changes will eventually lead to some kind of a reward (either monetary or psychic). If HEIs cannot run like businesses do and cannot make changes accordingly, they will not be competitive or become successful. One of the changes for the HEIs is the development and implementation of FDPs, which is one of the functions of a TLC. Another task that an administrator must do is to make sure that a TLC does marketing to raise the faculty awareness level of the unit so that faculty can access the TLC services.

As long as administrators, faculty and TLC workers are willing to accept the above suggested changes, all parties will benefit from these changes. Many studies have shown that positive changes in a work environment will benefit everyone involved. In the case of the TLC, that will confirm such scenario. As Smith (2011) stated, “Quality and change go hand-in-hand” (p. 111). By changing the operations of a TLC to make it like a business so that faculty can use their services to improve the quality of their teaching, that will also help the students to improve the quality of their learning. When that happens, the reputation of the HEI may also improve. This is a simple chain reaction. If that happens, everybody wins. Furthermore, Truong, Juillerat and Gin (2016) concluded the following:

Given today’s new higher education reality, CTL must undergo their own transformation, rethinking how they approach faculty development in new, creative, and innovative ways. The traditional faculty development paradigm of “if you build it, they will come” has proven to be insufficient, inefficient, and costly in light of today’s resource-constrained and technology-enabled culture. To remain relevant and viable, CTL must provide quality service efficiently and within or under budget. (p. 194)

Their conclusion brings up the cruel reality of fiscal constraints in the educational environment now. But they also bring up a key term used in a successful business – “quality service”. This is what customers want from a business. Therefore, the TLC workers need to improve their services in such a way that their clients will view them as high quality service providers. By doing so, the clients will return. Of course, the old saying of ‘It is easier to say than done’ is always true. It will take a lot of efforts for all parties involved to make the proposed changes work. Based on my personal work experience in the educational arena, it will take a long time for changes to become

materialized in a HEI because of bureaucracy and politics. For those people who wish to make changes, they need to be patient and do not give up.

5.10. Limitations

This research has the following limitations:

1. The sample size for the survey needs to be larger even though each school is represented in the study. The number of respondents was 228 out of a possible 1700. That was only a 13.4% response rate. Also, most of the respondents are full-time instructors (61.8%). That sample size may not reflect the opinions of the entire teaching population since not too many part-time instructors participated in the survey (only 37.7%).
2. This research was limited to only one HEI. The results may be different if data were collected from multiple HEIs and/or different types of HEIs (e.g., universities, colleges, technical institutions) due to different contexts and environments.
3. The number of interviewees was limited to only 15 due to time constraints.
4. Due to the sensitive nature of a unionized work environment, all of the evaluative questions originally proposed were not allowed in the survey nor in the interview. The results may be different if those evaluative questions were allowed. At the least, the results from those evaluative questions may be able to provide the TLC with some useful data on their current operations and thus they may be able to make certain changes deemed necessary.

5.11. Future Research

This study focuses on the faculty awareness of the TLC within a HEI and how innovative teaching ideas are being diffused within this institution. As well, this study looks at the TLC as a service unit and the faculty as clients. Using a service unit-client perspective to analyze the results in this study is very different from how most of the past studies analyzed the TLCs.

Future research may also focus on how a TLC can attract more users to the unit by using different marketing strategies (e.g., using social media, using e-mail, face-to-

face meeting with faculty). This type of research will help the TLC workers to understand the importance of marketing and the aspect of running the TLC as a service unit.

After looking at the results, I have realized that some of the interviewed faculty were not impressed by the services offered by the TLC. It seemed to me that there was a communications gap between the TLC and some of the faculty more than the competency of the TLC workers. Perhaps a study can be done on asking the TLC workers about their unit and how they see the unit and themselves in relation to the faculty within a HEI. The TLC should do some investigations on their own workers to get their feedback. I would call this action a unit's "self-reflection" instead of a unit review. This study may reveal more about how a TLC should be operated as well as maintaining a relationship with the faculty.

One other possible study is to investigate if there is an increase in TLC usage for those faculty who are given PD time to learn more about teaching. This study may provide an insight to the relationship between faculty PD time and usage of the TLC. The administrators may benefit from the results of this type of study. During my interviews, one of the suggestions was to provide PD time to faculty so that they could use the TLC services to learn more about teaching.

Finally, a study on management support could be done to see if there is a relationship between an increase in TLC usage for those faculty who receive administrative support, e.g., release time, financial benefits. This study may show administrators how they can help faculty to improve their teaching as well as how they can allocate their resources to the TLC.

5.12. Conclusion

This study identified certain changes that this particular TLC could implement in order to become a more effective unit within the HEI. However, this case study also uncovered many common issues that TLCs face. Administrators, faculty and TLC workers must work together to make the necessary changes so that the desired outcomes will benefit everyone – administrators, faculty, TLC workers and most importantly, the students.

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Appendix. Survey and Interview Questions

Purpose

The purpose of this survey is to determine faculty's awareness and perceptions of the Teaching and Learning Centre (TLC) at this institution. All the information collected will remain confidential at all times. You are free to skip questions if you wish. (Note: Please do not self-identify or refer to other people in this survey at any time.)

Demographic Information

1) Your school:

- School #1
- School #2
- School #3
- School #4
- School #5
- School #6

2) Your department:

3) Your work status:

- Full-time instructor
- Part-time instructor

4) Number of years of service at this institution: _____ years

5) Gender:

Male

Female

Other

Level of Awareness of TLC

6) I know that the TLC exists.

Yes

No

Unsure

7) I know where the TLC is located.

Yes

No

Unsure

8) I know the functions of the TLC.

Yes

No

Unsure

Usage of the TLC Services

9) I have used the services of the TLC.

Yes

No

Unsure

10) Would you consider using any of the services of the TLC in the next academic year (2016-2017)?

Yes

No

Unsure

11) Where do you go to look for innovative educational practices to enhance your teaching?

If you agree to do a follow-up interview, please send me an e-mail and you will be contacted very soon.

Thank you for your participation.

Introduction: The purpose of this interview is to gain a more in-depth understanding of the TLC.

Interview Questions

1. (a) How long have you been using the services of the TLC?
(b) How many times have you used these services?

2. Why did you choose to use the services of the TLC?

3. How did you know about the TLC at the beginning?

4. (a) Which services from the TLC did you use? Faculty services? Technology Support? Consultation?
(b) Can you elaborate on your usage of the service?

5. (a) How often do you currently use the services of the TLC?
(b) During which time period of the school year do you use the services the most?

6. Which types of innovative ideas does the TLC use to assist the faculty with their teaching and learning?
(a) How did you find out about these ideas?
(b) Have you implemented any of these ideas in your teaching?

7. To what extent did the service(s) you received change how you approach your teaching?

8. How does the TLC make faculty aware of its innovative ideas?

9. What is your estimate of the percentage of faculty who know about the services of the TLC?
(a) In your school?
(b) At this institution?

10. Can you provide any reason(s) why some faculty choose not to use the services of the TLC?

11. What do you think the TLC needs to do in order to make itself better known in this institutional community?

12. What do you think the TLC needs to do in order to have a bigger impact on this institutional community?

13. Do you have any other comments you would like to share about the TLC?