An Exploratory Study about the Role of Experiential Learning for Developing Professional Skills at Higher Education

Abstract
This study explores the learning experiences of postgraduate students pursuing master’s degree in higher education. The assessment students enrolled in the course “Application of Computer in Research” observed through semi-structured observations. These observations contained 16 weeks (4 days a week). The observation tool was validated through five experts’ opinions, and a mock observation was conducted in order to ensure the reliability of the tool. The researcher deeply observed the students’ learning experiences daily by tasks, activities and discussions in which they were involved by the teacher—the analysis procedures controlled through coding, memos and themes generation. The study findings revealed that experiential learning provided students with some important skills that enhance their learning in a better way. The study contributed to the field of education at a higher level than postgraduates might be handled through active learning because active learning may indulge new visions, ideas for creative work and transferring those ideas through reflection by involving students in the activities in which they do the tasks by themselves.

Key Words: Experiential Learning, Learning Experiences, Postgraduates, Active Learning, Higher Education, Practical Approach

Introduction
Experiential learning, as defined by Kolb (1984), is the sort of learning which is attained through utilizing experiences specifically in sustaining the teaching-learning procedure. The connection-making of practical work with academic life at higher education is perceived as a crucial element in the development of high order skills (Clyde, Floyd, & Walker, 2004). Experiential learning theory (ELT), as Kolb (1984) acknowledged, a most pertinent theory as it gives pure basics for learning to occur in natural settings.

How university students make their experiences enrich enough so that they may utilize them well in educational premises, one must listen to them carefully and estimate their role in the learning. Kolb (1984) argued, “Learning is the process whereby knowledge is created through the transformation of experience” (p. 38). University students are given a unique chance in the shape of availing hands-on experience in their relevant field of study; when utilized in combination with what they have learnt in the classroom, experiential learning may help in enriching their learning in vibrant ways (Hall-Hertel & Volchok, 2015). In the words of Kolb (1984), experiential learning theory makes a connection among individual experience, career and learning.

The present study may provide important evidence concerning university students’ learning experiences through their positions and how their work contributes to their personal and professional growth. In order to make awareness in their roles, the university students may create a meaningful and understandable conversation with faculty members to transform responsibilities where it is needed. The research may provide understanding to faculty members in order to know students’ inside and outside classroom learning experiences, coping with flexible strategies and provide guidance. For the teachers who provide guidance to their students in the field of research, the study may also be beneficial for them in order to get awareness regarding important issues which may become barriers in the learning experiences of students. Faculty members may avail a perception through the study...
that learning possesses a holistic position of variations in the mode of knowledge and behaviour in the world.

Learning, according to Kolb (1984, p.31), “involves the integrated functioning of the total organism – thinking, feeling, perceiving, and behaving”. A theory consisted of experiential learning may take all mentioned elements into account for processing information into meaningful channels based on students’ previous understanding. Moreover, Kolb’s experiential learning theory (ELT) (1984) emphasize the transformation of learning as a long-lasting process, and this postulate depicted the significant value of the knowledge provided in the classrooms may also be connected to the field of work and other life routines outside the educational settings. Various researchers also added a valid stance into Kolb’s statements that learning may not be depended upon merely in classrooms; in fact, several students-development theories portrayed that occasions provided outside the classroom setting may enhance the learning process in a better way (Astin, 1984; Kuh, 2001; Tinto, 1993).

A transformation of progress between the individual and the atmosphere depends upon learning (Kolb, 1984). As a matter of fact, the experience term in experiential-learning theory contains twofold meanings; one is purely related to subjective and another objective, a former is relevant to personal rendition, whereas the latter is relevant to environmental and concrete traits. “These two forms of experience interpenetrate and interrelate in very complex ways” (Kolb, 1984, p. 35). Kolb additionally stated that individual and environment are both interlinked, and their interaction may create commendable variations in behaviour and learning. “Learning in this sense is an active, self-directed process that can be applied not only in the group setting but in everyday life” (Kolb, 1984, p. 36).

The last but not least statement is that learning is the only element that may create new knowledge “Knowledge is the result of the transaction between social knowledge and personal knowledge” (Kolb, 1984, p. 36). Kolb and Kolb (2005) maintained experiential learning theory (ELT) as a social rehabilitative method where learning is refashioned through direct experiences. “To understand knowledge, we must understand the psychology of the learning process, and understand learning; we must understand epistemology – the origins, nature, methods, and limits of knowledge” (Kolb, 1984, p. 37). Learning contains the importance of “process”, and experiential learning theory encircles a holistic picture where understanding the process maintain more worth instead of concentrating on results or outputs. These postulations comprised of various fields that describe the ELT of Kolb.

Experiential learning theory (ELT) hold two major contemplations; one emphasizes how experience is grappled through ideas or concepts (abstract-conceptualization) into the tangible state (Concrete-experience), where Kolb identified concrete-experiences centred on feelings and emotions more than thinking. “The person with this orientation values relating to people and being involved in real situations, and has an open-minded approach to life” (Kolb, 1984, p. 68). He further utters that students in the process of abstract-conceptualization (A.C.) stress upon reasons and ideas, and these pupils normally may try to display an organized planning structure and use quantitative procedures whereas others contemplate on how experience transcends towards reflection. Reflective-observation (R.O.) emphasize students keep an eye fix to the happenings where active experimentation (A.E.) may enable them to perform in a better way. Pupils who choose reflective-observation (R.O.) alignments focus “on understanding the meaning of ideas and situations by carefully observing and impartially describing them” (Kolb, 1984, p. 68). Reflective-observation (R.O.) students may give worth to knowledge situations from various dispositions. Active-experimentation (A.E.) orthodoxy may include active participation in activities comprised of observations in which students accomplish tasks, and “they also value having an influence on the environment around them and like to see results” (Kolb, 1984, p. 69). However, every alignment may be apparent in different occasions or situations but also stimulate students to makeover their learning emplacement outside their easiness. The preferable learning procedures may occur when students pass through each mode of experiential learning (Kolb, 1984; Kolb & Kolb, 2005; Loo, 2004) “Experiential learning is a process of constructing knowledge that involves a creative tension among the four learning modes that is responsive to contextual demands” (Kolb & Kolb, 2005, p. 194).

In the words of Loo (2004), the learning phase auspicates from concrete happenings or experiences and reflects upon the basis of observation, and then reflections are connected into new concepts or ideas which may affect one’s viewpoints or upcoming occasions in the form of active participation, and these learning phases are created by Kolb (1984) according to the need of students’...
choices. These learning phases are comprised of; adjustment, merging, absorption, and resembling. “In using the analytic heuristic of a two-dimensional learning-style map, it is proposed that a major source of pattern and coherence in individual styles of learning is the underlying structure of the learning process” (Kolb, 1984, p. 76). These learning phases may process in the coordination of how learning occurred and how it transcends as above discussed through the four alignments. The performance of each learning phase depends upon the experiential learning theory (ELT) continuums.

Kolb and Kolb (2005) proposed that the northerner’s sturdiness dwell in “deep involvement while being comfortable in the outer world of action and the inner world of reflection” (p. 197). He easterner is normally strong in thought and reflection but has trouble applying this into action (Kolb & Kolb, 2005). The southerner is not commonly in touch with their feelings but is comfortable when applying analytical concepts (Kolb & Kolb, 2005). Kolb and Kolb (2005) explained the westerner has learning strengths “that are informed both by conceptual analysis and intuitive experience” (p. 197). The balancing learning style incorporates the four original learning styles: A.C., C.E., A.E., and R.O. These learners “are more adaptively flexible learners” (Kolb & Kolb, 2005, p. 198). The nine learning styles respond to a common criticism of ELT, “the tendency to treat the four learning styles as four categorical entities rather than continuous positions on the dimensions of AC-CD and AE-RO” (Kolb & Kolb, 2005, p. 198).

As an extension of learning styles, learning space is described as “transactions between the person and the environment” (Kolb & Kolb, 2005, p. 199). ELT’s learning space is based upon the work of John Dewey (1938), Bronfenbrenner (1977a, 1979b), Lewin 1951, & Vygotsky (1978). “The ELT learning space concept emphasizes that learning is not one universal process but a map of learning territories, a frame of reference within which many different ways of learning can flourish and interrelate. It is a holistic framework that orients the many different ways of learning to one another” (Kolb & Kolb, 2005, p. 200). Clyde, Floyd, and Walker (2004) described the importance of experiential learning in higher education – both inside and outside of the classroom. “Experiential education provides important linkage that could open doors for many student affairs practitioners who want to make a difference and collaborate with academic colleagues in the delivery of meaningful student learning programming” (Clyde et al., 2004, p. 102).

The above-discussed statements and learning styles additionally elaborated Kolb’s words, “Learning is thus the process whereby development occurs” (p. 132). Henceforth, three-level of growth and development is toughened by an individual: attainment, specialism, and assimilation. Alteration among the levels is not a clear process; hence where students need it, they may proceed with any selective element while staying constant in others (Kolb, 1984).

Experiential learning theory may be employed in various styles at the higher education level. The adjustment learning style mainly defines pupil matters concerning administration/consultants (Alsandor, 2005; Forney, 1994; Garland, 1985). In order to avail deep understanding regarding pupil matters related to administration/consultants, Forney (1994) conducted research, and her findings revealed the model learning style among the participants was that of adjustment “The high representation of students classified as accommodators points to a need for program faculty to emphasize the link between the academic and experiential aspects of the field” (Forney, 1994, p. 342).

Clyde, Floyd, and Walker (2004) endorsed “experiential education provides important linkage that could open doors for many student affairs practitioners who want to make a difference and collaborate with academic colleagues in the delivery of meaningful student learning programming” (p. 102). Moreover, experiential learning theory (ELT) is effective when implementing direction, pupil-guidance services, vocation improvement, staff advancement (Evans, Forney, Guido, Patton, & Renn, 2010), programming in pupil matters (Lea & Leibowitz, 1986), leadership improvement (Guthrie & Jones, 2012), and veracity improvement (Saunders & Butts, 2011).

Hall-Hertel and Volchok (2015) utilized Kolb’s experiential learning as a basic piece to their approach to working with doctoral-level students, particularly to cultivate what students are learning within the classroom. Gimbel and Cole (2009) also discussed that utilization of a hands-on learning approach with postgraduate students enable them to associate with faculty throughout their degree program may reveal better outcomes at higher education. Kolb (1984) emphasized that experience is the primary brick in making the building of learning, and a theory based on experiential learning may
provide an acceptable structure to discover the postgraduate student’s experiences related to their academics at higher education.

Kolb’s model of experiential learning may better be presented through postgraduate’s learning experiences within which they may reveal it into a tangible form from abstract ideas by reflecting upon it till generalize them into their lives in order to get better results (Kolb, 1984). He also asserted that “learning is the process whereby knowledge is created through the transformation of experience” (p.38). This statement is valuable for the students of higher education in terms of obtaining hands-on experiences while instantaneously accomplishing subject-work towards their degree.

Nationally, the enrolment in postgraduate education proceeds to avail strength and affluence. Borchert (1994) spill light on the worth of postgraduate education in the USA: Master degree in the USA today has a vibrant, energetic and valuable part of Graduate education. It also plays an impressive role in fulfilling societal requirements and also for the professional workplace. The Council of Graduate School and Educational Testing (2010) supported that “now is the time to address and understand the value of graduate education” (p. 1). Indeed, miscellaneous causes enunciate the increment in postgraduate enrolment and admission. In order to make advancement in the economy nationwide, higher education degree holders may be beneficial in opening new gates in the job market. Postgraduate degree holders may make tremendous money throughout their life span and have a lower rate of unemployment than those of bachelor’s degree. With the increment of undergraduate programs, teaching/research assistants may be recruited to help with instructions and assessment, and also helpful in advising and programming at administration side The Council of Graduate School and Educational Testing (2010).

Kolb’s ELT model provides a structure for the current study due to its sound emphasis on having experiences as the focal point for learning. The researcher may avail knowledge through learning experiences of higher education students, how learning may occur in unusual circumstances or in traditional settings. Researches may ensure the statement that graduate students’ experiences offer the foundational structure for the students’ matters who are being prepared for the work after having a degree. Higher education may include an emphasis on the state that graduate learning experiences are the vital point for their advancement in learning. Their requirements, problems and experiences are a matter of facts for the educators, managers and consultants and policy-makers as they proceed with policy and practices matters. Hence, additionally, in order to work as professionals, it is in the same way important for undergraduate students to teach themselves accordingly.

A deceitful postulation that higher education students do not need individualized attention or services is made by Faculty members and administration (Gansemer-Topf et al., 2006). Although, findings reveal the truth that postgraduate students retain the substance position of having extraordinary attention in the shape of projecting such programs and mentoring system in which their development and achievement towards professionalism may be possible (Conrad et al. 1998; Forney & Davis, 2002; Gansemer-Top et al., 2006). In this spillover, the present study concentrates on postgraduates’ learning experiences. The researcher keenly observed their experiences (positive and negative) throughout the study as a direct observer where positive experiences may steer to uphold individual and professional development as student-matter practitioners; on the other hand, negative experiences might not cater learning to occur with the increment in the enrolment of higher education students, more researches needed to work on graduate students’ experiences at a large level which may be ultimately fruitful in the entire educational field (Conrad et al., 1998).

Various studies’ emphasis is on the skills or movements into work which is gained by students enrolled in the higher education degree programs (Hyman 1988; Janosik, Carpenter, & Creamer, 2006; McGovern & Tinsley, 1976; Richmond & Sherman, 1991). Relatively, the least researches existing which have emphasized students’ learning experiences and explore their involvement within their classes (Flora, 2007). The blossoming call for active learning in the field is discussed in the present study. From here, it explored postgraduates’ learning experiences which unfolded and mainly stressed upon counselling and mentoring.

**Research Methodology**

The design of the present study accentuated a single-case study within the strictures of the qualitative
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Due to its revelatory element, elasticity, profundity and triviality in expressing and studying the specific problem or phenomena, a single-case study method was utilized. Yin (1984) postulated that a single case might exhibit a peculiar case in a holistic and well-framed theory. A specific context is explored immensely within the case-study method by the researcher. A case study method also takes a distinctive position in a way that a limited number of individuals purposively selected to be the part of the study. In order to discover and inquire about real-life situations and phenomenon, the case-study method is utilized for detail circumstantial analysis with the least number of terrestrial zones, events or occasions and their relationships (Zainal, 2007). Yin (1984) also explained that a single case-study method identifies to explore any phenomenon in the data in terms of serving a spot of interest to the researcher. An exploratory case-study method is utilized to discover the role of experiential learning in the precise settings of a public institution in the present study. In order to get the deepest understanding and investigate relevant concepts through direct interaction towards the problem, the researcher used semi-structured observations as the data resource of the study. The participants of the study comprised sixty-four students from the course “Application of Computer in Research” of the Master-degree program from the public university of district Lahore.

Formal permission from the institution was also being taken; the researcher also met with relevant teachers, explained to them the purpose of the study and also made sure them that this activity will be conducted only for the sake of research and no other matter and also took formal consents for conducting observations. The researcher also made sure that their names and other restricted information will be kept confidential. In order to maintain unbiased entirely, the researcher also took the services of another researcher as an independent observer who had knowledge in the relevant field of study. In order to maximize validity and reliability, the tools were being validated by the five experts from the relevant field of study. Their significant opinions are kept important while making possible variations, and a mock observation was conducted other than the main institution where the actual study was conducted.

In the opinion of Schuh and Upcraft (2001), the primary objective behind semi-structured observations is to pile up content directly in a natural setting within the classrooms. Taking into account the vigorous theory of Kolb’s experiential learning, which is consisted of four cycling procedure; concrete experience, abstract conceptualization, reflective observations, and active experimentation, the semi-structured observations covered the research question. Is there any importance of postgraduate students’ learning experiences discover the role of experiential learning for developing professional skills among them? The come-at-able response to the question is given by utilizing classroom observations. Inclusively, sixty-four observations which covered one semester consisted of sixteen weeks, are conducted in order to get awareness about students whether they are practising any type of experiential learning through the practical method in the present study. In point of fact, this course enables students to go through their learning by using the practical method, i.e. computers, laptops, projectors, classroom activities, and they also have the forty days experience of having practice teaching in their relevant field of study. The following figure illustrated the primary themes taken out from the utilization of observations:

![Figure 1: Emergent themes from classroom semi-structured observations (Source: Researcher)](image-url)
Semi-structured observations enabled the researcher to explore the practicalities in terms of the existence of experiential learning. Through observations, it is investigated that students expressed their issues consisted of clarifying concepts and improve deficiencies in a comfort zone while having face-to-face interaction with their instructor. The questions showing relevancy with the content are asked by the students, and the teacher replied in a responsive manner. On the other hand, students are also observed asking information regarding content with their peers except directly to the teacher, which sometimes leads to misguidedness. Though in computer classes, it is very difficult to go beyond the strict structure of the settings and clarify ideas anyhow, some students found this interesting for them to learn from their own ideas. It was also sightseen through observations that during class-time, students were asked to initiate a new task or new activity relevant to the course content without having awareness about the students’ grip of the previous task, which showed instructors’ distort teaching style.

With regard to utilizing previous knowledge in order to accomplish a new task, the majority of the students were observed well-performed in this session. Hence, discussion session, most of the time, it remained a neglected part of the instruction. The teachers (Evening-session) were remained flexible in sum-up the content or particular task without knowing each student’s command over that skill which showed that teachers were more concerned about completing the course instead of students’ grip over skill. However, some students (Morning-session) displayed their concern about having understanding regarding the knowledge of the particular task, and they replied well on asking the teacher’s question. Keen attention of some of the students (Evening-session), hence, was remained absent from the sight of observations by the researcher. A good habit of taking notes by the majority of the students (morning-session) was also observed by the researcher in order to memorize important steps while having completed the tasks.

A fascinating point was also observed through observations that students (evening-session) not only follow instructions but also tried themselves in order to equip with the new task with great intentions. They used to follow each step instructed by the teacher for grasping new concepts and repeat that again and again in order to get command. The teachers also were seen giving a word of appreciation for feedback terms. Sharing ideas with peers was also present in the students (morning-session); nevertheless, maintaining discipline was also seen lacked during this session. However, this tactic was beneficial for the students who could not follow instructions in order to make grip on keys. Due to this activity, it was observed that students not only shared ideas with their peers but also having acquaintance with them in order to appreciate them well. The students were seen having a deficiency in the interpretation of previously learned ideas or concepts into new meanings or implications observed by the independent researcher. During observations, it seemed that instructors (morning-session) used the tactic of motivation in a way that they have given an opportunity of making the performance well of those students who feel reluctant in using keys or obtaining command over new activity, they were also given an authority to make decisions regarding the students whether they learned the skill or not. The entire class (morning-session) were seemed less reluctant about doing new tasks, and they learned rapidly and also tried themselves in order to perform well. Whereas the students (evening-session) seemed lacking in maintaining discipline, and due to making a disturbance, their teacher could not concentrate on the instructions.

Discussion and Findings

The following emergent themes addressed the research question is there any importance of postgraduate students’ learning experiences to discover the role of experiential learning for developing professional skills among them? (a) face to face interaction; (b) keen attention; (c) improve performance; (d) appreciate peers and; (e) decision-making skill. The data were analyzed manually and keenly by the researcher; firstly, data is passed through the coding process in which open, axial and selective coding was being utilized. After coding procedures, the data were being categorized and labelled; after the categorization process, the themes emerged. Mainly Kolb’s experiential learning model was kept into consideration while making themes.

It was observed that most of the students interacted face-to-face with the teacher in order to clear the concepts. They asked questions and found relevant answers from the teacher. The students were
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daily asked to do a new activity or task using computers. Some of the students found this interesting, but some students did not pay attention to do it seriously. The researcher observed that students found themselves reluctant in doing new task on a daily basis. Usually, the class environment was settled in a way that students participated practically rather than in discussions. The researcher observed that students used to listen to the teacher carefully, and if she asked any question relevant to the content, the students responded carefully. They paid keen attention when the teacher explained to them how to do the task. Most of the students took notes in order to memorize the contents. Some of the students themselves started the task as they used previous knowledge regarding it. It was also revealed through the data that creative thinking and problem solving and creative thinking skills are the tire need of modern times which can be transmitted through experiential learning as evidenced by the study Amolloh, Lilian, and Wanjiku (2018), whose findings showed that problem solving and critical thinking abilities and knowledge could be availed through experiential learning. Another study’s findings revealed that the E.L model could foster creative thinking skills in students (Meyer, 1982; Sheih & Chang, 2014).

The observations depicted that students shared ideas in order to get awareness about the new task or activity. Some of the students found it difficult to share with each other. One of the students said, “this activity is so tough for me to get it done for the first time; I cannot share until I would get support”. Some of the students review their own tasks by doing it again from the beginning in order to get expertise in it. Sometimes researcher observed that students lost their interest in doing the task as they found it boring for them due to the lack of communication with their teacher. It was also observed that some students keenly paid attention to what the teacher instructed them to do. They did the task repeatedly until they got command over it. The teacher also asked her students, “should we move on if you follow this step”.

In order to grasp new meanings, it was observed that students felt reluctant in interpreting their ideas for developing into concrete shape. It often seemed that students were also being observed in sharing their ideas while they get command over the task or not; in this situation, misguidedness was spread. Backbenchers of the classroom took tasks for granted most of the time, and even on teacher inquiry, they remained unable to express or perform it well. The researcher observed that teacher gave them assignment regarding the activity she completed in the class in order to know whether the students were able to do this by themselves or not.

The researcher observed that some of the students used to share ideas with each other in order to clear concepts. The formation of an experiential learning environment can only be possible when the classroom structure would be based on child-centred learning (Dewey, 1936); it was also observed by the researcher that classroom structure was not fully based upon such atmosphere as it was evidenced in the literature (Trigwell, Prosser & Waterhouse, 1999). The researcher, during observations, noticed that students involved in doing the tasks keenly in order to make their performance better. Some of the students showed clear understandings regarding new concepts. Several observations depicted students’ self-satisfaction while doing the tasks. Some of the students tried to copy their peer work as they found it lacking in their own understandings. Some of the students felt excited when they did any task correctly. The student's incorporated new ideas for doing tasks in order to get mastery over it. They practised it repeatedly; however, the slow learners got minimum time to make their performance better. Two or three students got command over-interpreting their own ideas and made fast improvements. They not only completed the tasks but also initiated new understandings by applying the practical approach in terms of better performance. Another evidence from the study conducted by Chickering and Reisser (1993) also depicted that just delivering lectures in the classroom may not beneficial in nurturing an experiential learning environment in the university classrooms. Teachers can also play their effective role in developing critical and creative thinking skills, which was often neglected as evidenced through observations and textual data of the participants (Stedman, 2009; Stedman & Andenoro, 2007).

Conclusion

On the basis of highlighted findings, the conclusion of the study reveals that Kolb’s experiential learning model seemed to be implemented in the full strength in order to set learning on practical
boundaries. Therefore, more of the content of the course may consist of experiential learning activities, which may enable students to work themselves and get awareness about new concepts on the basis of previously learned experiences. On the other hand, the study explores that students of higher education need to develop high order thinking skills for opening new gates of learning by magnifying ideas and also change them into tangible experiences with active participation.

Experiential learning, according to the perceptions of the participants involved in the study, provides the fundamentals to the students on which they experience new ideas and interpret them in order to extract meanings from those. Basically, experiential learning, as a significant aspect of higher education level, enables the learners to review their work (tasks, assignments, journal articles, and term-paper) and also make decisions to improve them accordingly. The major findings were related to the feedback session, which explored by the participants that lacking occurs in providing proper and adequate feedback in terms of removing mistakes and errors. This was observed that teachers tend to precede their course content instead of giving feedback to the students to improve themselves properly.

**Recommendations**

On the basis of findings and conclusions, the following recommendations were made:

1. Most of the course content may be inducted on experiential learning so that new gates of learning may be disclosed for the students of higher education. The teachers may provide proper guidance to their students and get permissions to achieve excellence.

2. In order to compete for challenges globally, experiential learning may provide learners with a proper management way for maintaining their understandings and helpful in making new inventions.

3. Peer learning may initiate new doors to expand learning. Therefore, group work, group learning, peer appreciation may be promoted while taking experiential learning into considerations.

4. The only way to overcome deficiency there is a need to turn to learn into practice. This is to identify that the more the learners will practice the tasks given by their instructors, the better their performance will be.
References


