

REVIEWING AND INCORPORATING  
PEDAGOGICAL TECHNIQUES IN HIGHER  
EDUCATION VIA STUDENTS PERCEPTIONS



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**CERTIFICATE**

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### **Author's Declaration**

I **Zarina Khalid Khan** hereby state that my MPhil thesis titled **Reviewing and Incorporating Pedagogical Techniques in Higher Education via Students Perceptions** is my own work and has not been submitted previously by me for taking any degree from Pakistan Institute of Development Studies or anywhere else in the country/world.

At any time if statement is found to be incorrect even after my Graduation the university has right to withdraw my MPhil degree.

Date: 17.01.2022

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**Zarina Khalid Khan**

***DEDICATION***

***This work is dedicated***

***To***

***My beloved Son***

***&***

***My life partner Naveed Khan Ghauri***

***What I have achieved so far is only possible due to their continued motivation,  
appreciation and support***

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## **ABSTRACT**

This thesis presents qualitative research that examines how students perceive various teaching practices exercised in higher education institutions. Main aim of this research was to find out how students regard teaching practices, their attitude towards teaching quality assessment surveys and their influence on improvement of teaching practice, their concerns about how teaching practices can be transformed as well as the effect of Covid-19 pandemic on teaching practices. Online semi-structured interviews were conducted asking students General questions about teaching practices prevailed and what new teaching techniques should they think to be incorporated in higher education. Finding from this research helps teachers to prioritize their effort to search for more innovative and student centered teaching techniques that are identified by students as most important. Based on the results of this study a collective opinion was put forward by students called for a blended learning approach at higher education level which would enhance not only student engagement, motivation, critical thinking and depth of learning but would do increase learning responsibility as well as the ability to interact with peers and teachers.

**Keywords:** Reviewing, incorporating, higher education, pedagogical techniques

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## **LIST OF ABBREVIATIONS**

|          |  |
|----------|--|
| COVID-19 | Coronavirus Disease  |
| CSCSE    | Chinese Service Center for Scholarly Exchange                  |
| GDP      | Gross Domestic Product   |
| HEC      | Higher Education Commission                                    |
| LUMS     | Lahore University of Management Sciences                       |
| NUST     | National University of Science and Technology                  |
| OECD     | Organization for Economic Cooperation & Development            |
| OER      | Open Educational Resources                                     |
| QEC      | Quality Enhancement Cell                                       |
| SOP      | Standard Operational Procedures                                |
| UNESCO   | United Nations Educational, Scientific & Cultural Organization |
| UDC      | Unit of Data Collection  |

# CHAPTER 1

## INTRODUCTION

### 1.1 Background

This research proposal is developed for conducting the research study “Reviewing and Incorporating Pedagogical techniques in Higher Education via student’s perception in Islamabad” as part of the Development studies.

University education level comprises of Bachelor of Science, Bachelor of Arts, and Master of philosophy and doctor of philosophy carrying programs. There is a significant difference teaching mature minds than to teach blank minds. If we start from initial level mainly at preparatory level educators involve in generating knowledge, at upper level they attempt to broader and elaborate students learning and at university level teachers are supposed to put in them an individual way of visualizing things and gain knowledge. This visualization is only realized if teaching practices that are employed in higher institutions compel in them the skills that would help them building their intellectual capacity viewing things from their own angle and construct new avenues. Higher education in developing countries like Pakistan in addition to bring improvement to its economic development is equally important for its progress as a balanced and representative state. University education in Pakistan in terms of both quality and quantity perspectives is under debate. Quality education has a direct link with quality of teaching staff. Standard of teaching is the foundation around which an entire structure of quality education is constructed and so is the teaching

pedagogy (teaching strategies, instructing teaching) which is the key predictor of teacher's quality performance. Furthermore learning has a strong influence on method of teaching.

Recently, there has been a growing sense that extensive research on various teaching methods conducted over the last few decades represent an opportunity for advancement at the higher education level (Wieman, 2014).

Socrates emphasized that "Teaching should not be taken as the transmission of knowledge to students but through dialogue and questioning". Same was stressed by Chinese Philosopher Confucius "Teaching should inspire students and encourage independent thought which is facilitated in stages". Bates described it in a way, "it is astonishing to see that even after the creation of the printing press, radio, television, and the internet, the lecture style, identified by the authoritative instructor speaking to a group of students, continue to exist, the prior methodology for instructing in many institutions, even in a technological age" (Australia, 2017).

Education occupies the role of a backbone in the lives of all citizens of a nation and is a process that is not limited to facilitate learning but also to induce the acquisition of knowledge, skills, values, morals, beliefs and habits into its people to make them more better and acknowledged citizens. Educational system in every country is constituted around an educational structure comprises of various building blocks like curriculum, infrastructure, supervisors and administrative personnel, teachers, students and teaching styles etc. that carries the educational process in a prescribed formal manner for its smooth functioning. This whole educational structure primarily has one basic goal and that is to impart knowledge but ironically not much attention is paid to pedagogical techniques to provoke a visible change in student's learning in accordance with the desired outcomes. In the context of continually changing educational environment the

importance of pedagogical expertise at higher level would rather be emphasized more to divert student's learning from base level to deep learning (i.e. being able to analyze, evaluate and create). As stated, "regardless of lack of comparative data on teaching methods (and on the means through which teaching effectiveness is assessed) there is a far-reaching and spreading impression that they are inadequate to meet the needs of universities an impression today expressed by many as "a crises in teaching" (Garner, 2016) . In the same way as expressed, at higher level, the nineteenth-century model of teaching still overrule and (teaching) has not transform much since. Basically higher education is still a process of transmitting knowledge by means of lecturers to one's who want to receive it" (Garner, 2016).

Although teaching quality in higher education is said to be a function of several factors yet inappropriate teaching methods seems to have contributed the most to the decline in most countries' education systems, particularly those in the United States (Saville, 2009). Internationally, particularly in the developing world, the use of ineffective teaching methods is undoubtedly contributing to the decline, though the picture is more complicated (Beaudoin, 2007; Ocholla, 2003). Improving teaching methods through implementation of teaching strategies that are effective is therefore key to improving the situation and subsequently reversing the decline. Currently, traditional teaching methods, such as lecture-based teaching methods, are being challenged by alternative methods that are increasingly showing to be more effective.

The modern world's rapid changes have presented the higher education system with a wide range of challenges. As a result, more eager, thoughtful individuals in interdisciplinary fields are required to be trained. Thus, one of the most important requirements of the educational system is research and exploration to discover useful and effective teaching and learning methods (Shirani, Isfahani, Rouhollahi & Khalili, 2016).



In recent times, when everything is confronting with dynamic changes and challenges of varied nature affecting all spheres of society, same could be observed happening in education sector too. To respond to the demands of today's world, teachers have abandoned the traditional model of content memorization and verification in order to train critical and reflexive problem-solving professionals. As stated by Hoffmann and Koifman (2013), educators are expected to improve competency-oriented skills as well as the ability to enable students to actively participate in the learning process. (Santos, Figueiredo &Vieira, 2019). The sole purpose of university education is not merely to produce degree holders lead to unskilled/ unemployed workforce but to furnish students with appropriate skills, knowledge so that they could perform remarkably in their supposedly area of specialization . As stated, over the past 50 years the fundamental changes in employment call a rise in the demand for exceptional intellectual and soft skills and a decline in the demand for usual cognitive and artistry skills, physical labor, and monotonous physical tasks. Graduates are setting foot in a world of employment that is marked by greater unpredictability, pace, fear, complexity and multidisciplinary working. Whilst at university, the mode of learning and the university education, will urge to make student prepare for entry to such a setting and furnish them with relevant/proper skills, knowledge, values and attributes to prosperous in it (Mbagwu et al., 2018).

Education process has two main aspects that is teaching and learning which probably is taking place between two important individual characters Teachers and the students. A good teacher other than being a teacher also acts as learned person, questioner and analytical thinker. Teachers should be capable of facilitating their students to have enough of confidence to handle the subject as it has evolved so far, to be courageous in acceptance to new ideas, foster a culture of innovation, eager enough and have motivation to work in collaboration with others so that the stream of

information and effort is widened. This in turn calls for teacher's professional training, the issues of the formation and improvement of their pedagogical mastery become of current interest. "Pedagogical technique is an important component within the structure of pedagogical skills, their forms, practical manifestation, through which a high level of pedagogical professionalism can be formed and developed which then is displayed in the attainment of a high level of pedagogical activity based on a set of professionally important personal characteristics, special knowledge skills and abilities" (Tuigun & Sabiira, 2021). The professional competence of a teacher directly depends on the possession of professional technique, thus requires a teacher to constantly learn to apply pedagogical methods in his/her work so as to develop his/her pedagogical skills. Through pedagogical techniques teachers have to harness the ability to direct students towards learning and diversity in education, the ability to raise questions, communicate and draw conclusions through observation and individual thinking, good behavior, control of emotions, voice, facial expression and control of movements; etc. Without self-control, communication skills and pedagogical techniques a teacher cannot fully participate in educational activities. Improved quality of education work is primarily associated with the development of pedagogical techniques (Tuigun & Sabiira, 2021).

Though pedagogical technique is not the only element in the structure of pedagogical skills, yet its insufficient development will lead to a lack of pedagogical skills in the teaching and educational activities of the teacher. For example with undeveloped pedagogical techniques a teacher cannot control negative emotions in communicating with students, or, conversely, makes mistakes such as grunting or excessive anxiety, disconcerting in front of an audience and cannot find words to express his dissatisfaction with one or another action of the students (Slipchuk et al., 2021).

With the advent of high-tech communication technology, students from all over are more informed and have greater exposure to newly and much advanced teaching inputs available. Among university education institutions national and international competition for the best students is likely to growing globally, thus only emphasizing pressure for standardized coaching and quality control. Developing countries though have significant growth of higher education institutions yet inherent tensions in assuring quality remains. Quality dimensions of teaching could not be restrained to a single component only rather it is a mix of varied elements working together to run the educational system more efficiently and smoothly. The most important feature that I would preferably explore and which students mostly relies upon greatly, would be to study and analyze various pedagogical techniques being exercised by teachers in higher education institutions and how much such techniques contributes to a student basic understanding of the content and intellect skill enhancement.

Higher education institutions indeed putting sufficient efforts to enhance students understanding yet they lacking a comprehensive, well developed and perceived pedagogical model that would take into account specifically student's views/opinions for the attributes they consider important for the teachers to equipped with in order to enhance quality teaching factor at higher education level. The emergence of new approaches to education have paved way to transform even traditional and old techniques of teaching and learning in accordance with the changing trends in education through embedding more highly advanced teaching systems and styles in educational institutions. Educational institutions since taking learning process through staff among which "Teachers" are the most important university-related factor influencing student achievement and hence there is a dire need to assess pedagogical techniques been practiced and bring more improvement and clarity in those techniques while considering student's input. Aligning teacher and student improvement

of connection is the need of the day and this alignment factor between teachers and learners would only be made possible if input in terms of positive suggestions from both students and teachers is given due importance while making policies for education sector.

This study would provide an insight into proposing a very concrete, planned, highly supervised and easily implemented guide lines for putting into practice such pedagogical techniques that improve teaching quality of teachers based on the input gathered through students receiving higher education and to identify a contextually appropriate pedagogical model that would cater the needs of all graduate students.

## **1.2 Statement of the Problem**

Teaching is a very unique skill which is not possessed by everyone and that is why even the person having a lot of knowledge and awareness is still unable to transform it properly amongst the students, and that is a major reason for which every teacher is not being considered as a good and effective teacher.

The prime and ultimate purpose of teaching is to impart knowledge and putting in place specialized skills based on future challenges to meet the needs of today's global learners. Relating this teachers are required to develop professional approach to work and realize the importance of teaching methods that would further improve their professional development to be initiated at the very beginning level in accordance with the requirements. The teaching methods exercised by teachers should aim to enhance the learning capability of diversified students so that post graduates of high quality should be produced. The process of teaching should be aligned with student's improved

performance not only on campus but also to be recognized once they apply that learned knowledge in real life practice. On average, the current pedagogical styles do not cater the underlying learning needs of all post graduate students since not much has been worked out in this regard which is why most of the students seem lacking most futuristic based, digitalized knowledge and specialized innovative, creative skills thus stay back educationally as well as professionally in this high competitive educational world. Qualified graduates are stagnating. Action is needed if our higher educational system is to remain competitive both nationally and internationally.

### **1.3 Research Problem**

Based on the narrative of SOP as described in the preceding text, I am narrowing my research problem into “Reviewing and incorporating Pedagogical techniques in Higher Education Institutions in Islamabad” and have operationalized my topic into following research questions and objectives.

### **1.4 Research Questions**

1. What kind of existing pedagogical techniques are in practice in higher education institutions in Islamabad?
2. How Do Graduate students perceive those pedagogical techniques practicing in higher education? How effective these pedagogical techniques are in achieving the desired targets while considering students satisfaction level?
3. Do pedagogical techniques needs to be transformed taking in view student’s perception?

4. How Covid-19 has affected pedagogical techniques at university level education?

## **1.5 Research Objectives**

- Analyzing existing pedagogical techniques used in university education institutions in Pakistan.
- Finding out the perceptions of Graduate students about existing pedagogical techniques and to evaluate effectiveness of selected pedagogical techniques in achieving desired targets and student satisfaction level?
- To suggest and incorporate the best techniques available which can result in producing good quality graduates with enhancement of students capabilities
- To evaluate the effects of Covid-19 on pedagogical techniques

## **1.6 Significance of Research**

This study will guide us towards making use of more concrete pedagogical strategies and practices that are compatible to international education standards as well as go to the requirements of the students in digitalized world after analyzing what worked and what did not as per student's perceptions. In that context we will also to look for conducting teacher's pedagogical training programs that in turn will increase teacher's enthusiasm, knowledge and confidence and will be more able to view student's learning as linked to their teaching and teacher learning.

The research is important in a way that it will highlight the views of students as well as of teachers about the teaching methods currently employed at higher education institutions and to what extent these teaching methods could be transformed for the better outcomes in and outside of the classroom boundary. Student's views regarding weaknesses of those teaching techniques would be addressed and also would make us incorporated more innovative, easily understandable, solution oriented and highly analytical teaching methods in practice. Recruitment procedure of teachers at higher education level would sharply take into consideration not only teachers background of content subject and related experience in the respective field but element of pedagogical expertise would be at the core of this procedure. This research will get us new insights into improving and enhancing quality pedagogical techniques at higher educational level that aims at producing more productive and competitive Graduates. Through this study not only the participating students will be aware of the importance of the teaching methods employed at higher education level but will also be helpful to get the suggestions to bring forward a more contextually appropriate pedagogical model that would enhanced the teaching pedagogy of higher education teaching faculty for effective teaching.

## **1.7 Explanation of the Key Terms/Concepts**

### **1.7.1 Graduate**

After completion a course of study, the degree or diploma that is received by a person, as in a university, college, or school. For this study we took graduates who have been completed 16 years of their academic education (Master degree) since they possess broader knowledge base and can better express their opinion. Retrieved from [www.dictionary.com/brows/graduate](http://www.dictionary.com/brows/graduate).

### **1.7.2 Higher Education**

Offer of various types of education to post-secondary learning institutions that can usually pay off a higher education degree, diploma, or certificate at the end of a term of study. University - educational institutions include not only universities and colleges, but also various professional institutions such as law, medicine, business, and the arts. In addition, higher education encompasses teacher training schools, universities, and technical institutes. Retrieved from <https://www.britannica.com/topic/higher-education>

### **1.7.3 Incorporating**

Means to include something as part of something larger. Since this study is based on student's perceptions regarding pedagogical techniques hence their inputs concerning the topic will be incorporated in addition to already existing teaching practices in Higher education Institutions. Retrieved from <https://dictionary.cambridge.org/dictionary/english/incorporate>.

### **1.7.4 Pedagogical Techniques**

A pedagogical technique is a term much broader than an entire approach. A specific set of actions that the teacher takes on in the classroom. It might include Computational thinking, in-depth learning or blended learning. Retrieved from:



[https://www.researchgate.net/publication/325089131\\_Interactive\\_Teaching\\_Methods\\_and\\_Learning\\_Style](https://www.researchgate.net/publication/325089131_Interactive_Teaching_Methods_and_Learning_Style)

## **1.8 Organization of the Thesis**

This Thesis work comprise of six chapters in total. The 1st chapter is an introduction of the research study as well as Research questions, Research objectives, Significance of the study and explanation of keywords are covered in this part too. Chapter 2nd includes previous studies literature relating this study. Research methodology for the study undertaken is explained in Chapter 3 while data analysis and findings have been summed up in Chapter 4. Chapter 5 is a provision of discussions and conclusion revealed with inclusion of policy briefs for future developments.

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

#### **2.1 Introduction**

This Research focuses on acquisition of pedagogical techniques for instructors at higher education level and their importance with regard to changing educational environment for graduates of university level. This chapter includes a review of previous studies' literature to conduct a broad discussion on the topic. Section 2.2 explains lack of pedagogical expertise and their effect on student's learning. Conventional ways of teaching are presented in section 2.3. Section 2.4 explains pedagogical expertise as core component for effective teaching while varying concepts in relation to pedagogical techniques been portrayed by numerous scholars are given in section 2.5.

#### **2.2 Lack of Pedagogical Expertise**

Today's educational environment is constantly emphasizing for the need to induce quality perspective into instructional and educating processes at university level education. As expressed by (Hénard & Roseveare, 2012), Quality teaching endorse the use of pedagogical techniques whereby the production of learning outcomes for students is assured. In a study conducted by (Wambui et al., 2016) examined pedagogical qualification of university teaching staff, results shown that university lecturers assign significant importance to pedagogical work yet nearly half of them had never been involved in any kind of pedagogical courses. This is not a good sign because an effective teacher use a collection of teaching methodologies and techniques since no single universal approach could ever suits all situations. Traditionally lecturer's expertise in their

own discipline is considered to be the most distinct feature of a university lecturer but recently the need to improve lecturer's pedagogical thinking skill has been realized even more and has gain immense importance in educational circles. As such learning being the main concern of teachers, they need to be furnish with a sound understanding of how learning happens specifically in contexts involve variety of social factors. Many countries such as Norway, United Kingdom, Finland, Srilanka, Belgium, Sweden, New Zealand, Pakistan and catholic universities of Portugal are rapidly gaining ground on the attention being given to the pedagogical competence of university lecturers (Wambui et al., 2016).

### **2.3 Conventional Ways of Educating**

In the conventional system directions mainly were given by the teacher and the student's educational priorities and interests were not duly recognized hence instruction have to be revert towards a method where student's claims are effectively addressed and worked upon so that active change in behavior can occur (Biku et al., 2018). Lecturers usually teach according to their own habits and hunches whereas universities have to look for those who possess content and pedagogical expertise (Berrete, 2012). Also in the absence of pedagogical knowledge a lecturer may continue using only one teaching technique and methodology in all situations. Another study revealed that many lecturers do not look upon practical pedagogical skills to smoothly assist the evolution of higher order analytical skills through suitable methodology, as a result the students are not strengthen enough to use and transfer knowledge for the transformation of themselves as well as of society as per their desire” .

## **2.4 Professionalism/Pedagogical Expertise the Core Component of Effective Teaching**

Quality teaching is hard to attain without professional teachers at higher education level since teacher's professionalism is the significant factor that decides the quality of education for future generations. The teacher who can provide a descent education in accordance with the conditions of time, progressively work in priority areas (humanization of the pedagogical process and educational content, innovation of pedagogical technologies, collaborative actions of university management etc.) would be considered as the best one. Therefore improving the qualifications of teachers is an important pedagogical task. Knowing the structure of pedagogical methods and formation of appropriate behavioral skills enhances the teacher's professionalism thus in teacher's activities, pedagogical techniques step ahead as a system of social and pedagogical support of the educational process, which in turn performs a great deal of functions in teaching and educational work (Lutwack, 1984).

As mentioned by *OECD (2013)* (Organization for Economic cooperation & Development) "an expert teacher possess characteristics that includes considerable Pedagogical content knowledge, unique problem-solving solutions, improved adaptation for multiple students, better decision-making, sensitive perception for class events, and increased awareness of the setting and student respect".

Education is regarded as one of the most important public investments in the capacity building of multidimensional human resources, including social, economic, and cultural interests. As a result, full attention is required to provide excellent input to employees. However, it should be noted that the quality has deteriorated. The application of successful teaching and teaching is inextricably linked to the instruction of students. It covers a wide range of topics, including the development

of an effective curriculum and curriculum content, the use of various learning settings, such as guided independent study, project-based learning, group learning, experimentation, and so on. Quality education also includes well-conformed learning environments and student support services.

Effective teaching skills are highly valued by teaching faculty and are emphasized in teacher preparation, adult learning principles, and the use of advanced technology in educational settings. Teachers must combine subject matter knowledge and teaching abilities in order to provide a successful education and produce superior graduates (Biku et al., 2018).

By using a good teaching technique, it is possible to help students raise their questions and motivate them to learn by considering themselves as the authors of the answers and the agents of change. They are also encouraged to learn new things. Teachers must connect knowledge and teaching ability in order to provide successful education and excellent graduates (Biku et al., 2018).

Quality of teaching though has its consequences on student's learning outcomes, it is still facing varying challenges from all around. Still there exist spaces between what students expect and the preparation of instructors for the provision of appropriate lessons in the education sector.

## **2.5 Conceptualization of Pedagogical Techniques**

Pedagogical techniques by (Australia, 2017) are instructional procedures and strategies through which learning occurs. It points to the mutual communicative process between teacher and student and is also exercised to advocate the provision of some particulars of the learning environment including the firm learning environment, and the measures of the family and community.

Teaching methods are important for any student to demonstrate any skills in a postgraduate work environment since what is gained is expected to be revealed and that is why pedagogy is considered the skills and skills one employs in assisting others well (Nworie, 2021).

Pedagogy basically refers to the methods that are applied as how theory and practice of educating is taught. Meaningful classroom interactions between educators and learners are adopted in pedagogy which then help students put up prior learning and develop skills and attitudes hence instructors are required to give out the subject matter in such a way that accomplish student needs. The relationship between learning techniques and culture is considered and entirely determined by an educator's belief in how and why learning occurs. Pedagogy is concerned not only with the materials to be used, but also with the processes and mechanisms assumed to lead to deliberate cognitive learning (Christie, 2021) It also considers interactions between teachers and students, as well as the learning environment and teaching tasks. This broad term encompasses both the relationship between teachers and students as well as the pedagogy approach used in the classroom. Learning occurs as a result of the teacher's classroom teaching strategies. Although several instructional approaches are in use, some strategies are still more successful and acceptable when compared to others. The effectiveness of pedagogy is determined by the subject to be taught, the variety of learners' needs to be understood and adapted to the context of the classroom, and the surrounding context.

## **2.6 Pedagogical Approaches Identified By Various Scholars**

Due to new scientific discoveries, informatization and globalization significant changes are happening not only in other businesses of life but in education sector too. Enormous changes that

are taking place in education sector could be viewed not in the form of ever expanding network of higher education institutions worldwide but techniques of teaching have also been altered in many ways. Earlier traditional pedagogical techniques, where a teacher was to explain a theme and students writing down notes, is still in practice and is useful occasionally, but at present education give emphasis on encouraging the students to evoke their inquisitiveness and eagerness to learn. Due to this change in education a number of different techniques have emerged (diego, 2018).

A research study” understanding students-centered learning in higher education” by (Trinidad, 2020) based on student’s ideas concerning pedagogical practices that are communicative and to keep them engaged including discussions, case studies, field lecturers, debates, and class activities. A psychology faculty member suggest interactive activities to be more beneficial if students have to be engaged more appropriately. Majority of the faculty members realize that variation in teaching styles which is under taken through activities is useful for students who are bored easily and may have lessen focus of attention.

According to a research paper titled "Effects of the teaching approach to students' accomplishments in agricultural education with different styles of learning (Dyer & Osborne, 1996) “one of the most important processes is the selection of a relevant teaching approach to success and student accomplishment”. (Dyer & Osborne, 1996) go on to describe the students' reactions to various teaching methods, stating that "a suitable method is critical to learning the style of people being taught." When subject matter is conveyed using a variety of teaching strategies, it is assumed that students learn at different rates, with different learning styles, varying levels of prior knowledge, and in different environments.

There are as many different types of education as teachers. A number of researches have shown that teacher’s teaching attitudes and their preferences are usually represented by teacher’s teaching

exercises and their preferences regarding teaching methods. As stated by (Carkhuff, 2000)“some teachers stressed upon the use of question and answer technique, others opt for the use of many programmed instruction. Yet others apply the lecture method in their class rooms. Each teacher uses a different teaching method in a very real sense.

According to (Atkins & Brown, 2002) in view of the various teaching methods and is often proved to be challenging to adopt specific teaching method in a diverse education environment because each student’s expectation is different. Teachers/lecturers who are working in a diverse environment should adopt case histories, inter mutual sessions, management games, question answer method, collective discussions, problem-based questions and video-based examples. But whatever method may be adopted, it should pay attention to the student’s requirement. One to one discussion is very important in diverse class room as it helps a teacher/lecturer to understand the student’s learning background, way of understanding, level of academic structure and standard’s, practical knowledge and experience etc. It also brings in confidence to students because they feel they are new to this education system but their teacher is supportive to guide them to learn.

According to (Ray, 2004)as far as teaching methods in diverse environment is concerned, group discussion in classes is very helpful. The benefit of this teaching method is that students belong to different cultural and learning backgrounds have an opportunity to share knowledge with each other. This method builds a confidence level in students and thus they appreciate each other as they are new and believe they all are here to learn.

Stated by (Holtbrügge & Mohr, 2010) that it is interesting to teach/lecture to students who have different learning styles and approach to understand because students who already have some knowledge about the subject and also have experience, they enhance their confidence level while



understanding issues and then planning answer accordingly in a learning environment (Jena, 2015) argue that although the conventional method of teaching has pass on knowledge for several years yet group activities and community practice somehow, are better addition in the world of education.

Little is of the view that a teacher may be knowledgeable himself/herself but how does he/or she assimilates those in the knowledge of the students is a matter of concern. In this scenario it's not the teacher only to be left responsible but learners have to be equally keen to learn from the teacher. For changing the behavior of the students, the method of teaching (pedagogical techniques) occupies an important role. (Tebabal & Kahssay, 2011) at any level of education, the primary goal of education is to effect fundamental change in the learner. Procedure of transfer of knowledge can only be facilitated when educators use the most effective teaching methods that are most suitable to concrete objectives and understanding level of the students. The smartness of a teacher is to inculcate the passion and interest among the students towards the subject. Teachers can make students feel comfortable with learning by creating and promoting a positive environment and learning attitude among students. There should be element of creativity in a teacher and should be prompt in responding to different queries asked by the students (Alsabawy et al., 2011).

(Albet Maydiantoro et al., n.d.) Investigated that a teacher/lecturer must adopt teaching methods which motivate students and also inspire them to learn with self-confidence. Teaching is a complex process and it is not an easy task to select the teaching method. It is necessary for a teacher/lecturer to establish a friendly communication system with students and learn about their expectations, behavior, patience, skills and experience.

(gartenhaus, 1999) states that there are people who think that teaching is simple- just learn the subject matter and then tell others about it. But it simply is not that easy as it seems to be, rather teaching is a unique skill that demands constant effort, requires total involvement, and deserves continual reassessment. He explained the importance of certain ingredients for the effective teaching involving inspiration, affection for people, perspiration, perspective, perseverance, reflection besides to begin with content knowledge. Teaching is such an endeavor that needs constant improvement. Assuming one' self-doing a good job is not enough rather focus should be how we might be doing a better one (gartenhaus, 1999).

Teacher can fulfill the needs of pupil by adopting innovative teaching methods.(Tadesse & Muluye, 2020). (Adunola, 2011) expressed quite exceptionally, the majority of students with poor academic performance has a direct link with the application of ineffective teaching methods by teachers to impart knowledge to their students .Through teaching process it is made possible to bring about desirable changes in learner with the specific purpose of achieving specific outcomes (Ganyaupfu, 2013).

Pedagogical techniques that were in use earlier, where a teacher was supposed to explain a concept and students writing down notes, is still in practice and is useful occasionally, but education today stressing more on encouraging the students to evoke their inquisitiveness and eagerness to learn. A number of different techniques have surfaced in education due to this transformation in education. Most of such techniques are not in fact new. Usage of technology in teaching has given education a new life path letting us to approach old ideas in a new way. Through incorporating technology in education, numerous teaching pedagogies have appeared on the horizon include flipped classroom, design thinking, self-learning, social media, free on-line learning tools (diego, 2018).

## **2.7 Current Pedagogical Practices In Higher education**

### **2.7.1 Active learning methods**

Students in active learning methods spend a significant portion of class time on activities that require them to actively process and apply information in a variety of ways, such as answering questions with electronic clickers, completing worksheets exercises, and discussing and solving problems with their peers. Based on student's responses and questions, the instructor creates the questions and activities and provides follow-up guidance and instructions (Weiman, 2014). Though good active learning tasks simulate authentic problem solving, yet teaching with these methods typically demands more instructor subject expertise than does a lecture (a traditional method).

### **2.7.2 Blended learning**

Current educational approaches in higher education use blended learning, in which students may receive a combination of traditional face-to-face instruction in class and be required to complete activities outside of class that are facilitated by a variety of technological resources. Blended learning is becoming increasingly popular in higher education around the world, serving as the foundation of curriculum design and allowing students to learn in ways that were not previously possible or available to them (Lage, Platt & Treglia, 2000).

### **2.7.3 Flipped classroom**

Baker (2000), proposed the term “classroom flipping” to reflect the changing role of teachers. In the flipped classroom, teachers transitioned from being the “sage on the stage” to the “guide on the side”, and the content to be learned was not taught by the teacher through face-to-face classroom interactions, but rather by the students themselves outside of the classroom through online learning using various resources (Zhao, He & Su, 2021).

### **2.7.4 Playful learning**

Kangas et al. (2017) define “Playful learning” as learning activities that are designed and implemented to encourage student’s playful engagement and exploration. Playful learning has also been shown to help students develop their creativity and imagination (Kangas, 2010a).

### **2.7.5 Design-Based Research**

Design-based research (DBR), also known as design research, design experiment, and development research (Van den Akker, 1999), is a theoretical framework aimed at improving learning by focusing on real-world problems. The DRB output contributes to theoretical as well as societal education (Zhao, He & Su, 2021).

### **2.7.6 Problem-based learning**

PBL evolved from Barrows and Tamblyn's (1980) research and was first used in medical education in Canada (Barrett, 2005). PBL allows students to investigate what Boud and Feletti (1997) refer to as "real-life situations," with an emphasis on problem solving and teamwork. When applied to the gathering of both internal (class-based) and external (real-world-based) knowledge to solve a shared problem, PBL shows promise as an integration pedagogy (Huber et al., 2007). In addition to improving communication skills among students, the problem-oriented approach promoted critical thinking as well as study skills and an interest in their learning (Shirani, Isfahani, Rouhollahi & Khalili, 2016).

### **2.7.7 Use of technology in teaching in higher Education**

According to Beatty and Ulasewicz (2012), "having the right tool for the job makes teaching more effective and student learning more successful". Knowledge and application of appropriate and effective teaching methods, as well as the use of appropriate technologies, are especially important in bringing about quality teaching in HE institutions (Thindwa , 2016).

## **2.8 Relevance of current pedagogical techniques to Pakistani context**

Prevailing current pedagogical techniques undoubtedly contributing significantly in uplifting student's cognitive and intellectual skills in developed countries yet in underdeveloped countries like Pakistan most of such techniques cannot appropriately be applied unless many challenges and

obstacles of various nature financial, technical, administrative, educational expertise, resource availability etc. confronting by higher education are to be address & resolve first and then to established an environment where novel teaching pedagogies are practiced and applied appropriately and efficiently.

## **2.9 Research Gap**

This Research study found a key gap since in most educational policies previously formulated within the context of Pakistan higher education, much attention is paid towards curriculum building and design particularly and not teaching pedagogies or the delivery modes of knowledge. This study is distinct because the context is distinct as it explored current pedagogical techniques existing and how such innovative teaching pedagogies could be applied taking in view student's perceptions on that for better intellectual capacity building, researcher is trying to address and fill this gap.

## **2.10 Covid-19 Impacts on Teaching and Pedagogical Techniques in Third World Countries**

Coronavirus (covid-19) is a pandemic disease that affects educational systems in all socioeconomic groups (Tadesse & Muluye, 2020). According to UNESCO, the coronavirus epidemic has also had an impact on the global education system. UNESCO (United Nations Educational, Scientific, and Cultural Organization) (UNESCO, 2020). On March 11, 2020, the World Health Organization declared coronavirus (Covid 19) a pandemic after it was detected in

114 countries in three months and infected over 118 000 people worldwide. Experts believe that coronavirus is spreading at an exponential rate, and that many countries are locking up their educational systems, forcing people into severe isolation in order to limit the spread of this extremely dangerous disease. Because education is the backbone of every country, a variety of issues ranging from curriculum changes to education system closures as a result of widespread pandemic diseases have had a significant impact .

The economic shock has been first in many developing countries due to this pandemic, as countries lock their economies in order to restrict the spread of contagion which has resulted in greatest economic decline of many developing countries and shutting down of their education and transportation system. Experts believe that coronavirus is spreading at an exponential rate, and that many countries are closing down their educational systems and isolating people in order to limit the spread of this extremely dangerous disease. Because education is the backbone of every country, a wide range of issues, from curriculum changes to education system closures as a result of widespread pandemic diseases, have had a significant impact. Since then, virtual courses, remote support services for students, remote degree ceremonies, and remote campus visits have become the norm in order to slow the spread of this deadly disease. "Even online educators and adversaries may jump on the bandwagon, using emergency distance learning as the only alternative by employing educational tactics that mimic classroom training in an attempt to enable students to advance or even graduate" (Nworie, 2021). Under such scenario distance learning/online is the only option left to continue the education system because there has been a growing shift towards teaching online because of the unknown closure of schools, colleges, and universities.

The traditional mode (such as lecture) was transformed into a web or digital mode is the most severe drawback in the present online teaching. Teachers have tried complying adjustable way of

using live sessions, recorded videos, and a quiz to restore digitalized delivery. A number of teaching methods not explored before emerged as alternative options of teaching methods. Unlike the pedagogical approach, which is equally well-known as a teacher's centre, (Knowles, 1978) introduced the thematic Andragogy, in contrast to teaching methods, such as lectures, instructional exercises, tasks, coaching, quiz, debates that seems advantageous in offline teaching mode. The learner's continuous self-awareness and thoughtful development is the most common basis for Andragogy. Case teaching, role play and field trips, studios, and games are a few of the most effective strategies at the university level. Moreover, new approaches became evolved because of more connectedness to internet in recognizing the teaching methods in the 21<sup>st</sup> century. (hase, 2015) proposed a new term, Heautagogy (Self-determined learning), based on the autonomous from development of students who can learn the phrase Heautagogy. Flip-Class, case studies, mentorship, mini-projects, short videos, guided reading, and case studies are all examples of new-normal online teaching methods. (TODAY, 2020).

While it cannot be denied that formal education's prominent position due to direct interaction between teachers would always be replaced by any other pedagogical approach, the aftermath of the CL-19 crises has resulted in a pedagogical shift from traditional to advanced teaching-learning approaches to personal to virtual teaching from classroom to zoom (Mishra, 2020). Previously, informal education was mostly e-learning, distance education, and correspondence, but it appears that if current trends continue, it will eventually change the official education system. (Mishra et al., 2020).

A wide variety of famous online communication platforms such as Start.me, New, Edx, GoGuardian, Elucidat, Kami, PluraSights, G Suite, Otus and many more have changed the entire



landscape and route of the education system all over the world after Corona pandemic. (Mishra et al., 2020).

Dr. Amjad of the University of Jordan has used Lark to teach his students, saying that it has not only changed the way they teach but also enabled me to communicate with my students more easily and effectively through chat groups, video meetings, elections, and document sharing, especially during this pandemic. My children can also converse more easily on Lark. Even after the coronavirus, I will continue to use Lark because traditional offline learning and e-learning can go as far as I believe." (Li & Lalani, 2020).

To date, e-learning is a great opportunity for teachers, students and families and many actions in relation to this have been developed, including the introduction of online learning platforms, the application of blackboard, Zoom, Tronclass, class and wechat Group platforms, the conduct of online training and information gathered about all courses yet moving from offline class to online learning is a challenge for instructors ,learners, families, and the government of countries at the same time that have shortage of finances, technical skill, technology related equipment, access to internet access and resources for education in developing countries.(Tadesse & Muluye, 2020).

According to UNESCO, at the height of the Covid-19 pandemic in March 2020, one and a half billion students worldwide were engaged in remote learning. Some students were in the position to avail the opportunity to access the internet to do so, but not all of them. Their teachers, who have no past expertise of online education, are offering fantastic teaching and learning ways in order to end the genuine issues this existing reality has brought about. The faculty tried doing experiments with personal challenges, working in small groups, project-based learning and short videos recording. They tried exploring pedagogy, seeking assistance from their fellow beings that

were having former experience of online teaching. Exemplifications for creative arts and music were highly motivated, with zooming practices and performances being exceptional and life-changing events. Others have discovered open educational resources, materials, laboratories, movies, simulations, and games, prompting them to look for new ways to engage online students. In addition, several cutting-edge design subjects, such as the COVID-19 course, where a faculty member from this discipline teaches in a different "perspective" each week, appear (epidemiology, economy, psychology, virology, politics). As time has passed since schools and educators became acquainted with computerized teaching and learning tools, opinions on pedagogy and techniques have evolved. Collaborative approaches to the creation, use, and dissemination of multimedia and open educational resources (OER), increased student control, decision-making, and independence, anywhere, anytime, any type of learning, new forms of evaluation, self-directed and non-formally taught online have all had an impact on how you are performing..

Those developments listed above made a way for Three Pedagogical Moves evolving in future are

- A shift to open learning in order to improve accessibility and flexibility. A lecture delivered in the classroom is no longer a learning center.
- As a shifting instructional role, the exchange of powers between instructor and student must be increased and restructured so that material and techniques can be more promoted and negotiated, and student self-governance can be developed and supported. On the student side, new social platforms, assessments by supporters, discussion groups, and even online study groups must simply support students, but with advice, assistance, and feedback from professional experts and content specialists.
- Increasing the use of technology not only for teaching but also to support, facilitate, and reassure students.

These new pedagogical trends are significant, but they will require more skill, evaluation, and research to distinguish those that will have long-term value and effects on the system.

## **2.11 China's Higher Education System before Covid-19 Pandemic**

Formal education system of China sounds to be the earliest one in the world and is predicted to be established prior to the Han dynasty (206 BCE to 220 CE). This system is built on merit-based standards that still remains in the education system of China. Regardless of its long history, China's existing higher education system is greatly under the influence of Western education traditions. In China teachers have been historically honored and till today students are expected to respect their teachers to a great extent which is quite a different learning experience for students at Chinese universities. Moreover an expanding criticism and concern coming up from students is about the standards and methods of teaching and learning at Chinese higher education institutions. Chinese education system is seen as concealing ingenuity and individuality of Chinese students. Routine memorization, a central teaching methods seems the main culprit in the eyes of the Chinese students. According to a study on the teaching quality of Chinese higher education, many students complain about a lack of teaching ability to train their students' independent thoughts and prefer a superficial approach to studying rather than attempting to comprehend the content in detail. Teachers to date been occupied by the Confucian concept stick to teach in a lecture style and do not allow enough room to have questions or discussions with the students. Students till are mainly supposed to act different towards their teachers by listening to them. Due to this scenario Chinese students are continuously pursuing options to personalize their education to their best needs and interests and thus are selecting to study overseas at international universities.

Regardless of all above mentioned problems, the education system of China is yet one of the most rigorous and recognized education system and is searching for how it can be transformed to suit the needs of the students of its country's in the presence of increasing aspects of western world and cultural differences. Retrieved from <https://asiasociety.org/china-learning-initiatives>

## **2.12 Reshaping Of Higher Education In Lieu Of Corona Pandemic in China**

Every country's growth is dependent on education. Before Corona-19 pandemic all schools, colleges and universities in the world were continuing their educational services smoothly and efficiently catering the needs of their student learners but Year 2019 came as a big disaster in the face of Corona Pandemic. The Covid-19 pandemic illness is caused by a virus that has harmed both developing and developed countries' educational systems, thus bring closure of all educational institutions worldwide. The closure of educational institutions brought similar complications for students, families and teachers. The only solution/option left for the continuity of education system was distance learning but the shortage of network infrastructures, access to computers and the internet is difficult in developing countries. As a result, states devised a strategy for utilizing education technology, void internet education resources, free online learning resources, and teaching broadcasting. Government of China introduces several mechanisms that are applicable in the Covid-19 Pandemic to lessen the consequences on education uninterruptedness. Those measures are briefly mentioned below.

## **2.13 Restricting Person To Person Instructing Mode**

The Chinese government suspended all schooling at the end of January 2020, forcing schools and higher education to replace traditional teaching with online teaching. For the first time on a large

scale, online delivery was made available in the course of official education in China. In response to this all schools, colleges and universities transitioned to teaching classes online. Retrieved from <https://asiasociety.org/china-learning-initiatives>

#### **2.14 Facilitating With the Changeover to Networked and Distance Delivery Means**

The Ministry of Education has developed a guideline for organizing and managing online teaching and learning in higher education institutions to help with the transition from schools to e-learning. Higher education institutions are encouraged to use e-platforms for distance learning, and a list of 22 online platforms capable of providing this service has been provided. The majority of the platforms were created by top Chinese institutions or businesses. As of 11 May 2020, more than 2 billion people from all over China had visited the platform; however, students and institutions were unable to purchase the equipment required to access content online, particularly in rural areas where there may be no reliable Internet connectivity have raised issues of technical nature. Ministry of information technology for the purpose of overcoming those problems announced procedures to strengthen broadband coverage to support online studies during the pandemic outbreak. Subsidies were given to students in some provinces of China to acquire access to online learning. Furthermore, the province of Liaoning compensated approximately 20,000 university students for a total of RMB 7 million in order to purchase equipment and pay for internet access. Retrieved from <https://asiasociety.org/china-learning-initiatives>

## **2.15 Helping Overseas Students**

For Chinese students who are studying abroad, the main concern among others was the verification of their qualification they obtained from overseas particularly online in the time of the Covid-19 Pandemic. However, keeping such concerns in view been shared by providers, the CSCSE has stated that it will not affect the verification of foreign qualifications obtained partly online due to inability to attend campuses. For the first time, CSCSE has accepted qualifications obtained through online courses. Chinese students are giving continuous support by Chinese Government, agencies by means of managing through 280 Embassies and Consulates all over the world. Covid-19 health packages has also been distributing to Chinese students studying abroad by Government of China. Approximately 2 500 000 health packages containing machinery such as masks, disinfectant wipes, medicines for Chinese people, and an information pamphlet were prepared until April 2nd, and nearly 16 charter flights were transmitted between March 4th and April 12th, 2020 for its students from countries such as the United States and the United Kingdom that were hit hard by COVID-19. Retrieved from <https://asiasociety.org/china-learning-initiatives>

## **2.16 Analytical Methods**

### **2.16.1 Social Constructivism Teaching Theory**

Economic development has always been measured through indicators like GDP, per capita income, poverty rate, and employment initially but with the creation of Human Development Index more emphasis was laid upon masses and their competence to be weighed as the ultimate criteria for the growth/betterment of a country as a whole and not just economic growth solely. For human

development, average achievement in three dimensions have been focused among which being knowledgeable is the essential one.

The process of this knowledge transfer usually is taking place between two most significant key Participants Teachers and Students (learners). Teachers through the use of various teaching theories may plan and modify their approaches to teaching (Tes, 20th August 2019). This theory propounded by Vygotsky in 1968 puts much emphasis on the role of both the teacher and student and view learning as a collaborative process (Tes, 20th August 2019). Social constructivism, also known as collaborative learning, is founded on student participation and discussion. (Dr.Vera et al., 2020).

Teaching pedagogies are thought to be the basic art and knowledge that leads to management and teaching methods. Furthermore instruction method can also be seen as constituting the concepts and methods meant to maximize the learning of students. Those approaches and methods of teaching are established on learning theories (Dr.Vera et al., 2020).It was proposed that the use of educational approaches such as case studies, research projects, problem-based learning, brainstorming, collaborative learning, group work, learning guidance, simulations, and so on could exercise social constructivism in classrooms. This theory implies teachers to adopt such instructional methods that are student's centered, co-operative in nature and are guided by the teacher.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Introduction**

The research is undertaken systematically according to the methodology (Sarantakos, 1993). Research strategy and research design are explained in section 3.2 and 3.3 respectively. Section 3.4 describes the units of data collection that is graduates and instructors. Section 3.5 includes research methods which is semi-structured interview conduction. Section 3.6, 3.7 and 3.8 describes sampling methods, sample size and study locale respectively.

#### **3.2 Research Strategy**

This research study shall use a qualitative method approach since it's consistent with our aim to understand a real world issue and to capture detailed awareness into a problem to originate new conceptions for research. In fact, qualitative research approach or method as defined by (Crabtree, 2006) "as any research that uses data that do not indicate ordinal values . The study is divided in two parts; the first part will be based on secondary data analysis by reviewing the existing pedagogical techniques exercised in various higher education institutions and to assess the linkage of these pedagogical techniques with student's understanding of content knowledge and skills improvements in higher Institutions. The prevailing methods of pedagogical techniques currently exercised in higher education Institutions in Islamabad shall be studied and discuss in the research.



In the second part, through semi-structured interviews the perceptions of students about the need to reshape existing pedagogical techniques in higher education and their suggestions for a contextually appropriate pedagogical model adoption will be introduced.

Under qualitative approach, semi-structured interviews comprising open ended and semi-structured questions with students in selected higher education institutions will be conducted. Field notes will be used. This will help respondents to answer questions in detail while sharing their life experiences concerning the specific subject of research and how do they think their learning capabilities would be harnessed through the application of varied pedagogical techniques best suited in present educational scenario. Questions will be asked regarding if pedagogical techniques exercised in their institutions need to be transformed and do they see such transformation effecting their overall educational growth. Moreover it will further help in assessing Government and HEC formulation of teaching methodologies that reflect upon student's response for quality teaching techniques practices at higher level.

The interview guide would be developed that would contain demographic details, general questions, main questions and space for suggestions before conduction of interviewees. The interview guide will be sent to 2-3 experts for the content and format review beforehand and the changes will be made based on the feedback of the experts. These experts can be the proposal supervisors, teachers in the higher education Institutions.

Semi-structured interviewing, as stated by (Bernard, 1998), is efficiently scored when an interviewer receives only one interview opportunity for anyone. Semi-structured interviews frequently include open questions that allow informants to express their views on an individual basis. Semi-structured interviews can yield useful qualitative data that is comparable. It will be

suitable to record interviews through any medium easily available and then transcript these records for analysis later. (Crabtree, 2006).

The research will be based on the grounded theory, which is mainly a qualitative approach, also known as the flexible design, which helps to generate theory from data collected (Elise, 2013).

### **3.3 Research Design**

The exploratory kind of research design will be endorsed in this study whereby observation and descriptive design features will be integrated. Exploratory research also called as interpretive research or grounded theory approach, the results of this research give answers to questions of a nature like what, how and why? (Tsfaye Boru, 2018) stated that exploratory design is befitting in looking for new apprehensions, raising questions, analyzing event/incident in a new glimpse and originating concepts and hypothesis for more research. As (chandran, 2004) in studies that pursue to understand people, events and situation exploratory design is more appropriate. This study will use exploratory design because it will explain the main concerns of students regarding pedagogical techniques exercised and why those techniques didn't prove effective in producing the desired outcomes as well as what transformation have to bring in as per the requirements of students.

In the current scenario of Covid-19, the traditional method of class-room based teaching has not been in practice so far and instead online teaching is the only option left for the continuity of education process in higher education Institutions. With the help of exploratory research design we would be able to identify the reasons as “what pedagogical techniques are applying by teachers in online education delivery process and how do students perceive them relating enhancement of

their learning capabilities as affected. Also student's perception regarding knowledge delivery procedures be reviewed and would opt for a consensus to put in place such procedures that facilitate students much better and would add to their cognitive and creative skills. Findings derived from this study will help to provide some support for the variations leading to the acquirement of supportive pedagogical techniques online. Therefore, exploratory research design will be used for this study.

### **3.4 Units of Data Collection**

#### **3.4.1 UDC 1, Students**

This study is primarily based focusing the perceptions of higher education students about the pedagogical techniques they see important in view of the ever changing educational prospects of entire educational world, thus Graduates/Students getting/receiving higher education in various Institutions of Islamabad were the first unit of Data collection (UDC) for this study. Through semi-structured interviews data was gathered from those Graduates. Randomly selected Students including both male and females were part of this study. The equality in male and female students was ensured.

#### **3.4.2 UDC 2, Generals/ Articles/Books**

Finally for cross-country analysis of policies we relied on available articles, books, newspaper editorials and generals available on different websites.

### **3.5 Methods of Data Collection**

Data collection is a procedure in which an investigator collects the information from all the relevant sources to find answers to the problem, test the hypothesis and evaluate the results. Two method of data collection are largely in use that is Primary and Secondary data collection method. Any of those data collection methods could be used by the researcher depending on the sphere of the research as well as the nature of the research goals and objectives.

#### **3.5.1 Primary Data Collection Sources**

##### **3.5.1.1 Semi-Structured Interview**

Data which is used in the research is primary data. Primary data is the type of data which a researcher collects directly from the respondents by using data collection tools such as interviews, surveys, focus group discussion, experiments etc. In this research data will is collected through semi-structured interviews with students in higher education institutions in Islamabad in the first phase. Interview guide comprising questions build on previous literature and altered according to our setting are developed to gather data for individual population (students). A deep conversation between the interview questions and the local environment was held by a number of professionals (lecturers and supervisors) so that respondents understand them easily. In Semi-structured interviews participants are given a free hand to express their opinions about the area under investigation to have more useful information collected. Also in semi-structured interviews the interviewer does not have to follow a pre organized pattern of questions hence initiating two way communication process for more better results. Formal consent of the participants should be taken

prior to the scheduled interview in order to save time of the participants. Notebooks and mobile recorder are utilized during data collection. The data is analyzed through coding after interview conduction process is completed. The responses received through interview is divided in various themes and analyzed qualitatively.

### **3.5.2 Secondary Data Sources**

Data that is collected by other than the primary user is called Secondary data (Nordquist, 2018). And, the sources of secondary data include books, newspapers, journals, organization websites or Government records or data collected by any organization.

### **3.6 Sampling**

For this study we will employ convenience sampling method to gather data. Convenience sampling also known as Accidental or Haphazard sampling is kind of nonrandom or nonprobability sampling where participants of the targeted population fulfil some criteria, including easy approachability, geographical positioning, having presence at that time or ready to take part are included for the intent of study (Domye,2007). In addition to, purposive samples are also known as “accidental samples” because the researcher simply select samples as they just happen to the researcher’s area of data collection (Etikan, 2016).

Considering the ongoing situation of covid-19 convenience sampling seems to be more appropriate for collecting information with less resources, time constraint and easily accessibility features. We

will look for such higher education Institutions which are located in the vicinity of Islamabad and where graduates could be easily contacted to collect information. The instrument would be administered to sample students selected through convenience sampling adhering higher education.

### **3.7 Sample Size**

Graduates from both public and private universities that are situating in the domain of Islamabad will be selected purposively taking in consideration the experience they went through since people with enormous experience would probably address pedagogical problems in more depth. 35 students both male and female who have not less than 16 years of learning experience were chosen for carrying semi structured interviews. Five sample universities were selected and 7 students were randomly interviewed from each university for the study undertaken.

### **3.8 Locale**

The research will take place in Islamabad, Pakistan's capital, which is managed by the Federal Government of Pakistan as part of the territory of Islamabad's capital. Islamabad is the capital of Pakistan with the greatest literacy rate, with over 40 per cent of all graduates from Pakistan hosting a large number of public and private educational institutions. Moreover, the targeted Higher education institutions include Bahria University, Quaid-e-Azam University, National Institute of Modern languages, Air University and the Shaheed Zulfiqar Ali Bhutto Institute of science and technology. Those universities are considered as one of the leading educational institutions that

are providing excellent academic services and quality education to a large number of students nationally and internationally.

### **3.9 Conceptual Framework**

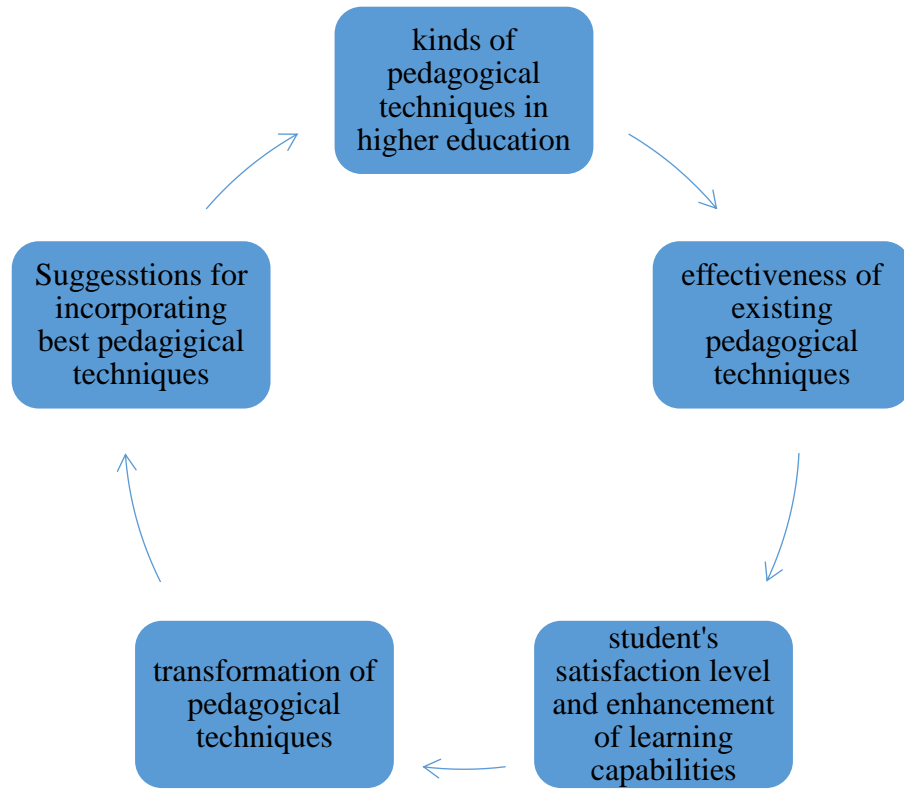
A transition of educational system has been viewed with the start of Covid-19 pandemic worldwide. Before that traditional face-to-face classroom teaching practices including class lectures, seminars, practical exercises, work placements and case studies were in practice at all educational level in developing countries where the core component interactivity has been of great value to the students and also one of a reason to ensure students and teachers engagement for the purpose of learning outcomes.

With the advent of Covid-19 pandemic the traditional classroom setting didn't stay functional any more and the whole education delivery system has been shifted to online/virtual teaching. Online teaching in developing countries is a completely new approach and thus has its drawbacks besides challenges it carries. In comparison to classroom-taught teaching, Virtual education has been identified of lesser value and authenticity for a number of reasons out of which the pedagogical skills and techniques were of main concern. Due to inadequate training in pedagogy and student's preparation to conversion to new procedures of learning, both faculty members and students to take up challenges of numerous nature.

While evaluating effectiveness of varied teaching approaches, student's performance at studies, their mental and social growth, social and emotional skills developments such as collaboration, self-regulation, in-student wellbeing and success in and outside of the classroom are the main

determinants. These determinants in turn are correlated to the satisfaction level and the capabilities like skills enhancements, behaviors and dispositions. Those attributes to a great extent depends entirely upon a teacher's pedagogical techniques through which such capabilities could be facilitated and improved. Students acquire talents in their learning in higher education institutions and in their daily lives in a comfortable, successful, and appropriate manner under complicated and changing circumstances. In a nutshell there is a demand to draw on both face-to-face classroom and virtual/online pedagogy to meet the learning accessibility needs of students for blended learning models and for better outcomes in future.





**Figure 3.1:** Conceptual framework: Existing Pedagogical techniques their effectiveness and transformation at higher education level

## **CHAPTER 4**

### **DATA ANALYSIS AND FINDINGS**

#### **4.1 Introduction**

After the data collection process was completed, phone data was analyzed and extensive interview notes were reviewed. The data was analyzed using various themes that emerged after reading the exact record line by line. Those themes were based on the responses of the students highlighted under various headings. To accurately represent the responses of participants, original responses to major questions and subtopics were used.

#### **4.2 Existing Pedagogical Techniques at Higher Education**

Respondents were asked about existing pedagogical techniques at higher education. Most of the students reflected that teachers have their own techniques and it varies from teacher to teacher depending on their educational background, their expertise in pedagogical knowledge, and their passion about incorporating new techniques for more effective teaching-learning process. More than average of students points out that “lecturing methods” and “participatory” approaches are widely used by teachers besides other pedagogical practices.

Concerning lecture style, one of the respondent shared that one of their lecturer used to explain extremely complicated content to them in a very easily & delightful way that the respondent carried rest of her academic career mastering that subject in particular.

*“Lecture style of my teacher indulge into me the luv for the subject called Economics which otherwise is usually considered as one of the boring and dry subjects by most of the students and that was the reason I continue pursuing the same subject in my educational career. It was the delivery style alone that made me understand quite complicated economic concepts in a very light and delightful manner.”*

Some respondents view lecturing style as:

*“The orthodox, generic style of teaching from textbooks by the teachers then interpreted by students into simplified forms for memorizing.”*

As mentioned by a respondent from Science dept.:

*“Lecturing style though an oldest technique yet I take it not that effective because students being the only receptive with varying mental capacities are not capable of following the theme in the same way and equally for it’s a single way of information sharing technique predominantly”.*

Various other innovative pedagogical techniques as witnessed by one of our respondent from law dept. during her education career were:

*“Face-to-face conferencing, work live play, in class homework and lecture recordings of teachers and were regarded as the most interesting and beneficial ways of promoting active learning of diversified student learners”.*

One more teaching practice was explained by one of our correspondent where a teacher asked their students to read a novel and then relate the story with the economic concepts they are taught in

class. This practice have made students visualizing of economic concepts through novel reading which constitute in them not only the habit of reading but to view it as a more different source of getting knowledge of the content they read in the class.

*“That once they were asked to read novel, in that novel the main character (a girl) was a cancer patient and didn’t have sufficient means for the treatment, there an economic concept of demand and supply was highlighted and thus generation of an economic activity was put forward”.*

Another teaching practice as described by a respondent was to give a situation/ case study to students by teacher and were asked to put their opinions for dealing with such a situation, that practice made students analyzing the situation themselves and putting efforts for resolving the situation taking in view various tips that were taught to them in class thus proved sufficiently remarkable in polishing their cognitive/analytical skills on ground.

A respondent from Physical science said:

*“I prefer demonstration technique as one of the most appealing way of sharing knowledge. Everything taking place before our eyes thus made students practicing and finishing various tasks on their own while observing and following the teachers’ instructions as accordingly.”*

Relating real life experiences with content has been another convenient way to facilitate students in understanding the content in a more special way. As is mentioned by one of our correspondent of development economics:

*“We were given an assignment from our teacher where we were asked to relate development theories with that of marriage and education institutions, it was indeed a completely new practice and I felt quite enthusiastic doing that.”*

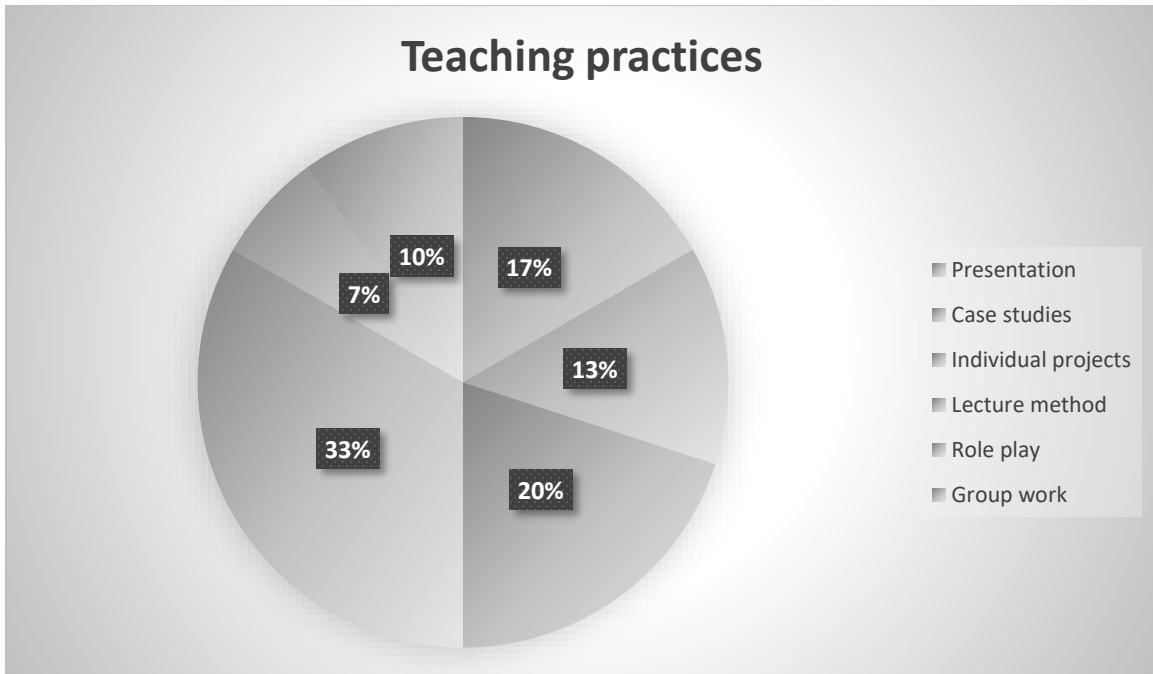
Story telling remained a way of communication by human beings for hundreds of years. As is revealed by one of our respondent from business administration:

*“In Sweden there is a teaching technique concerning making a story line of each topic thus has its advantages in making learning more exciting and interesting. Through stories teachers bring disparate information to life in a meaningful and connected way. Also story telling technique improves student’s comprehensions of difficult theories and concepts.”*

Special emphasis was drawn by many respondents about distribution of content before class time:

*“Honestly speaking, I have a great interest in reading the content before class. This way sufficient time is available to me to go through the content in detail, and then taking points of such nature that are not understood by me so far. In class I only have to discuss those points with my teacher and not much time is taken by the students to understand long contents.”*

Thus by applying varied new, innovative, future based pedagogical practices would facilitate student learning and overall comprehension of material with greater effectiveness.



*Figure 4.1:* Teaching practices at higher education

### **4.3 Effectiveness of Pedagogical Techniques and Their Relation with Skill Improvement and Knowledge Enhancement**

Effectiveness of teaching practices were divided into three categories: enhanced level of understanding the basic content, communication skills development, improved analytical skills, confidence level increased and putting in place solution oriented skills.

**Table 4.1:** Pedagogical Skill Improvement Techniques

| <b>Sr. No</b> | <b>Skills</b>                      | <b>Explanation</b>                  |
|---------------|------------------------------------|-------------------------------------|
| 1             | Level of understanding enhancement | Content , material knowledge        |
| 2             | Communication skills               | written & oral communication        |
| 3             | Analytical skills                  | logical and reasoning thinking      |
| 4             | Solution oriented skills           | finding out solution to problems    |
| 5             | Confidence level build up          | to express one's views<br>confident |

Communication skills represent written and oral skills including (speaking), listening and reading communication expertise while analytical skills contains logical and reasoning thinking whereas solution oriented skills based on providing solution to specific problems on ground.

When asked students to express in what extent those teaching practices help improving various skills development in them. A number of different views came forward. More than average of students were of the opinion that through individual Presentation technique when they read the

material, not only their reading skill and level of understanding the content enhances but also they feel more confident presenting it in front of their classmates.

As mentioned by one of our respondent:

*“Whenever I was asked for a presentation in the class, I used to consider it as a night mare literally. I always had a fear of losing confidence in front of so many students since I was not at all good in speaking”.*

Speaking is one of the key element in communication skills and it is usually observed that students feel shy and nervous whenever they are asked by teacher stating their idea in the classroom thus presentation is a way forward which encourages student to speak and providing them with the opportunity and comfort to express their ideas while building up the element of confidence in them at the same time.

As told by one of our interviewee, individual projects which is actually a teaching strategy where students learn in natural setting beyond the boundaries of classroom proved very effective in enhancing their experiential capabilities and appreciate investigative learning and solution of practical problems.

*“Process of Critical thinking, an element of analytical skill in students gets developed and sharpens more vigorously through individual project handling”.*

*“As expressed by another correspondent skill improvement doesn't come all of a sudden but rather it proceeds step by step and varies from teacher to teacher depending what strategy they took and pursue taking into consideration that specific aim of enactment of varying skills in students”.*



As per the opinion of a participant teaching approaches may be arranged based on educational priorities that influence teaching strategies. If the aim of the education is merely delivering of knowledge to students by the teachers then teacher-centered approach where a student being the passive recipient of receiving knowledge is applied where as if educational goal is to facilitate student's self- learning then student centered approach is more appropriate. Student centered approach provide student's the opportunity to actively participate in learning process and explore new ways of learning that would contribute towards the development of individual students. According to one of our correspondent whatever teaching strategy is employed by a teacher it does improve some of their skills yet the basic idea would be that teacher should have a command over it and should align it according to the overall understanding of all students.

*“Effectiveness of teaching practices can also be measured if students are given opportunities to apply new knowledge. Without practical implication students learned knowledge could not be addressed and tested”* as is said by a participant.

A new concept was brought forward by one of our participant explaining that one of their teacher has put in them the habit of reading articles which helped a lot in improving their English vocabulary as well as reading skills.

*“Students after reading articles were supposed to raise questions and that is how student's understandability of that content and thirst for creative thinking was nurtured this way.”*

*“The most effective way to teach is first to give knowledge of that students already possess, compare it to past events , carry out case-studies to apply the knowledge gained from relevant*

*sources involved, and finally analyzing similar and relevant cases in recent times for problem solving as expressed by a participant” .*

*“Another practice viewed by a respondent was “We have been into practice of performing live play that probably was to depict a certain situation and how to handle such situation if confronted with them in reality. Such practice makes us enable to understand the situation in more depth and to have a firsthand experience of taking care of such situations more promptly.”*

There came another view by one of our respondent where they were asked by their teachers to speak and share about any of their life experience at the end of the class every day. This practice was extremely helpful in the first place as how to speak in front of the audience and how creative interaction has to be initiated between students and teachers.

*“According to one of our correspondent besides teaching practices, strong working relationship between teacher and student improves the quality of interaction which in turn inculcate a sense of confidence and students are at much ease expressing their ideas more openly.”*

Indeed all pedagogical techniques may resume for certain skills development in students yet much is needed to explore and incorporate into education system as per the requirements of digitalized world.

#### **4.4 Need for Transformation of Teaching Pedagogy (Practices)**

When asked students a general question regarding a change/transformation in teaching practices, one of our respondent told that teaching is a matter of progression, to keep up with the constant

revolution of all existing knowledge and exploration, , which leads to new knowledge, which then must find a suitable medium in order to be taught to students.

*“New and effective teaching methods must be first investigated so that students may benefit through new and constructive styles of studying which may help them carry essential and useful knowledge as they progress to their futures”*

Change as expressed by one of our interviewee is key agent for development. It has been realized by most of our participant that our education system is in the wake of facing rapid and continuous changes and today's world increased complexity extensively putting new and more impositions on our education system. Education system needs to be renovated and refurnished with new teaching and learning techniques so that our graduates could maximally utilize the acquired knowledge to take advantage on his/ or her capabilities can become a strong influential factor in seeking more learning and more contributing to others. Also as viewed by one of our correspondent for productive functioning of the students in the continually changing and demanding environment there is a dire need to change and improve the preparation of students through applying both teacher-centered as well as student-centered approaches for teaching and learning processes.

One more idea was put forward focusing mainly on teacher's assignment of using multi-dimensional strategies while working in groups in line with individual teacher's specific skills, cognitive capacity and personality attributes.

According to another participant:

*“Innovation in physical teaching practice is more essential than in virtual teaching since virtual learning has so far more advanced and technically developed base.”*

According to one of our participant effectiveness of teaching strategies cannot be restricted only to the development of particular skills in students but it should include

*“The entire well-being (physical, mental, social) of a student in and out of the classroom canvas”.*

In this regard teacher’s role has to be redefined as champions in promoting more coordinated, parallel and caring connections/links with students. Having said this it requires teachers to devote the time and resources essential to permit students to work jointly and does experimentation.

A more diverse opinion was taken by another correspondent saying that teachers have to review/revise their individual practices in order to find out and better position their innovative, inherent and personal competencies with those grouping of novel pedagogies.

*“In relation to this, the correspondent said that one of their teacher was practicing this technique every month after the class gets over, asking students learners to express in writing about different attributes for example any teaching practice or personal characteristic they think needs to be changed by their teacher and that was more than a surprise when they actually visualized that change happening. A great appreciation was given by the students for this act of their teacher and build a sense of confidence in them in turn.”*

As expressed by another students the changing educational scenario calls for

*“More technology based digitalized teaching practices to be introduced and students should be given enough time to get used to it alongside physical teaching. It has to be ensured that students make use of this technology more often carrying their daily routine educational tasks”.*

One more aspect was emphasized by one of our interviewee was:

*“To provide the necessary architecture to allow teachers integrate, rather than assimilate new practices into their reserve of teaching tools and designs”.*

As mentioned by one of our respondent that transformation is not something that happen overnight. It takes months and even years to transform a whole educational system taking in view the available resources at hand and expertise needed for it. Moving harmoniously from an environment of traditional learning to online learning too has its own pros and cons and is connected to various obstacles and challenges at that moment.

#### **4.5 QEC as A Tool for Transformation of Teaching Pedagogy**

QEC evaluation tool which is usually exercised at higher education institution hold utmost importance and is usually provided as a source to help student self-asses their teaching practices and teacher’s attributes.

A question asked students concerning if those QEC actually lead to any transformation in teaching pedagogy. Just a few comments were expressed in this regard. According to most of the students although QEC may contribute to great extent towards bringing in innovations in teaching practices yet it is possible only if such QECs are utilized in their true sense. Students feel hesitant to express openly their thoughts on teaching strategies and teacher’s characteristics that deemed important for teaching effectively because they have a fear of revealing their identity which may cause them more problems by their teachers that will severely affect their educational career.

*“Few others see it merely a formal practice not in fact giving any consideration to student’s feedback and thus is not even taken seriously by the students.”*

*“Teachers in public universities are mostly Government employed and they are least bothered about the feedback they receive from their students. Those teachers continued teaching in almost every semester seem least interested considering student’s responses seriously”*

Another viewpoint by one of our respondent says “Those QECs contribute only to the extent that they are a source of keeping inform the undersigned authority about teacher’s personal characteristics and their teaching practices in general and thus have no particular role in transforming teaching pedagogy”.

Yet another completely opposite view to what is mentioned above is expressed by one of our correspondent said:

*“In Punjab group of colleges this quality evaluation practice is exercised at the end of every month while keeping students identity secret thus making it a more genuine process and visible changes have been observed in teaching practices of many teachers.”*

#### **4.6 Effect of Covid-19 on Teaching Pedagogy**

In the words of one of our interviewee the major impact of the pandemic was the complete and sudden stoppage of movements and physical communication between people, whether it be for work, socializing, studying etc. the educational sector (like all others) too, was affected. Improvising had to be done so that education did not come to a stop otherwise it would have

adversely lead to catastrophic wastage of student's times and educational years. We saw a shift from an in person generic style of teaching to a virtual style where both students and teachers were able to continue on with their respective duties from the comfort of their home via mobile devices such as smartphones, laptops and computers.

*“For some this method was more than convenient, whereas for others it was a step back in terms of progression, effectiveness of studying and overall experience.”*

As expressed by another respondent online teaching has to be introduced and utilized into educational institutions much earlier rather than with the spread of Covid-19 pandemic. In developing countries where physical teaching is widely in use, students were not mentally prepare for this abrupt change all of a sudden.

*“In many private educational institutions like LUMS, NUST, Army public Schools digitalized teaching has been into practice for long time back and it is of great appreciation seeing students of those institutions continuing working so efficiently using this technology.”*

Another interviewee expressed her opinion saying Covid-19 has badly affected the entire education system. Although online teaching is the only option existing to continue with educational activities yet students find no connectivity and interaction between them and the teacher.

*“being a student myself I have observed learning interest of students goes on diminishing since teachers have not related experience of online teaching and devote rather less of their time for learning purpose online as compared to offline teaching mode”.*

Yet others express that:

*“Besides, giving you- tube material to students for studying, teachers should first read it by themselves and then instruct students as accordingly”.*

Another opinion as expressed was there has been shift in teaching practices with online teaching software which has its pros and cons. Lack of regular and appropriate interaction on daily basis with instructor is a major concern associated with online learning. Similarly students are more concerned any material for the online course are generally discuss with the concerned course teacher by e-mail, which involve response time. Furthermore

*“Traditional classroom socialization is one more missing element. Students can only communicate through digital medium, and hence the existing sharing of ideas, knowledge and information is less permissible in the computerized learning world”.*

More than average percent of students see:

*“Online learning is a complete failure because it cannot provide expected results as were anticipated in developing countries like Pakistan, where a large number of students do not have sufficient technical and monetary resources to access the internet which pose a great hurdle in continuation of smooth learning process. Also minimum face-to-face interaction with the teacher, replying time, feedback from the students, live in class group discussions and nonexistence of traditional classroom mingling were among some other issues emphasized by university level students”.*

Another opinion reported was that in digitally advanced countries online learning can be effective but ineffective in Pakistan since very limited was constituted regarding the effects and



effectiveness of digital education and secondly a great deal of learning and teaching as well as office management tasks of learning institutions are performed by hand.

It has been pointed out by one of our respondent that:

*“Live session by teachers are must, mere recording of lectures do not have remarkable effect on student’s learning.”*

Another comment by a respondent concerning this sudden and unexpected change to online learning questions the organizational quickness where a variety of educational institutions mainly concentrate on the transfer of academic content to the digital world and not particularly on virtual teaching and delivery methods.

#### **4.7 Instructor’s Role In Engagement of Students In E-Learning Environment**

Student’s engagement in e-learning is of great significance than it is in on-campus courses because online learners are provided with very limited opportunities to be involved with the institution. Thus it is highly recommendable to create several opportunities for student’s engagement in the e-learning environment. Engagement of students can be retained by developing and applying guidelines for designing effective online courses. Various opinions were suggested by Graduates and post graduates when asked them a question as how student’s engagement can be hold in online learning environment.

*“For effective learning online, the very first step to follow would be a strong interaction between teacher and students, interaction between one student and other students and finally interaction between the learner and the text. Interaction, dialogue and feedback between learners and teachers is at the core of education and learning. Interaction may take the form calling students by their names while taking feedback from them.*

Reinforcement is highlighted as another strategy that could boost student’s engagement. The instructor should reinforce student feedback and questions well to appreciate further participation by:

*“Making of positive statements and usage of gestured communication like laughing, nodding and maintaining eye contact is a way reinforcement can be done by the instructor.”*

One more development is seen important for student’s engagement and

*“That is to ask students to keep their cameras switch on during class lecture to make sure student’s participation in online learning session as well as to keep them stay active and alert otherwise”.*

It has always been observed that at times students get involved into such discussion that is out of context, in that case the teacher can refocus to support the student to bind her/his response to the subject under discussion. This technique is also beneficial to divert student’s attention to a new topic.

According to one of our respondent probing does contribute in maintaining student’s engagement. Probing a questioning technique, is undertaken to make students search opening comments. Probes

are advantageous to get student involved more into critical analysis of their own and of other student's ideas.

Another interviewee stated that since students didn't have yet getting used to maximize work using digital medium,"

*"Teachers should precise their lectures and class time should be limited. Sitting long hours in front of laptops won't bring fruitful results since it requires a great deal of mental capacity to stay focused".*

*"Time punctuality has been emphasized being one of the most essential factor for student's engagement in online learning. Teachers should be responsible enough to take their classes in time which will then be effective in creating a sense of responsibility on the part of students as well to follow the same practice. Instructor need to be loud and clear while delivering lecture and should come well prepare concerning the content that has to be delivered".*

As suggested by one of our respondent:

*"Pictorial demonstration of the topic seems to be more interesting way of keeping students engaged rather than lengthy boring slides presentation.*

Another idea as put forward was engagement should be retained through

*"Attendance at the beginning and end of the class. Questioning, feedback of students, class participation should all be affiliated with giving extra marks to students in exams".*

As viewed by another participant in order to pay attention on student activity and engage them innovatively, incorporating learning strategies is a must. Active learning strategies involve such

methods that keep students actively involved in learning process and putting on them a greater level of responsibility instead of leaving them inactively digest information. Role-playing, group discussions, problem solving, case-studies are among those activities which help raised higher order thinking skills and more productive knowledge is created.

One of our interviewee expressed that two or three of their class mates have made their group where they collectively work together to examine and understand the content taught to them. This entirely promote an environment of collaborative learning that lead to discover new perspectives and reshaping old ideas with new angles.

It is an understood fact that students memorize more through visuals. According to a number of participants:

*“Pictures make communication faster and simple while at the same time help memorize information conveniently. Figures, illustrations, graphic organizers, depictions and info graphics are powerful substitutes to lengthy duration of lectures that avoid students usually get easily bored of.”*

Pre- recorded tutorial videos or video demonstration is an alternative to online lecture that students can make use of according to their own speed online. An instructor either may produce videos by himself or might choose from the ones available on the internet. Instructors may distribute and give access to students to relevant websites, blog posts, e-books and videos they can read and watch.

For students convenience all learning material needs to be stored in a central location so that students can access them easily for their learning purpose.

As stated by one of our interviewee the instructor have to design online friendly assessment techniques like group based projects, case studies, video projects, present-time online quizzes, story maps etc. that would keep students deeply engaged while learning online. Students can submit their files through institution's online communication platform.

#### **4.8 Indicators of Online Teaching Presence**

Teaching presence is conditional upon design of the course and arrangement, assisting of online discourse and definite direct instruction as opposite to what is exercised in face-to-face teaching where physical presence is assured.

Following question asked students what indicators of teaching presence they perceive as most important. Teaching presence indicators were categorized as teacher's online material, direct instruction, facilitating online discourse, teaching methodology, communicative aspect of teacher etc.

The indicators that were marked most important by students include direct instruction by the instructor about course content. Distributing/displaying course material on digital platform is not sufficient enough till it has to be briefly describe by the teacher for better understanding of the students.

*“Direct instruction is much appropriate way when you allow students to watch your subject expertise through your online communication with them. Direct instruction is a strategy whereby learning is socially shared and directs to a path of meaningful, systematic and worthwhile educational experience”.*

As stated by a respondent:

*“For teaching presence teacher’s command on his subject holds great importance. Teachers should come well prepare, passionate, and stay focused while delivering their lecture. In relation to this, another aspect is the necessity to pay special attention to the conversational features of teacher presence. To establish and maintain a sense of belonging among students, teachers should make efforts and promote such an environment where students could have free content discussions, information sharing related to professional interests and goals of students”.*

As expressed by a respondent:

*“Teaching presence can be viewed by Preparation of learning courses with specified learning goals, reading assignments, precise instructional content, learning activities, discussion board posting requirements, evaluation mechanisms in the design of the course”.*

Facilitation of discussion is required at each step in online learning environment which is usually initiated through ice breakers where students are asked to introduce themselves at the start of the class and find similarities with other classmates. A teacher being the driving force of online learning environment should also introduce himself to students and to conveniently express your thoughts as what do you want your students to do. This would show teacher presence while encouraging students to understand your expectations for e-learning discussion.

*“Teacher’s presence itself and online material has far reaching effects on learning outcomes since long hours group discussions are hard to take place online”.*

*“An online discussion as mentioned by a respondent could also be taken up in the form of Summarizing which is a suitable substitute for dialog facilitation and exhibit teaching presence.*

*Summarizing of discussion forms a connection between the discussion and its relation to the course content and identifying of any missing information”.*

Teaching presence online in any form is viewed highly important and should be retained successfully throughout the course deliver process.

## CHAPTER 5

### DISCUSSION, CONCLUSION & POLICY RECOMMENDATIOND

#### 5.1 Background and Discussion

Summarizing the whole discussion and since we are focusing particularly on teaching methodology, an important thing that has been identified and mostly agreed by all is that transformation of teaching pedagogy keeps a vital role for the progress and development of a student' learning hence more attention should be diverted to teacher's pedagogical expertise when recruitment procedure is followed (Garner, [www.umc.edu.dz](http://www.umc.edu.dz), 2016) . No matter how efficient a system is formulated unless it's not delivering the services in its true essence it would simply be of no use to derive the desired objectives. Use of varying innovative & new teaching methods will help in polishing the hidden talents and skills of students that they may apply to work progressively in an advanced digitalized education word. Huge response was put forward by students for bringing changes in teaching methodology as deemed important within the context of continuing changing educational environment and its requirements.

Teachers being the driving force and occupying the core value in the educational structure need a constant transformation of their pedagogical skills that would help them to prepare their students for facing upcoming challenges in the educational world progressively and proactively (Chinyeaka et al, 2018) . Following this the first step is to hire teachers purely on merit to make sure they possess required knowledge and pedagogical expertise so that they could teach according to standards. Secondly, there should be a concrete and appropriate inbuilt evaluation system of teaching methodology in practice that would be monitored regularly by the higher authorities on



constant basis taking feedback from students for bringing in much better additions and solutions to knowledge delivery process and giving much space for student's views in this regard thus appreciating their role. This evaluation has to be done on completely fair and transparent basis keeping student's identity secret. Also teachers and students should call for such arrangements face-to-face where they could freely exchange and share their concerns regarding what innovations and creativity measure have to be incorporated for much better desired results at higher level. Teachers training is another extremely important feature regarding transforming teaching pedagogy. Quarterly teacher's training program and session should be conducted specifically at higher education level where professionals should direct teacher's better ways for teaching thus enhancing their pedagogical skills for much better learning outcome (Biku, Demas, & Getahun, The effect of teaching without pedagogical training in st. Paul's hospital Millennium Medical college, Addis Ababa, Ethiopia Teshale B, December 2018). Professional educationists from abroad with special skills in teaching methodology should be take on board for this purpose. After completion of such trainings it is to be assured that teachers must apply those aspects into their daily teaching practices and to measure its effectiveness through student's feedback. Teachers should also be given a free hand to adopt for more practical usage of imparting knowledge rather than cramming of bookish knowledge solely into their students. Higher education institutions should formulize such policies where practical studies are prioritize over theory. This would make their students gain more knowledge through doing research and exploring of new avenues. Apart from what is mentioned above there is a realization of the fact that instructors mostly are hesitant applying new innovative teaching methods in their routine teaching and stick to old traditional methods specially lecture method which is why student's cognitive skills are not improved the way it should be. Furthermore students have great concerns regarding online teaching which they don't

see as beneficial as it is in developed countries because online teaching requires specific set of skills that faculty must acquire in order to be successful in this new paradigm of teaching and learning. Also since students have been into face-to-face traditional learning practice long back they advised their teachers to consider teaching their classes partially online in regular routine besides on-campus giving them enough time to get used to this new learning mode.

Moving further it is notified by most of our student participants that there exist a lack of meaningful and purposive communication presence between teachers and students due to which students have never been given that confidence and feeling where they could express themselves more openly. Interaction and connectivity is the key issue for the greater success of teaching and learning process as suggested by Jose (2019) while conducting a research study “understanding student-centered learning in higher education”. That interaction is only possible if teachers continue encouraging their student’s participation in each and every endeavor of educational field. Same would be suggested for online learning too, universities should arrange meetings with colleagues where practicing of such methods should be reassured/enhanced that are more interactive hence would encourage students presence and improving learning capabilities.

Besides it has been also expressed that teaching methods in higher education are hardly of a kind to develop basic skills such as writing, problem handling, and component of reasoning into their students which surely remains a hindrance to educational development of graduates at higher level. In view of that learning material of more creative nature should be devised by the teaching staff. Students have to be provided with more innovative and practical work. Teachers can entrust students with case studies depicting real world scenarios and would ask them for their ideas and opinions accordingly. This would inculcate in them the sense of critical thinking and problem solving skill enhancement too. Contrary to conventional teaching, online learning in developing

countries like Pakistan is a big challenge since teaching advancements are not practiced much here as well as students are not yet mentally adapted to this learning mode which is why it is not seen much effective in providing education by most students. Still a wide range of instructional strategies by higher educational level students have been devised that will help in coping with the issues confronting in person e-learning.

One of the most important aspects of e-learning is the teacher's voice. For excellent communication teachers, their voice pitch should be high, with vocal pauses, intensity fluctuations, has to be retained while addressing students. Teachers should focus on having more interactive online classes and share class material before conducting regular class. Inculcate in their students the spirit of critical analysis and viewing things from a different perspective of their own which is then possible if given students independent projects and case studies to deal with. Regular meeting arrangements with students on weekly basis have to be initiated to get feedback from students for the overall way of delivering the content satisfying their educational needs and what other measures have to be incorporated to make teaching pedagogy worth contributing.

## **5.2 Conclusion**

Teaching and learning being two important elements travel collectively in the journey of education. Students of current age need newer, interactive and dynamic method of learning. Relating this it is necessary to figure out the effective teaching and learning methods to allow not only the progression of transmission of knowledge but to produce an appropriately skilled workforce with capabilities to meet the challenges of the fast growing world. Teacher's role here is to provide appropriate knowledge through the use of more advanced pedagogies for better

learning outcomes as desired. That too would make students feel more enthusiastic and participatory and will help them to retain the learned concepts. The new frame of reference for thinking and training, as well as subject-specific knowledge and abilities, must be adjusted in traditional instructional technologies with more inventive, skill-based, and futuristic approaches to improve personal skills.

### **5.3 Policy Recommendations**

Education is a crucial mean for countries like Pakistan to prosper in the future. Therefore, keeping the importance of education in mind the bureaucracy of Pakistan comes up with new reforms each year to fulfill the advanced requirements of education. The policies of each year are put through the scanner to get a better result and hence a better policy. The education policy of 2009 is also a continuation of such reforms with additional features included and few others excluded.

Although the education policy of 2009 is a better version of previous policies yet it leaves certain flaws that needed to be addressed. One important aspect that has been not touch in this policy is about teacher's pedagogical training. Teachers being the only force for delivery of knowledge are always ignored by the policy makers while formulating the educational policies. Besides there exist few training institutes for teachers but are not functioning well due to financial constraints. Therefore a drastic and an aggressive plan focusing pedagogical innovative reforms has to be induced in our next national education policy reforms for much desirable and worthier learning end results.

Following are some recommendations that are suggested on the basis of the results drawn from this study:

- Considering the importance of pedagogical techniques at higher education level, Government should instruct Ministry of education to make it mandatory for teacher's recruitment to hold teaching pedagogical expertise as the most important required feature besides subject expertise and relevant experience. Relating this, the concerned authority have to make sure that those instructors been hired have to retain following developments in order to become pedagogical experts. 1) A thorough understanding of pedagogical knowledge and its application while instructing higher level students 2) the ability to use successful and equitable classroom practices in a truthful manner. Those classroom practices by teacher includes a variety of both theoretical and practical approaches to expand the learning capabilities of their students 3) teachers must use those understandings to modify instructions to fulfill the academic needs of their students the best way possible.
- Government should have proper institutes set up for providing pedagogical training to instructors at higher level. Although there exists a few teachers training institutes in Pakistan but they mainly are established to provide educational services to primary, secondary level as well as to students of special education. But this isn't enough and yet more focused has to be paid for the establishment of such institutes which are concerned with pedagogical research and innovation as well as to train teachers specifically at higher education level.
- Pedagogical experts from abroad should be taken on board to train instructors on pedagogical improvement and enhancing skills in accordance with international standards. Lifelong learning deemed essentially important as the right and duty of every teacher as

well as the responsibilities of educational authorities and higher education itself. The educational authorities should plan the necessary activities for teaching staff to boost their pedagogical knowledge in their universities and educational Institutes. Those activities should be wide-ranged and free of cost so that all teachers could benefit equally.

- Student's as well as teachers views should be given due importance to bring in more innovative pedagogical practices at higher education level while formulating pedagogical framework. Higher education should have regular meetings arrangements where instructors and graduates of university level could exchange their views for introducing more challenging and novel pedagogical practices and training teachers at higher level of education for desired learning outcomes. Higher education should go beyond simple instruction, motivation and communication technology transmissions.
- Formulation of a concrete pedagogical framework at higher educational level must be ensured and implemented.
- Conducive endorsement of innovative pedagogical practices at university level be applied that would be in line with the corresponding contextual setting. Each educational institute have their own context where educational activities are carried on. Those educational institutes have to propose and initiate such pedagogical practices that can be easily applicable to their own contextual environment rather than those whose implementation cannot be assured
- Instructors applying innovative pedagogical practices should be given appreciation by awarding them distinctions and awards and payoffs as well as offering them much better positions in their institutions. They should also be given the opportunity to display their pedagogical expertise to greater student masses in routine seminars and classes etc.

- Workload of Instructors should be lessened to ensure that their complete attention and energy are devoted to instructional issues.
- Provision of necessary funds for the purchase of materials and resources required for instructional and professional development should be assured.

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## APPENDIX

### Appendix I: Interview guide Students

#### Reviewing and incorporating pedagogical techniques in higher institutions via student's perception

- **Demographics**

Your name (Optional): \_\_\_\_\_

Are you ...: Female \_\_\_\_\_ Male \_\_\_\_\_

**Your age group in years.....: (Please tick ✓ under the appropriate answer)**

| 18-29 | 30-39 | 40-49 | 50-59 | 60+ |
|-------|-------|-------|-------|-----|
|       |       |       |       |     |

**Your highest qualification....: (Please tick ✓ under the appropriate answer)**

| Bachelors | Masters | M.Phil. | Doctoral | Other (Please specify) |
|-----------|---------|---------|----------|------------------------|
|           |         |         |          | _____                  |
|           |         |         |          |                        |

- **Main Questions**

1. What type of teaching techniques have you experienced in higher education and in your opinion how effective those techniques were in terms of enhancing the understanding level of basic content and development of intellectual skills of students?

2. Do you think that teaching techniques needs to be transformed according to changing educational trends/needs?
3. How did covid-19 pandemic affect teaching techniques in higher education?
4. How does the role of instructor affect student engagement in the online learning environment?
5. What indicators of online teaching presence for example teacher's online material, direct instruction, facilitating online discourse etc. do students perceive as most important?
6. What improvements do you think should be incorporated in online teaching mode?

**Thank you very much for your time!**

