

## **Knowledge of Principles of Teaching and Learning and their Practices at Higher Education Level**

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### **Abstract**

Conveying information and skills from one person to another is called teaching. In order to make teaching effective, the Principles of teaching and learning are comprehensive which provide support to teachers for analyzing their practices and upgrade their teaching (Julianne, 2006). The major aim of the research was to examine the perceptions of university teachers about the knowledge and practices of Principles of teaching and learning . To accomplish this aim all the teachers coaching at Bahahudin Zakariya University Multan was the population of the research study, which were 619 teachers (currently teaching at that time). Eight faculties were merged in to four strata by the researcher. Forty five departments were selected from these four strata by using Simple random sampling technique. Sample of 395 was selected from these 45 strata through using lottery method of simple random sampling. For data collection researcher used questionnaire. Reliability of the tool was also calculated using Cronbach's Alpha Model and the value of 0.96 was abstracted which indicated that the scale was steady and reliable. Collected data was tabulated, analysis and interpreted in the light of objectives of study. Descriptive statistics (i.e., Mean and SD) and inferential statistics t-test and analysis of variance were applied to obtain the answers of research question. The results of the research study revealed that most of the Principles of teaching and learning were esteemed high on the measure by teachers responding to the questionnaire. The top ranked principle was "Teacher identifies that differences among single students exist." and the lowest rated principle was "Teacher organizes different ways for students to interact with native and wider communities."

**Key words:** Perception, Principles of Teaching and Learning, Social Sciences.

### **Introduction**

Teaching is to pass on knowledge or expertise from oneself to the other, moreover, it also encompasses sharing of experiences. The planned interaction between a more matured and a less matured person to fortify the education of latter (Rajagopalan, 2019). Teaching is the act of examining, coaching, guiding and pursuing activities to facilitate formal or informal activities.

(Doung, 2021; Reynolds, 2020). In present time, every institute wants to make their teaching effective. In order to make teaching effective, the Principles of teaching and learning are comprehensive which provide support to teachers for analyzing their practices and upgrade their teaching (Julianne, 2006; Sobkowiak, 2016). Many researches have been done on Principles of teaching and learning . A fundamental idea when teachers are getting ready to teach is identifying the individual differences of the learners. Knowing about the learners and selecting instructions with respect to the learners is a key characteristic of an organized teaching-learning (Jones, 1987; Al-Ghadouni, 2021). Following 20 teaching-learning principles were given in a report developed by American psychological association in 2015:

- Learner's intellectual working is effected by their perceptions regarding intellect and expertise.
- Learning is effected by student's previous knowledge.
- General steps of development do not restrict students' intellectual advancement.
- Learning is based on circumstances, so implementing knowledge to new and changing circumstances is not impetuous but needs assistance.
- Attainment of deep rotted knowledge and potentials depends on practice.
- Explicit, vivid and proper feedback to students is obligatory for learning.
- Self-regulatory skills can be transmitted because students' self-regulation aids learning.
- Students' creative powers can be nurtured.
- When students are intrinsically motivated they do well.
- Students operate materials more appropriately when they use expertise goals.
- Students' learning, motivation and their performance is effected by expectations of their teachers.
- Students' motivation is enhanced by developing clear, definite and interesting objectives.
- Learning takes place in many collective settings.
- Social associations and transmission are vital for instruction as well as for socio-emotional development of students.
- Students' outputs, comprehension and development is effected by emotional relief.
- Various methods of teaching are used by teacher to enhance social association and etiquettes in classroom.
- Efficacious classroom management is possible trough implicit communication and healthy relationship between student and teachers.
- Formative and summative both assessments are important and useful but require diverse methods and explanations.
- With the help of evaluation procedures which are based on psychological principles students' knowledge and skills are measured.
- The information got through assessment should be perfect, unprejudiced and neutral in order to make effective assessment

In the view of Julianne 2006:

- Ensure supportive and zestful learning environment.
- The classroom environment should boost individualistic learning and self-motivation of the learner.
- Learning program is the reflection of students' individual needs, experiences and interests.

- Support students in advancing imagination and implementing new and inventive ideas for the solution of problems.
- Evaluation practices are essential part of teaching.
- Teaching should have a strong connection with communities and extra-curricular activities.

### **Rational of the study**

The background of the study suggested that there is a need to investigate university teachers' perceptions about Principles of teaching and learning. Nevertheless university teachers have awareness of the Principles of teaching and learning but still they are unable to use these principles effectively in classroom. Thus, there is a need for a research study about Principles of teaching and learning in order to recognize the perceptive of teachers and to refine their practices. For that reason this study deals with investigating teacher Perceptions about the Principles of teaching and learning.

### **Statement of the Problem**

This research study investigates the perceptions of university teachers regarding the knowledge and practices of Principles of teaching and learning. There are many principles of teaching and learning but teachers cannot practices these principles of teaching and learning in their classrooms. This study includes the investigation of perception of teachers about the knowledge and practices of Principles of teaching and learning at higher education level.

### **Objectives of the Study**

The chief objectives of the study were:

1. To investigate the perception of university teachers regarding the knowledge and practices of selected Principles of teaching and learning.
2. To examine the difference in perception of female and male teachers about the knowledge and practices of Principles of teaching and learning at higher education level.
3. To inspect the difference in perception of university teachers about the knowledge and practices of Principles of teaching and learning based on the strata.
4. To investigate the difference in perception of university teachers regarding the knowledge and practice of Principles of teaching and learning based on position.

### **Research Questions**

1. What university teachers perceive about the knowledge and practices of selected Principles of teaching and learning at higher education level?

### **Significance of Study**

- This study will be significant for policy makers for improving the worth of instruction as it provides the clearconcept of Principles of teaching and learning.
- This study will be significant for university teachers that they will get information regardingPrinciples of teaching and learning and use these Principles of teaching and learning during their instruction.

### Research Methodology

The current study was descriptive in nature. In current study survey research design was used to examine the perception of teachers at university about the Principles of teaching and learning. To accomplish the main aim Bahauddin Zakariya University Multan was chosen as a case. Eight faculties are at Bahauddin Zakariya University. Within eight facilities 65 departments, colleges and institutions were working. The total 619 teachers were teaching at Bahauddin Zakariya University which was selected as population. Eight faculties were merged into four strata by the researcher. Forty five departments were selected from these four strata by using simple random technique. In selected departments 454 teachers were employed. From these 454 teachers sample of 398 was elected by selecting lottery method. In association with the purposes of the research, this study used quantitative data assembly method supported by qualitative data gathering technique (open-ended items). For this research, questionnaire was used for university teachers it comprises two sections first section was about Demographic information of the Respondent's, Second section consist of 15 Principles of teaching and learning. Items were investigated by five point likert scale. Descriptive statistics (i.e., Mean and SD) , inferential statistic (independent sample t-test) were applied by using the SPSS software version 22 to analyze the collected data taking into consideration the nature of survey questionnaire and the suitability of responses.

### Analysis and Interpretation

**Table 1 Respondent's Perceptions about the Principles of teaching and learning**

Sr.no	Items	Mean	Standard deviation
1	University Teacher identifies that differences among single students exist.	4	0.94
2	University Teacher gives an opportunity for discussion and reflection to his/her students.	3.96	0.86
3	University Teacher emphasizes on the development of attitudes and skills in their students.	3.94	0.89
4	University Teacher openly clarifies outcomes of lesson to their students.	3.93	0.78
5	Formulating objectives that are completed on time, concise and temperately exciting increases motivation.	3.93	0.78
6	University Teacher arranged educational deeds that include the desires, requirements, interest and ambition of their learners.	3.86	0.71
7	University Teacher gives steady affirmative feedback to his\her learners which support additional learning.	3.84	0.68
8	University Teacher associates new knowledge with somewhat from prior knowledge.	3.83	0.76
9	The execution of an instructional method by a University Teacher is more Significant than which method is designated.	3.81	0.75
10	To generate reinforcement further operational,	3.80	0.83

	reward (reinforcement) must be delivered to the learner closely for the desired behavior and it should be linked with that actions which is operative.		
11	University Teacher practices individualized teachings to help students make assessment.	3.80	0.83
12	University Teacher practices Multiple of teaching content; teaching tactics and Evaluation methods for giving appropriate learning experiences.	3.79	0.89
13	Learners are encouraged with their contribution in formation of goals and planning learning experiences.	3.79	0.89
14	Subject matter to be teaches has meaning, association and arrangement that is flawless and understandable to their learners.	3.74	0.74
15	University Teacher organizes different ways for students to interact with native and wider communities.	3.69	0.76
	Overall	3.85	0.82

Table 1 discloses that only one principle which is University Teacher identifies that differences among single students exists, had mean value of 4 and other 14 Principles of teaching and learning had mean value of less than four. The value of other 14 statements was more than 3.5 which shows the majority of respondents have high level of agreement with the selected principles.

Explicitly, the maximum mean score was identified 4 about Teacher identifies that differences among individual students exist which stipulates that teachers of university acknowledge that individual difference occurs among learners. For now, lowest mean score was 3.69 which stipulate that university teachers contributes minimum in organizing different ways for students to interact with native and wider communities.

General mean score of 3.85 validates that university teachers acknowledged that they have knowledge and they are also worried about the Principles of teaching and learning during classes. General Standard deviation value of 0.82 validates that maximum University teachers have information and were worried about Principles of teaching and learning.

### **Investigation of Respondent's Perception regarding Principles of Teaching and learning on the Gender basis.**

This section deals with the Perceptions of teachers about Principles of teaching and learning on gender basis. The sample of respondents contains 211 male and 94 female teachers of the university. The t-test is used to evaluate the difference among the opinion of male and female teachers. In table 2 the attained value of significance level was matched with the common level of significance 0.05 (Airasian, Gay & Mills, 2012).

**Table 2** Gender-Wise Difference in Perceptions of Respondent's about selected Principles of teaching and learning

Gender	N	Mean	Standard deviation	df	t	Sig(2tailed)
Male	211	56.41	8.69	303	-3.850	.002
female	94	60.57	8.72			

Table 2 illustrate the attained value (0.02) is fewer than significance value of 0.05 which tells that there is statistical difference among the opinion of male and female teachers' about the Principles of teaching and learning. It shows that female teachers have more information and were more worried about the Principles of teaching and learning in their class at Higher education level than male teachers.

#### **Investigation of Respondents' Perceptions about Teaching Learning Principle on the base of strata**

**Table 3** Strata wise Difference in the Perceptions of Respondents about selected Principles of teaching and learning

Faculty	N	Mean	Standard deviation	df	F	Sig(2tailed)
Social sciences and language	83	58.02	8.7	303	0.642	.51
Natural science and business administration	95	58.01	8.67			
Agricultural science and veterinary science	68	57.86	8.94			
science and veterinary science	58	57.36	9.14			
Engineering and Pharmacy						

Table 3 shows that the attained value (0.51) is more than significant value of 0.05 it discloses that there is nonotable statistical difference among the Perceptions of teachers on the base of strata about the knowledge and practice of Principles of teaching and learning. This shows that there is no difference among the Perceptions of social science and language, natural science and business administration, Agriculture science and veterinary science and Engineering and pharmacy teachers regarding the knowledge and practice of Principles of teaching and learning.

#### **Investigation of Respondents' Perceptions about Teaching Learning Principles on the base of Position**

**Table 4** Position wise Difference among the Perceptions of Respondents about selected Principles of teaching and learning

Position	N	Mean	Standard deviation	df	F	Sig(2tailed)
Lecturer	70	57.42	8.68	303	0.674	0.56

Assistant Professor	102	60.55	8.75
Associate Professor	87	58.93	8.61
Professor	46	56.72	8.3

Table 4 shows that the attained value (0.56) is larger than value of 0.05 which discloses there is no notable statistical difference among the Perceptions of teachers on the base of position about the awareness and practice of Principles of teaching and learning. This indicates that lecturer, Assistant Professor, Associate professor and Professor perceive in a same way about the knowledge and practice of Principles of teaching and learning.

### **Finding**

The findings of the study exposed that average scores of nominated principles of teaching and learning is between 3 and 4. More precisely, the top average score was observed 4 about “University teacher identifies that difference among single students exists.” It shows that teacher at higher education level were well aware that one student is different from other. General mean score of 3.85 validates that university teachers acknowledged that they have knowledge and they are also worried about the Principles of teaching and learning during classes. General Standard deviation value of 0.82 validates that maximum University teachers have information and were worried about Principles of teaching and learning. The results of the inferential statistics shows that average scores of the female teachers at higher education level is more than the male teachers of higher education level. It was shows from inferential analyses of the study that the attained value of significance 0.52 which tells that there is no statistical difference between the mean values of facilities. This indicates that there is no difference between the perception of social science and language, natural science and business administration, Agriculture science and veterinary science and Engineering and pharmacy teachers regarding the knowledge and practice of Principles of teaching and learning. The results of the study shows that the attained value (0.58) is more than significant value of 0.05 which exposes that there is no notable statistical difference between the perception of teachers on the base of position about the knowledge and practice of Principles of teaching and learning. This indicates that there is no difference between the perception of lecturer, Assistant Professor, Associate professor and Professor regarding the knowledge and practice of Principles of teaching and learning.

### **Discussion**

The results of the research study indicated that teachers responding to the survey ranked maximum of the Principles of teaching and learning high. The highest rated principle was “University Teacher identifies that differences among individual students exist” and the lowest rated principle was “University Teacher organizes different ways for students to interact with native and wider communities.” The previous research suggests that Principles of teaching and learning rated as most important included: recognition that individual differences exist among students, feedback is important for student learning, teaching strategies are very important for students to learn well, use a variety of evaluation procedures is necessary, career guidance should be provided as necessary, and teachers should set achievable objectives for lessons (shinn, 1997). Aslam and Awan in 2019 conducted a research on perception of primary school teachers about teaching strategies and their impact on student learning and results shows that

were of the view that they use pictures, tools, practical kits, real things related to teaching topic the respondent shows high level of agreement on this statement.

### Recommendation

There are following recommendations which were proposed on the consequences and results of the research.

- The administrators should work that teachers should focuses on the Principles of teaching and learning during teaching so that quality of teaching as it gives the clear idea of Principles of teaching and learning.
- The results should be conveyed to teachers and teacher educators to stress the significance of using suitable Principles of teaching\learning.
- The Principles of teaching and learning and allied theories will be incorporated in the educationalists and educators in-services teaching programs because information on this theme has an impact on usage and efficiency of instructional approaches and methods.

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