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INSTRUCTIONAL METHODOLOGIES AND STUDENTS' PERFORMANCE: A CO-RELATIONAL STUDY

Jalil Ahmed Thebo, Faculty member, SZABIST Larkana, jalilthebo@gmail.com
Benazir Fatima Veesar, PhD Scholar, Department of Education, University of Sindh, Jamshoro
Raja Sajid Hussain Laghari, PhD Scholar, Institute of Commerce, Shah Abdul Latif University, Khairpur
Dr. Zulfiqar Ali Rajpar, Assistant Professor, Shaikh Ayaz University, Shikarpur
Dr. Ghulam Akbar Khaskheli, Research Associate, Institute of Commerce, Shah Abdul Latif University, Khairpur
Muhammad Hassan Veesar, PhD Scholar, Department of Education, University of Sindh, Jamshoro

Abstract
Objectives: Instructional/teaching methodologies that are the main cause of the students' learning are a factor which can change the students' performance at broader level. The study has focused on the methodologies that are playing major roles in the current study trends. This study is very unique in its nature. **Methods:** The Students from the IBA Sukkur University have been included in the population. The random sampling technique has been used as each and every student can get chance to express his/her own view and the better results and finding could be deduced. The total populations were on campus students which are 1200 according to the report of HEC 2019-2020. The study has used a total sample size of 200 respondents to get responses. **Analysis:** The study analysis has been done in the AMOS software in which the SEM has been performed and the confirmatory factor analysis has also been conducted to confirm the factors. **Findings/Conclusion:** The findings of study suggest that all hypotheses have supported according to the results obtained from the analysis of study and it is noted that the instructional methodologies have a positive and significant correlation with the students' performance.

Keyword: Instructional methodologies, students' learning

I. INTRODUCTION

There are several factors defining the quality of teaching-learning process. The notion of quality here refers to the quality of teacher, teaching program, readiness of students, and physical atmosphere of learning environment. Positive and negative contributions of these factors are crucial for the success of teaching-learning process. Among these, teacher, learner and instructional program are the basics of the "instructional process". Of these three basics, teacher, as a guide, facilitates the interaction of students with the instructional program. In this sense, the basic responsibilities of teachers during a course can be specified as conducting and managing the teaching-learning process. Defined as teaching service in this process, teachers organize some activities based on instructional methods to help students attain their instructional goals. In literature, "methodology" is defined as "a systematic path designed to accomplish certain goals (Turkish Language Association 2016)", "A systematic way of studying on phenomena and concepts (Öncül 2000)". Method, education-vise, can be described as "a way consciously employed in order to realize identified instructional and educational goals (Öncül 2000)." These ways may vary according to the target, time, level of the student, modern approaches, and practices in educational sciences. Specifying an appropriate teaching method for the goals of the instructional program and applying them during the classes can be seen as one of the teaching skills. The teaching method is a concept that should be considered together with model, strategy, and technique. There is a hierarchical relation among these concepts. Model and approach rank highest in terms of hierarchy. In this respect, the instructional model can be deemed as an umbrella term. As for terminological hierarchy, techniques are embodied into methods that are subordinated by approaches. Ocak (2008), states that some educators feel like employing methods when using materials, studying on reading passages, conducting activities, and doing exercises. According to him, the concept of method has a different meaning than the others such as A course of activities that help the learners to achieve their objectives at the earliest and in the shortest way. Within this scope, a method is a total of activities that are conducted and is a path or a situation that these activities refer to. Accomplishing instructional goals also depends on the goal,

student, teacher, subject, as well as finding and conducting an appropriate method for the available materials. As an indispensable component of the process, the instructional method should be considered within the educational aspect of the program. Asserting that a method is the best to reach all kinds of educational goals, or claiming that one is better than the other would technically be misguiding. Rather than thinking that a method is good, it is better to look for compatibility among the target, students' features, and other factors. Therefore, teachers have to have a rich and large command of experience so as to determine the suitable method and technique. A teacher utilizing different but correlated and compatible instructional methods in one lesson will be more able to support his/her students in achieving effective, permanent, and meaningful learning (Fer and Cırık 2011). Gözütok (2007) reports that literature hosts different classifications regarding instructional methods. Some sources group instructional methods in terms of the size of the class, some do it according to the type of the roles that teachers and students bear, some categorize them with respect to the physical setting (labs, studios, in or outside the class), and still some others classify them in accordance with the skills and behaviors (cognitive, affective, and kinetic) to be infused on students. In this sense, teachers should know the properties, limitations, and contributions of all methods.

Research Problem

It has been noted since years that the outdated instructional strategies are prevailing in the current educational institutions of Pakistan. the out dated strategies are no longer useful for the current educational requirements of the students and the performance of students are declining with the passage of time.

Research Objectives

1. To measure the impact of Flipped Classroom instructional methodology on the students learning.

2. To measure the impact of Project-Based Learning instructional methodology on the students learning.

3. To measure the impact of Cooperative Learning instructional methodology on the students learning.

4. To measure the impact of Thinking-Based Learning instructional methodology on the students learning.

5. To measure the impact of Competency-Based Learning instructional methodology on the students learning.

Significance of study

Improvement in the instructional methodologies is the dire need of the day. The current educational requirements are changing day by day. In order to fulfill the current needs, this study has used the latest five instructional strategies which have not been tested together and the use of this new instructional methodologies will definitely help the intuitions to improve the performance of the students and can meet the current educational needs of the students and can make them to meet the international quality standards.

II. Literature Review

One of the classifications concerning instructional methods was done by Fer (2011), who noted that some of the methods are categorized as techniques and some of the techniques are recorded as methods in the literature due to the closeness and interwoven nature of the two terms. So, she categorized instructional methods as teacher-centered, individual-centered, and interaction-centered.

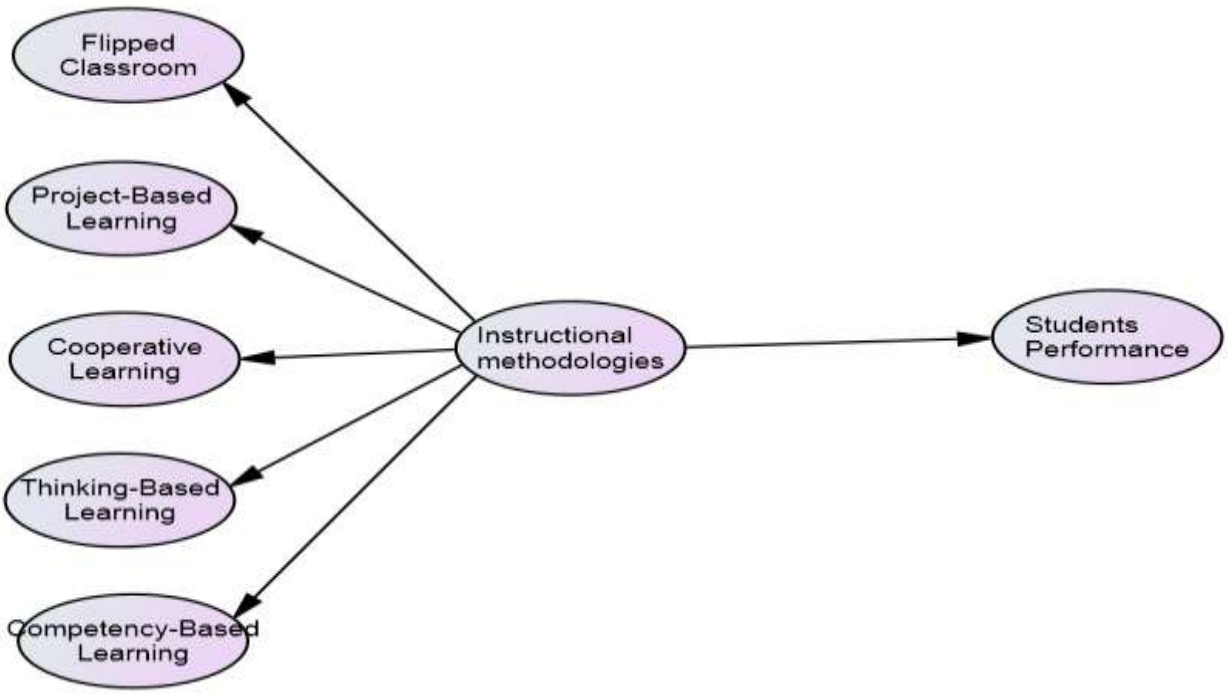
Lang and Evans (2006) consider instructional methods more as a component of instructional strategies. One or more methods can be found in one strategy as parts of it. In this sense, some behaviors such as demonstration, question-answer, and presentation that are performed by teachers and included in one method are also classified instructional skills. Lang and Evans (2006) Categorize instructional strategies under five groups, which are direct, indirect, experimental, cooperative, and individual learning strategies. Selection of an instructional method should be rationalized based on the resultant of goals, information, skills, high level of cognitive competence, values, and affective features. A good lesson plan should include two or

more instructional methods and strategies. There is no miracle method or strategy that is the best for all students. Teachers should carefully study the variables within teaching-learning process while deciding on methods-strategies. Literature reviews yield some kind of consistency as to the variables effective over teachers' selection of methods-strategies. Following are the factors influencing decisions about methods and techniques (Demirel 2011; Küçükahmet 2001; Bilen 1999; Yasar 1998):

Teachers might employ one of the methods more than others during teaching-learning process. This frequency of some methods may cause teachers to feel alienated and stranger for other methods. Especially lack of student-centered methods may lead to loss of competence regarding the application skills of those methods. At times, the rush to complete the curriculum might also be a reason for teachers to use more traditional methods. Some other factors, apart from those above, can be influential over the selection of methods. Recently, teachers have been strengthened in terms of planning the process due to the prevalent use of activity-based instructional programs based on constructivist approach and inclusion of methods-techniques, and activities concerning the outcomes within the program. Therefore, teachers have the chance to add variety to the methods techniques and activities suggested in the instructional 3 Instructional Methods 111 program and to re-cast their activities in accordance with the variables noted in the program. Enhancing teaching-learning process by including as many methods as possible has almost become a universal principle and generalization (Küçükahmet 1992). On teaching goals, the literature is full of with different instructional methods. Teachers are advised to employ student-centered methods more often than the others (Sözer 1998). The number of methods that teachers can adopt for an effective instruction is unlimited. Each teacher may develop new methods based on their creativity (Küçükahmet 1992).

Research Framework

The study has used the Instructional methodologies as X variable and the Performance of students as the Y variables. The X variable has the five dimensions that have an ultimate impact on the Y variable.



Research Hypothesis

1. Flipped Classroom is an instructional methodology and has a positive and significant impact on the students learning

2. Project-Based Learning is an instructional methodology and has a positive and significant impact on the students learning

3. Cooperative Learning is an instructional methodology and has a positive and significant impact on the students learning

4. Thinking-Based Learning is an instructional methodology and has a positive and significant impact on the students learning

5. Competency-Based Learning is an instructional methodology and has a positive and significant impact on the students learning

III. RESEARCH METHODOLOGY

Research Design

The study is cross sectional and quantitative in its nature.

Type of data

The data used for the study is primary data which is collected through the primary sources of data collection.

Data collection instrument

The data has been collected through the close ended survey questionnaire based on the 30 items and each dimension consists of the 5 items.

Population of study

The population for this study is the students studying at the higher education institution of Pakistan.

Targeted population

The target population for this research study is the students of IBA Sukkur University. According to the HEC report 2019-2020, the total number of enrolled students in the IBA Sukkur University is 1200.

Sampling technique

The random sampling method has been used for the study and each respondent has given an equal chance to respond.

Sample Size

According to the requirement of the study the sample size has been selected by using the sunders et. al table. According to that if the population of study is between 1000 to 10000 the sample size for the study will be 200 or according to the minimum requirement of analysis tool. The tool for this study is AMOS, and the minimum sample size required for the AMOS is 200. So the two hundred respondents from the IBA Sukkur University have been selected.

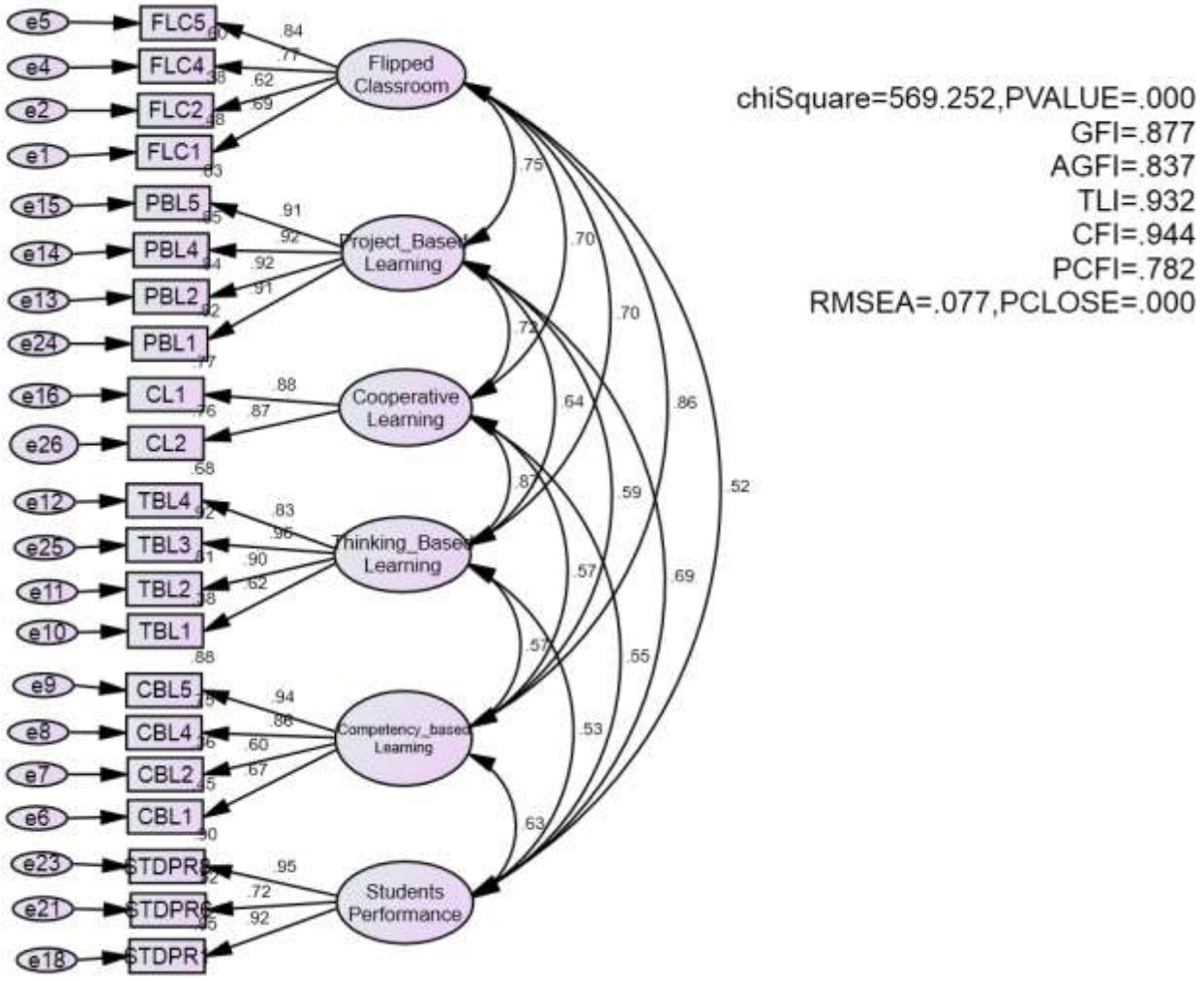
IV. RESULTS AND INTERPRETATION

Descriptive Statistics

The Study was cross sectional and quantitative in the nature. The primary sources of the data collection were the students from the IBA Sukkur University. The respondents' category was divided in male and female

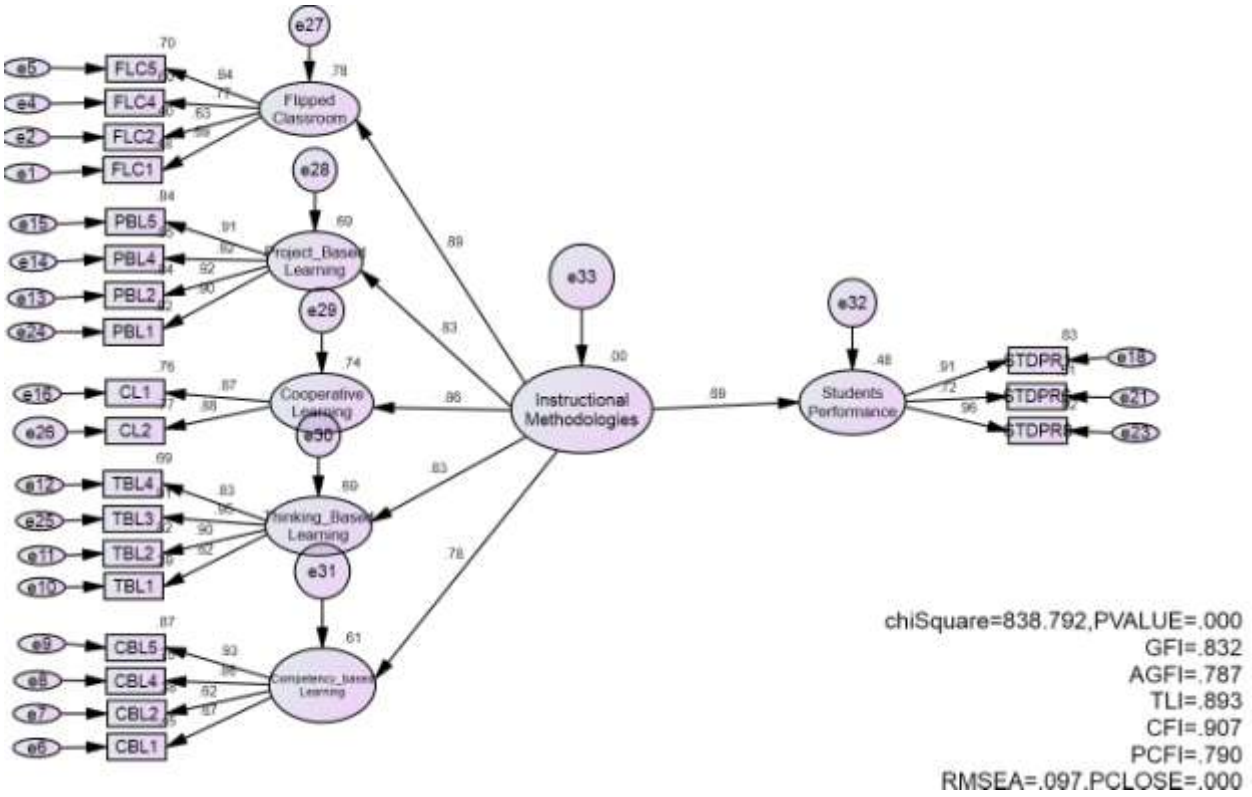
domains. The Response rate was 100%. According to the frequency calculation the male ratio of respondents was 62% and the female respondents' ratio was 38%.

Confirmatory factor analysis



In CFA, all variables have been used together to test the fitness of model. The co variance has been observed among the variables which are showing that all variables are positively correlated with each other. And all variables have value above than the threshold value which according to the Hayes, 2016, if is above than .50 can be considered good. All the loading of items are above the .50 which shows the strong factor loading. The goodness of fit indices GFI is .877 which is near to the value .90 that can be considered as good and all, other values in the above mention figure is in range of goodness. By observing all the values it can be concluded that the model is fit.

Structural equation modeling



The suggested hypothesis has been tested through the SEM which elaborates that flipped classroom which is a dimension of the instructional methodologies has a regression weight .89 and it shows that it has 89 percent effect on the students performance. The flipped classroom which is a dimension of the instructional methodologies has a regression weight .89 and it shows that it has 89 percent effect on the students' performance. The flipped classroom which is a dimension of the instructional methodologies has a regression weight .89 and it shows that it has 89 percent effect on the students' performance. The flipped classroom which is a dimension of the instructional methodologies has a regression weight .89 and it shows that it has 89 percent effect on the students' performance. The flipped classroom which is a dimension of the instructional methodologies has a regression weight .89 and it shows that it has 89 percent effect on the students' performance. The overall effect of the instructional methodologies on the students' performance is 69%. So it can be concluded that the overall impact of the independent variable has strong on the dependent variable.

V. CONCLUSION

The findings of study suggests that all the null hypothesis which were 5 in total has supported according to the results obtained from the analysis of study and it is noted that the instructional methodologies have a positive and significant impact on the students' learning at the university level. In the present study, it was illustrated that good Instructional methodologies helps the students to question their preconceptions, and motivates them to learn, by putting them in a situation in which they come to see themselves as the authors of answers and the agents of responsibility for change. One of the key components of the learning process is instructional methods. It requires the teacher plan carefully and displays teaching skills. It is a reflection of learning philosophy on the whole and instructional strategies in particular. Goals are the prior variables to be considered in deciding which instructional method should be employed. Apart from students' performance, features of teachers and students, content, and physical setting also are influential over the selection of the instructional method.

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