

Activity-based Curriculum: How do Primary School Teachers Respond to it?

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Abstract

Activity based learning is a set of modern strategies which help learners as well as teachers to achieve learning outcomes accordingly. Observing modern techniques of curriculum, activity-based course components have been included in all level textbooks in Punjab by PTB (Punjab Textbook Board). The present research is a stance to investigate teachers' attitudes towards activity-based course components at the primary level in Punjab, Pakistan. Teachers' attitude related to their understandings, participations and perceptions about activity-based curriculum was investigated through this study. For this purpose, a quantitative survey has been conducted and a Likert scale questionnaire has been used as a tool for data collection. Through random sampling data for this research were collected from public primary schools of District Okara in the province of Panjab, Pakistan. The data were analyzed through different SPSS tests and percentage and it was found that majority of teachers practicing at primary level in Punjab were highly educated and experienced so they had a sufficient awareness about components of activity based curriculum and they participated actively in different activities while they perceive that there were some factors which effected the implementations of some activities consequently it has been suggested that paying attention to the issue these factors could be removed. Furthermore, this research could be helpful for curriculum developers, teachers, executive bodies, administrations and learners as well.

Keywords: Activity-based curriculum, primary school, Pakistan, curriculum reforms, text-book board.

Introduction

The most crucial and primary source of the education system is no doubt curriculum and it provides frameworks, directions, and materials for the teaching and learning process. In Pakistan, the curriculum is developed according to different levels of education i.e. primary, elementary, secondary, intermediate, and degree levels whereas, different boards and universities develop curriculums differently according to the needs of particular levels of education. Punjab Textbook Board is one of them and it develops a curriculum for primary, secondary and intermediate level education in Punjab, Pakistan. Observing modern techniques of curriculum, activity-based course components have been included in all level textbooks in Punjab by PTB (Punjab Textbook Board). The present research is a stance to investigate teachers' attitudes towards activity-based course components at the primary level in Punjab, Pakistan.

Jayalaxmi (2016) positions that schooling, teaching, coaching and education are processes through which knowledge, experiences, ideas, skills and other particular informative materials are installed in minds of learners through different approaches and methods by educationists, philosophers, teachers and instructors and they use multiple teaching equipment for this purpose. Jayalaxmi (2016) also declares that a number of syllabus designers, educationists, philosophers and psychologists take up all desired requirements of multiple approaches and teaching methodologies for the betterment of education system.

As for modern schooling is concerned, there is an essential need of highly experienced and skill-oriented teaching experts for schooling of young generation because an efficient and proficient teacher could fulfill pupils' educational desires in finest way (Namitha, 2018). Educators are considered as nation developers in any particular social setting because they are engaged for fulfillment of traditions, customs, ethics and other social norms in a particular society, so, the basic responsibility of teachers is to develop generation according to worldwide requirements. In this scenario, teachers or instructors should have grip and command over subject matters and course components designed by national curriculum developers (Haq, 1990). It could be claimed that these are only teachers or coaches who contribute to develop national attitudes in learners' personalities through implementations of course components because only

teachers are expected to do this with devotion and positive behavior (Kassir, 2013).

Old or traditional methods of teaching are not considered as dominant methods of teaching in present educational scenario because traditional methods are teacher centered only and cannot provide better education, on the other hand self-learning or modern instructional technologies provides better education through different skill oriented course contents and activities and the knowledge gained through these skill oriented curriculums becomes a part of learner's memory for the long time (Bunatovich, Khidayevich & Abdurakhmonovich, 2020). In activity-based classroom, teachers should be well trained and competent; they should participate actively in activities and should follow all practical procedures in the classroom because without involvement of teachers, learners do not participate actively and the results would not be furnished according to needs of activity-based curriculum (Kosterelioglu & Yapici, 2016). Kosterelioglu, and Yapici (2016) suggests that in education system for quality of education, it is important for teachers to apply their knowledge, creative techniques and technical skills according to pupils' educational requirements.

Activity Based Learning (ABL) is considered as a technique or strategy which provides maximum opportunities to participate in classroom activities in a particular education system. At school level learning, ABL approach attracts young learners due to its physical involvement in learning process. In this approach, teachers who are involved in activities have to produce and arrange some particular activities for young learners in the classroom additionally, these activities transformed classroom environment into hubs of some particular activities and fruitful learning, furthermore, this approach is helpful in developing instructions, evaluation and reinforcement as well (Anwar, 2019). In activity-based process, students become active learners, they build their creative skills, they learn, what do they want to learn, they build self-confidence and build up their potential which increases self-motivation and self-esteem, so, this process provides effective learning and teaching to the school system (Kupcu, 2012).

In Pakistani education system, teachers and learners might face some challenges in the classroom when they use ABL approach due to non-

availability of instructional technology, whereas, if they are equipped with proper technology, they would produce better results adopting these technologies with their positive attitude towards activity-based curriculum (Younis, 2018). Anwar (2019) argues that approaching ABL, teachers facing some personal challenges related to beliefs about degree of balance whether activities are controlled by teachers or students and who would these activities be done effectively in the classroom.

Society and family of the learners expect moral and appropriate education by the teachers and education system and these expectations effect education system, so, curriculum is designed according to social needs and experienced teachers are appointed to fulfill course objectives. The social needs might vary society to society or culture to culture but during schooling these beliefs and expectations are observed by the educationists, philosophers and curriculum designers as well (Inelmen, 2011). Almost, in all societies, it is believed that female teachers show positive attitudes during teaching that male educators because it is observed that female teachers are more conscious towards their duties than male members (Shittu & Onaite, 2015). Shittu and Onaite (2015) also declared that in activities-based learning female teachers proved themselves active participants of the classroom and female teachers showed positive attitude engaging young learners in activities. Inelmen (2011) advocates that the poor outlook of teacher's personality, negative professional attitude and negative social imagery of teacher's profession effect teacher's status and low down the teaching learning process.

Primary level education in Pakistan occupies a significant place because it provides basic education to the learners. Progress in higher education depends upon the effective course components of primary level education (Haq, 1990). Though, the aim of primary education is not to teach critical thinking or philosophy but it could be claimed that the aim of primary education is to improve children's mental growth, so, in this way pupils are facilitated to grow actively (Fehintola, 2014).

Teachers and learners have parallel role in activity-based classroom because no activity would be done without participations of both. As per requirements of activity base course components, teacher should have active and positive attitude towards activities during class sessions. Teacher would have to encourage learners to participate in activities, he

would have to insist students toward critical thinking and finally he should motivate students towards creativity or self-learning (Kassir, 2013). In Pakistani scenario, in activity-based classroom, teachers have to face many challenges related to laziness, poor interests of students in activities and irregularities in classroom but through positive attitude he can overcome these challenges (Younis, 2018). Prakash (2016) declares that teachers are motivators, guides, mentors and friends of the students because pupils spend a lot of time with them in the school. They know well about likes, dislikes, qualities and behaviors of the students and could estimate appropriate activities according to their needs, so, they can easily find out solutions for problems of the learners. In active classroom, a teacher should be an open-minded person because if he thinks positively, he could respond positively and answer the inquiry of students and respond the needs of his students effectively (Hannafinet et. al., 2014).

In active classroom learning, student have no doubt, central role because he has to participate actively in small group discussion, pair discussion or self-learning to achieve the goals set by curriculum developers. In activity-based classroom students are expected by the course designers to participate actively and help other students by sharing and distributing ideas, experiences, problem solving methods and other activity-based techniques (Hamann, Pollock & Wilson 2012). Hamann, Pollock and Wilson (2012) also declare that using activity-based methods in classroom, the passive behavior of learners can be replaced with active behavior easily. Participants in an activity-based classroom participate actively, they complete assigned tasks, they reflect their interests and express their physical and emotional movements during learning process (Sandercocks 2013).

Statement of the Problem

The purpose of this research was to investigate teachers' attitudes towards activity-based curriculum at the primary level in Punjab, Pakistan. In this modern educational scenario, many reforms have been accorded due to an increased and rapid change in the educational system in the whole world. To observe the needs of this situation, modern technology and educational equipment have become a part and parcel of the curriculum. Today, without practical learning or without learning through activities, it seems

impossible to make students interested in the books though these books have best reading materials. Observing practical requirements of syllabus, PTB (Punjab Textbook Board) produced advanced and well reformed curriculum including activity-based course components at primary level. This study was an exploration of teachers' attitude towards these activities-based course components. This study investigated the interests, practices and perceptions of the teachers towards activity-based curriculum and also investigated the implementations of activities in the classroom at primary level.

Research Questions

1. What is teachers' understanding of activity-based curriculum at primary level?
2. How do teachers participate in activities during class at primary level?
3. How do teachers perceive about the implementation of activity-based curriculum at primary level?

Hypotheses

1. Teachers working in public primary schools have an understanding of activity-based curriculum.
2. Primary school teachers participate in activity-based classroom.
3. There are some factors which effect implementations of activity-based curriculum.

Research Design

The research in hand is a quantitative type of research whereas, results of the research were discussed qualitatively as well. The present research can be classified into survey research which is a type of research where researchers collect data through interviews, questionnaires or observations. To meet the objectives of the present study, this approach was selected by the researcher because it was a useful method to investigate teachers' behavior towards activity-based curriculum. Application of quantitative research with the help of qualitative explanations would enhance the validity of the findings of the research while on the other hand it is helpful to meet the demands of stakeholders, children, teachers, policy makers and

curriculum developers (Alasi, 2018). Rationale to select quantitative method of enquiry was due to a philosophical assumption that it provided perfect, accurate and valid outcomes because it was an objective way of investigation.

The quantitative method of investigation with the help of descriptive analysis is highly beneficial method in survey researches because it allows researchers to modify and signify their outcomes according to research objectives and research questions, furthermore the techniques which are being associated with quantitative methodology appealed perspectives related to postpositivist point of view (Kouta, 2011). Generally, quantitative type of research is applied on data collected in figures through interviews, Likert scale questionnaire, experimental procedures and many other phenomenological research methods (Mishra, 2016). Furthermore, in accordance with quantitative way of investigating, Dilshad and Latif (2013) states that qualitative way of interpretations makes possible to elaborate composed data according to emotions, behaviors, intentions, interpretations, feelings and suggestions of the participants by whom the data was collected through different techniques of interviews or questions.

Instruments for data collection

Quantitative researches generally focus on the data collected in the form of numbers and scores of the participants who are selected by the researchers and participate in a well-planned framework and then results or scores collected after procedure of that particular framework. Keeping in mind the requirements of quantitative research paradigm, the researcher prepared a Likert Scale questionnaire for primary school teachers to investigate their attitude towards activity-based curriculum during their professional practices.

Likert scale questionnaire

In order to investigate teachers' attitude, a Likert Scale questionnaire was developed to survey the practices and perceptions of primary school teachers towards activity-based curriculum at primary level in province of Punjab, Pakistan. All the items selected in this questionnaire were efficiently refined by the researcher to maintain effort and time because

respondents were hundreds in numbers and had to visit in specific time frame.

A researcher might collect data easily if he managed time and space effectively during preparations of questionnaire and interviews during different surveys because collecting data from thousands of respondents is no doubt, a time-consuming activity (Robson, 1994). To meet the requirements of a quantitative research surveys, a questionnaire might be properly designed because this practice provided accurate and precise insight to evaluate how respondents think and the way respondents look into a situation in a specific scenario (Reid, 2003). As for data collecting tools are concerned, a Likert Scale questionnaire had been considered the most useful, effective, and appropriate instrument for different surveys in quantitative research especially in surveys related to attitudes, behaviors, and opinions (Fraenkel & Wallen, 2000).

Questionnaire was chosen by the researcher because other instruments were not as convenient as questionnaire, furthermore, a well-formed questionnaire provided results which would be arranged easily. Besides questionnaire, documentary investigation was a difficult task because, a well-established documentary records were not available in Pakistani educational scenario from Primary to University level education. Additionally, investigation through observational procedures was also a tough and difficult task due to time limitations and more importantly, to visit whole schools of District Okara could be impossible in connection with observational data collection.

The data was collected through cross sectional survey method by using a questionnaire consists of three parts. First part consists of the items based on the attitude of teachers that shows understanding and second and third parts shows participation and perception towards activity-based curriculum respectively.

The questionnaires were also consisted of demographical information of teachers (gender and locality; rural / urban), academic qualification, professional qualification, experience, and subject taught by them.

Table 1

Parts wise distribution of Questionnaire items.

Part	Attitude	Item Serial #
First	Understanding	1 to 12
Second	Participation	13 to 26
Third	Perception	27 to 38

Research Population

According to PESRP (Punjab Education Sector Reforms Program) school census report (2021) total number of primary schools (male & female) in province of Punjab, Pakistan was 32097, while total number of primary schools in District Okara were 884. So, in this regard, all primary school teachers of 884 Primary School (male and female) serving in District Okara were considered as representative of the whole province and selected as a target population for this study.

Sample of the Study

It is considered that study sample could be a full set of characters which usually, consists of similar components for specific subject matter and represents a standard sampling (Mertens, 2010). Sample was selected randomly from all 884 primary school of District Okara as per needs of present study. In present study, 250 teachers from different male and female public primary schools were selected randomly and they will be requested to fill up Likert scale questionnaire.

Data Analysis

In this study, quantitative technique was used to collect data. For this purpose, a questionnaire having 5-point Likert scale were developed. Microsoft Excel was used to analyze the collected data. Details of statistical tools used for data analysis is given as followings:

Test for significance of proportion

Research hypotheses (i) to (iii) established in this work is tested through the procedure of testing of hypothesis about population percentage π_0 . This procedure is outlined as follows

Step 1: Hypothesis $H_0; \pi \leq \pi_0$ and $H_1; \pi > \pi_0$

Step 2: Test statistics
$$Z = \frac{p - \pi_0}{\sqrt{\frac{\pi_0(1 - \pi_0)}{n}}};$$

Step 3: In this step critical value against a specific level of significance is calculated to form a critical region. For this purpose, online calculator and available statistical table may be used. Conclusion depends upon calculated value of test statistic given in step 2. If calculated value of test statistic is larger than the critical value, we may not accept hypothesis of insignificance.

***p*-value Calculation and its use**

Alternative procedure for conclusion for the testing of hypothesis discussed above is to use *p*-value. Online calculator may be used for its calculation. In this research *p*-value for comparison of two regression and correlation coefficients is calculated using the following link Free Statistics Calculator by Dr. Danial Soper.

Conclusion procedure based on *p*-value is as follows

- (i) Accept null hypothesis if *p*-value is more than 0.05 or any pre decided other value.
- (ii) Reject null hypothesis if *p*-value is less than 0.05 or any pre decided other value.

Results of the Study

Statistical analysis

In this part statistical analysis of the data collected about teacher's understanding about activity-based curriculum, participation in activities and perception for implementation of activities is presented. Basic descriptive measures for data are computed. Moreover, hypotheses are tested by using Z-test.

Testing of hypothesis about understanding of the teachers about activity-based curriculum

In this part hypotheses about understanding of the teachers about activity-based curriculum is tested.

Hypotheses

H₀; $\pi \leq 0.50$ (Percentage of the teachers who understand the activity-based curriculum is 50% or less)

H₁; $\pi > 0.50$ (Percentage of the teachers who understand the activity-based curriculum is more than 50%)

Variable	<i>n</i>	Percentage	Z value	α	Confidence Interval	<i>p</i> -value
Understanding	250	79	9.177	5%	(0.738, 0.842)	.00001*
				1%	(0.716, 0.864)	.00001**
				0.1%	(0.692, 0.888)	.00001***

Calculated value of Z-test and *p*-value = .00001, shows that percentage of teachers who understand the activity-based curriculum is more than 50%, it means majority of the teachers have understanding about the activity-based curriculum.

Testing of hypothesis about participation of the teachers in activities of the class

In this part hypotheses about participation of the teachers in activities of the classes.

Hypotheses:

H₀; $\pi \leq 0.50$ (Percentage of the teachers who participate in the activities of the class is 50% or less)

H₁; $\pi > 0.50$ (Percentage of the teachers who participate in the activities of the class is more than 50%)

Variable	<i>n</i>	Percentage	Z value	α	Confidence Interval	<i>p</i> -value
Participation	250	53	6.646	5%	(0.658, 0.762)	.00001*
				1%	(0.636, 0.784)	.00001**
				0.1%	(0.612, 0.808)	.00001***

Calculated value of Z-test and p -value = .00001, shows that percentage of teachers who understand the activity-based curriculum is more than 50%, it means majority of the teachers participate in the activities of the class

Testing of hypothesis about perception of the teachers to implement the activity-based curriculum

In this part hypotheses about the perception of the teachers to implement the activity-based curriculum is tested.

Hypotheses:

$H_0; \pi \geq 0.50$ (Percentage of the teachers who perceive to implement the activity-based curriculum is 50% or more)

$H_1; \pi < 0.50$ (Percentage of the teachers who perceive to implement the activity-based curriculum is less than 50%)

Variable	<i>n</i>	Percentage	Z value	A	Confidence Interval	<i>p</i> -value
Participation	250	47	- 4.114	5%	(0.418, 0.522)	.00002*
				1%	(0.396, 0.544)	.00002**
				0.1%	(0.372, 0.568)	.00002***

Calculated value of Z-test and p -value = .00002, shows that percentage of teachers who perceive to implement the activity-based curriculum is not more than 50%, it means majority of the teachers do not perceive to implement the activity-based curriculum.

Discussion and Conclusion

In this thesis, As for behavioral statistics were concerned, responses of 237 teachers showed that they understand well about activity based curriculum while a little amount of teachers i.e 13 students showed little understanding about activity based curriculum whereas, a vast number of teacher i.e 211 participated actively in activities suggested in activity based curriculum

while only 39 teachers paid little amount of interest in activities, furthermore, there were average amount of teacher who perceive about implementations of activity based curriculum at primary level education in Punjab. Results of inferential analysis related to first hypothesis “understanding of the teachers about activity-based curriculum” indicate that majority of the teachers know well about activity-based curriculum as well as about activities designed in the suggested curriculum. Hypothesis related to participation of teachers was analyzed though Z-test indicates that percentage of the respondents who understand and participate in activities is more than 50% which significantly indicated that majority of the teachers participate actively in suggested activities. As for 3rd hypothesis is concerned, it was analyzed through Z-Test and found that majority of the participant was not more than 50% which indicated that majority of teacher did not perceive to implement the activity-based curriculum at primary level.

Findings and discussion of the present research throw light on the conclusion that activity-based learning and teaching in present era is most famous and applicable phenomenon at primary level schooling. It is concluded that curriculum having activity-based exercises have no doubt great impact on learning at primary level in Pakistan and significantly majority of primary teachers know all about activity-based learning and they also know how to implement activities in the classroom for betterment of learning. In the light of respondents’ views related to implementations and understandings of activity-based curriculum, it was found that activities were most reliable, interesting and enjoyable way of teaching because primary level students especially students of lower grades liked to perform play like activities which were helpful to engage them in the classroom. Parveen and Mushtaq (2021) declared that the role of activity-based learning and teaching in present scenario of education is very active because it helps teachers to engage students in the classroom as well as it makes possible to apply multiple instructional instruments for teaching different subjects like science, math and languages at primary level.

First of all researcher gathered data related to respondents’ area of practice, medium of schools, their professional and academic qualification and so on. After delimitation of research area researcher collected data through

random sampling and the results of the collected data significantly exposed that primary school teachers working in District Okara were highly qualified i.e the majority of the teachers had post graduate academic qualification and also equipped with at least bachelor or masters' professional qualifications which significantly indicated that the teachers practiced at primary level were well educated and well trained. Furthermore, it was explored that majority of schools preferred English as a medium of instruction which indicated that teachers, parents and administrations wished to equipped young learners with modern education because English was concerned a language of science and technology. There were another indicator which proved that public primary schools of Punjab province could provide better education at primary level was experienced teaching faculty. After analysis of items related to teaching experience of the respondents it was found that there were a vast number of experienced teachers because accept 39 teachers all teachers had more than five years teaching experience which significantly indicated that might know all about activity-based curriculum i.e understanding, participations and implementations.

Analysis of all the items related to first research question and first hypothesis "What are teachers' understandings of activity-based curriculum at primary level?" exposed those teachers working in public primary schools in Punjab had sufficient understanding about activity-based curriculum because after analysis of their qualifications 'academic and professional' it was found that majoring of the respondents were highly educated. After analysis of first research question and hypothesis through different SPSS and percentile tests it could be claim that first hypothesis has been approved because above 50% responses favour the hypothesis.

After analysis of research question, No,2 "How do teachers participate in activities during class at primary level? And hypothesis No. 2 "Primary school teachers participate in activity-based classroom" it was found that majority of primary school teachers participated in activities during class. After analysis of all items related to their responses about this research question it was found that calculated value of Z-test and p -value = .2354, declared that percentages of teachers who participate in the activities of the classes in rural and urban areas were same, it means attitude of both rural and urban teachers towards participating in the activities of the classes was

same and they participated actively in all activities during the session. Analysis of the items related to 2nd research question and hypothesis exposed that majority of respondents participate actively in activities during class, so, it could be claimed that second hypothesis had been approved because above 50% responses were in the favor of hypothesis.

Third research question “How do teachers perceive about the implementation of activity _ based curriculum at primary level? And “hypothesis “There are some factors which effect implementations of activity-based curriculum” were related to perceptions of the primary school teacher towards activity-based curriculum whether this type of curriculum could be applicable in Pakistani scenario or not. In this regard, it was explored that majority of respondents perceived that there were some factors which might be maintained to implement activity-based curriculum at primary level in Punjab Pakistan. These factors could be related to missing facilities e.g instructional technologies and could be related to external and internal control as well, so, the results significantly approved the third hypothesis.

Pedagogical implementations

It is pertinent to state the pedagogical implementations of the present study. The findings of the present research, clearly, exposed that there are a large number of well trained, educated and experienced teachers teaching in public primary schools in Punjab, Pakistan but unfortunately, the institutions are not equipped with proper instructional technologies like projectors, computers, gadgets or tools kits which support to implement activity-based curriculum. In this regard it could be suggested that providing proper equipment in the schools the activity-based curriculum may be implemented effectively. Furthermore, the present research would be helpful for curriculum designers, teachers, executive bodies and students because it provides a comparative analysis of teachers’ attitude regarding understanding, participations and perceptions of teachers at primary level. This research suggests that teachers should be provided proper training and orientations about activity-based curriculum so that they would make lesson planning for implementations of activity-based curriculum at primary level.

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