

Evaluation of Existing Teaching Learning Process on Bloom's Taxonomy

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Abstract

Professional teaching is not up to mark throughout Sindh in general and district Mirpurkhas in particular. It is generally assumed and accepted that the teachers only touch knowledge and comprehension levels of Bloom's cognitive domain. The other two affective and psychomotor domains are openly ignored in both the curricula and professional teaching. Present qualitative study is an attempt to evaluate the existing teaching regarding Bloom's three domains at secondary school level in District Mirpurkhas. The purposive sampling included the 30 students; out of them 10 students (05 boys and girls each) were interviewed and 20 students (10 boys and girls each) were selected for focus-group-discussions separately. Findings revealed that the existing teaching was teacher centered rather than learner-centered. Teaching strategies mostly involved knowledge and rote learning with a little focus on comprehension that is of course the lower levels of cognitive domain while the affective and psychomotor domains remained untouched throughout.

Keywords: Bloom's Taxonomy of Educational Objectives, Cognitive-domain, Affective-domain, Psychomotor-domain.

Introduction

During the Greek period Socrates and his student Plato based education on discourse or two-way dialogue or active participation of learners (Khalid, 1974). Though their education was teacher-centered in terms of selection of learning experience and methodology yet the researchers think that their teaching was better than our existing one's as the discourse or discussion remained their way of teaching and it obviously developed analytical and critical thinking among learners.

French philosopher Jean Jacques Rousseau made education totally as learner-centered through natural way of learning regardless of formal books, curricula, and schools (Jacques, 2009). Educational psychology has propounded learning laws and theories, and the

prerequisites and process of proper and effective learning and education (Morgan et al. 1986; Davidoff, Linda, 1987; Slavin, Robert, 2006).

The inner potentials and capabilities of a child are more important, therefore all the environmental influences including teaching (facilitating), curricula, and learning resources must subordinate them i.e. child's natural and inborn capabilities. An educative experience is the one that makes a child to keep it continuously growing and developing within the culture of a child. The learners thus involved in learning by doing and reconstruction of experience. Teaching, according to Dr Dewey, is nothing but the proper facilitation of learners to actively develop their potentials to a maximum. The learners are not imposed of anything; however it does not imply that there are no rules to follow in a learning situation (Dewey, 1979).

Benjamin Bloom classified educational objectives and their evaluation process into three domains for effective learning outcomes. Cognitive domain involves intellectual skills whereas affective domain determines learning having influence on emotions and values, while the last psychomotor domain focuses learning through skills and performance (Bloom, 1956).

Cognitive domain helps teachers to make their students able to get knowledge or information, comprehend the concept, analyze the concept or the situation to its parts, synthesize and integrate the parts to form a whole concept, apply the concept to new situation, and finally look into the concept critically to properly evaluate strengths and weaknesses (Bloom, 1956).

Krathwohl, Bloom, & Masia, (1973) worked on affective and psychomotor domains. The affective domain make the teachers able to present the concept or text in a way that learners feelings and emotions could be attached to it in one or other way so that learning could become part of their personality. Receiving, responding, valuing, organizing, and characterizing are to be developed among learners within affective domain. First, the learners are motivated and helped to receive (listen to) the new concept or text. Second, after proper motivation they are able to actively respond (participate) to learn new concept or text. Third, they are helped to value (understand diversity and cultural differences of other learners) others' thought to learn the new concept or text and consider it worth learning. Fourth, they are made able to organize (set priorities to adjust within the group and balance their emotions) to understand new concept or text. Last, they are helped and guided in a way that they could characterize (show self-reliance, team work, professionalism to solve problems, and revise judgments in light of new evidence) the concept in hand to manipulate throughout their lives.

Psychomotor domain involves skills and performance of learners for a learned concept or text. Dave, (1975) also worked on the educational implication of psychomotor domain. According to his classification psychomotor learning involves: **Imitation, Manipulation, Precision, Articulation, and Naturalization** for doing practically the concept or the text learned. Sport activities, scientific experiments, student's individual or group presentation and performances, and role play caters psychomotor domain in an educational set up.

Though almost all public sector school teachers in district Mirpurkhas possess the professional degrees of B. Ed., and M. Ed. that include developing mastery on Bloom's Educational Objectives categorized under Cognitive, Affective, and Psychomotor domains but their teaching strategy and practice hardly reflect professional skills.

Present study is an attempt to evaluate the existing public sector secondary school teaching qualitatively with regard to Bloom's taxonomy i.e. cognitive, affective, and psychomotor

learning of students in District Mirpurkhas in order to understand it from learner's perspective and suggest possible measures for its improvement.

Methodology

The researcher used qualitative approach of methodology to carry the study according to the nature of the study. The researcher put ten students under in-depth interviews, five males and five females. Focus group discussions (fgd) with the ratio of 3:2, three male and two female students were conducted in friendly and freely environment.

Population and Sample

The target population of the study was all public sector students (boys and girls) of district Mirpurkhas in grade ninth and tenth and the sample involved a total of 30 respondents. 10 respondents (5 boys and girls each) were selected for in-depth interviews; whereas, 20 students (10 boys and girls each) participated in focus group discussions.

Data Collection

The data was collected through qualitative method. The in-depth interviews and fgd were used as tools for collecting the data of study. The data was triangulated by panel of experts to ensure the validity/truthfulness and reliability/authenticity of the data and tools of the data.

Data Analysis

The qualitative data will be transcribed first, and then within the framework of phenomenology, thematic analysis will be done to conclude and develop a theory about existing teaching methods on the responses of the respondents.

Findings and Discussion

Existing Teaching Learning Situations

It was found out through Interviews and FGDs that almost all teachers used traditional teaching method, where instead of allowing pupils to work independently, teachers dictated or wrote on black boards the answers to the questions of comprehension exercises listed at the end of each unit or chapter of the textbook that are actually designed for students to solve by themselves. The learners are directed to copy it down on their 'rough-notebooks'. [They are said 'rough' notebooks because during classroom teaching, the learners have to quickly copy the material that was dictated or written on the black board. In doing so they often made mistakes and overwriting so their handwriting become normally 'rough' or not fair, therefore the notebooks are referred to as "rough-note-books". Then, the material is supposed to be rewritten in a fair hand on 'fair-notebooks' at home. [The above rough material is supposed to be rewritten in a fair hand by the learners at their homes, therefore the notebooks are referred to as 'fair-notebooks'.

The fair-notebooks are checked on a regular basis. Corporal punishment is given to the students who fail to maintain their fair notebooks. Moreover, the annual inspection of these notebooks by the relevant authorities has now become an integral part of the formal evaluation system. It was disappointing to note that comprehension-check exercises were designed to enable the learners to develop their thinking, comprehension, and understanding of the text whereas the existing teaching did not provide the opportunity for learners to solve on their own. The same procedure was followed for teaching of other social and natural

science subjects or courses. Almost all respondents confirmed that the science equipment laboratories or almirahs (cupboards) containing lab equipment remained locked and was very seldom used.

As far as teaching of languages (English, Sindhi, Urdu, Arabic) is concerned the respondents reported, students remained silent participants as the teachers read out aloud passages from the text. These passages are then paraphrased and translated in their local language(s). This was all about languages' teaching. This exercise proved futile in enhancing the language skills especially learning English language skills among students.

Teachers' Professional Skills

The teachers only focused local teaching method for all subjects or curricula i.e. to make students write the questions and answers through dictating verbally or through writing them on the blackboard, and let students to copy the material down on their 'rough note books', which at home they had to rewrite fairly on their 'fair notebooks'. It had no option to involve the learners to develop and learn through proper teaching which incorporated activities of affective domain. The memorizing or knowledge based questions and answers were taught mostly, and the examination also supported that type of teaching and learning mostly.

As mentioned earlier most teachers used the traditional and out-dated teacher centered method. No single teacher followed lesson planning. Their teaching simply lacked important elements like: proper motivating the learners, presenting the content, and appropriate evaluating techniques for teaching a concept or lesson. Respondents revealed that there were no individual or group presentations, activities for their active participation in learning. They remained passive most of the time. They revealed that their teachers regarded 'a silent class' as an ideal and perfect teaching.

Teachers' Content Knowledge and Overall Attitudes

Most teachers simply lacked the content knowledge as revealed by their students in focus group discussions and in-depth interviews. The students revealed that their teachers did not allow any questions in order to hide their inefficient skills and content knowledge. The teachers made the mouths of the students closed. The present system of examination/evaluation is totally null and void. They believed and blamed that like others districts, teachers were involved in the use of unfair means i.e. cheating, impersonation, replacement of answer books and candidates to get through the examination with flying colours are easy and popular methods in all examination centers across District Mirpurkhas. This situation clearly indicates the failure of examination and teaching learning process.

The respondents pointed out that teachers' attitude towards them and teaching learning situation was not learner-friendly. They were often punished corporally. Cane (stick) remained a permanent feature of public-sector teaching. It is important to note that the departmental rules, and the pre and post service professional trainings and degrees bound the teachers not to use corporal or verbal punishment but the existing situations reflected a different picture.

Existing Teaching vs. Bloom's Cognitive Domain

The existing teaching as revealed by the respondents does not support learners' development under Bloom's first domain of cognitive development. The findings disclosed that teachers

mostly touched the lower level skills of this category. They made learners to memorize the definitions and answers of the text or exercise-questions. Students blamed that teachers did not take efforts to explain and clear the concepts through open questioning or discussions, hence they lacked in comprehending the concepts properly. They mentioned that maintaining fair notebooks was the teaching all about. Their teachers' teaching and evaluation supported memorization. More or less is the case with board's annual examinations, however, the question papers have some questions asking for higher level skills of cognitive domain i.e. application, analysis, synthesis and evaluation of the taught concepts, but the learners use unfair means to copy down the answers from books, or use the hired services of expert teachers to solve such questions (one of the forms of unfair means prevailing at the Board's examinations).

The application level of cognitive domain existed, as revealed in findings, in the teaching of English and mathematics curricula. The rules of grammar and mathematics were taught by the teachers as they could not do so using local teaching method; and the students were supposed to apply the rules on given examples or exercises. However, the respondents blamed that their teachers felt contented if a few of the students from a class got the point and were able to understand and solve the textual problems. Huge majority of average learners, they blamed, were ignored.

Existing Teaching vs. Bloom's Affective Domain

The existing teaching, as was found through in-depth interviews and focus group discussions, lacked in incorporating learners' development regarding affective domain. Normally, teachers did not properly motivate the learners for learning textual concepts. Consequently, the respondents accepted the bitter reality that they could not be able to receive, respond, value, generalize, and characterize the textual concepts throughout their academic learning process. Their teaching simply lacked any activities that could promote their learning through feelings, and emotions. Even frequent questions and discussion remained a dream for most of the respondents.

Existing Teaching vs. Bloom's Psychomotor Domain

Many skills, performances, and bodily movements within educational set up can come under this domain but the study was limited to explore about students' demonstration (of scientific experiments) and laboratory work, individual and group presentations, sport-activities, and role-plays.

The individual reading a lesson before the class in teaching of languages was the only performance of students during their teaching learning process. The findings revealed that almost all school teachers did not bother to unlock the doors of science or computer labs, and the sports' material available at their schools. However, very few teachers were reported to partially using them. The equipment or material for sports, computer and science related subjects i.e. physics, chemistry, and biology was mostly available at most schools but was hardly utilized. The respondents also complained that in some schools there were no computer teachers. It was shocking to know that the computer-education and practical component of science subjects were compulsory components of secondary education in public sector, but practically their teaching was simply ignored. Sports', and computer and science-labs' provide opportunities for learners to develop and exhibit a wide range of psychomotor performances but they were utilized in papers mostly; practically, the

respondents agreed that they were dormant components of education within public sector secondary schooling at district Mirpurkhas.

Conclusion

The researchers on the basis of findings conclude that existing teaching was not up to mark as the public sector secondary school teachers did not use any standard teaching methods. Teaching of languages involved only loud reading of students, however, the most important reading at secondary stage i.e. 'silent reading' was missing. Teachers relied on local teaching method existing in which teachers dictated verbally or wrote on the blackboard the questions and answers of comprehension exercises enlisted at the end of the units or chapters for all courses (curricula).

Regarding Bloom's cognitive domain, the knowledge-based questions and answers were taught. Learners memorized (rote) the concepts, definitions, and textual question and their answers. However, comprehension and application skills were poorly touched in teaching of mathematics and languages. Development of analysis, synthesis, and evaluation skills were simply remained untouched in routine teaching.

Affective and Psychomotor domains remained dormant. Most teachers even did not utilized available equipment of sports, and computer and science-labs in the district. The equipment remained locked for months and years under the heaps of dust.

To sum up, the researchers conclude that existing teaching could not reflect any professionalism. The knowledge-based and rote-learning prevailed. The teaching catered only one of the six levels of cognitive domain mostly i.e. knowledge and rote learning. With regard to affective and psychomotor domains the existing teaching simply ignored these domains in teaching learning process. The situation reflected total failure of teaching learning process in terms of proper reflection of three domains of Blooms Taxonomy of educational objectives at public sector secondary school level at District Mirpurkhas.

Limitations of the Study

- It was a qualitative study; the researcher tried thoroughly to understand the existing phenomenon from students' perspective. Hence the findings could not be generalized to the target population. For this purpose a further mix model research could compensate it.
- Moreover, the teachers and other stakeholder would be involved for triangulation and reliability of the data in further study.

Recommendations

- The existing poor teaching in the district Mirpurkhas not only puts tags on teachers' professional and academic degrees, but it also points to the poor administration and management also. Therefore, concerned teachers, administration, and management must take efforts to make the teaching learning process learner-friendly, cooperative and thought oriented and to control unfair means prevailing in educational and examination system so that coming young generation could develop their hidden potentials to their maximum to face the challenges of the 21st century using the weapon of educational objectives of Blooms' Taxonomy.
- The professional degrees' teaching and evaluation system needed revolutionary changes. At least they must incorporate their teaching according to Bloom's taxonomy of educational objectives so that professionally trained teachers could be able to teach and evaluate their learners on that pattern.

- All the teachers should be refreshed in the teaching–learning courses under Blooms' Taxonomy to develop mentally, emotionally, and physically in connection with cognitive, affective and psychomotor domains respectively.
- The classroom teaching should be student centered rather than teacher or book centered.
- Chinese proverb 'when I read I forget, when I see I remember, when I do I understand' is a must for science related subjects. In teaching learning process teachers should remember that learners are unique individuals, so keeping in view of their differences and diversity teacher should carry more or less individual classroom teaching and activities.
- We are far behind to adapt Blooms theory-based approach, but we at least can try to remove the weaknesses which we can; and to teach and train our teachers to utilize the available resources at maximum level and to allow and reinforce students' asking questions and discussions; and to engage students in proper learning activities. These measures must be taken in not for anything else but for making ground that would facilitate to keep our future generation on the right track to develop critical, analytical, and innovative thinking required for meeting with existing problems and futuristic unknown challenges as well.
- Lastly, the researchers would urge that we need to separate the chuff from grain. We should plan with attitude, prepare with aptitude, participate with servitude, receive with gratitude and this should be enough to separate you from the multitude. (Knish Darin, Daily Dawn dated 10th July 2011)

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