

## **APPLICATION OF BLOOMS TAXONOMY IN OUTCOME BASED LEARNING: PERCEPTIONS OF PRESERVICE TEACHERS**

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### **Abstract**

*The outcomes of the learner are decided by the competency of teachers who handle them. Teacher training programmes have significant role in the competency enhancement of teachers. The National Council for teacher education continuously review and revise the teacher education curriculum to equip the prospective teachers with the essential skills and competencies. The quality of professional preparation of teachers has a crucial role in the educational progress of a nation. There are many theoretical foundations for practicing OBE, among them Blooms Taxonomy is the widely accepted one. Hence the present study explores the perceptions of student teachers on the application of Blooms Taxonomy in OBE. Here Investigators took survey method and Document Analysis for the study. Questionnaire of 20 items prepared and executed to 40 teacher trainees of Physical Science and Natural Science optional subjects respectively. The obtained scores have been analyzed with percentage analysis. Observation from the lesson template also recorded.*

**Keywords:** *Blooms Taxonomy, Outcome Based Learning.*

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### **INTRODUCTION**

Quality of learning depends on the quality of teacher and the teaching process. Outcome-based education (OBE) is an educational delivery model that focuses on planning, gauging, and accomplishing predetermined educational goals enable students to learn, advance, and fostering skills that would help them to grow in their professional as well as personal life. OBE can primarily be distinguished from traditional education method by the way it incorporates three elements: theory of education, a regular structure for education, and a specific approach to instructional practice.

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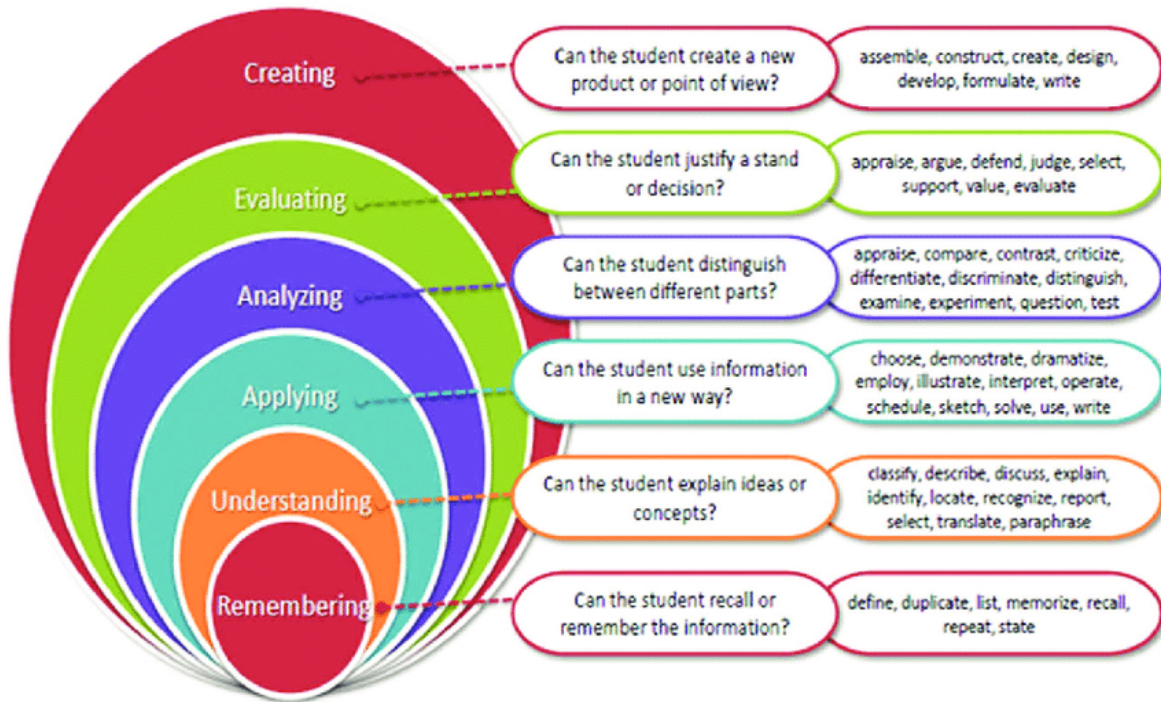
competencies. The quality of pupils' achievement is determined primarily by teachers' competence, guidance provided for the learners and other support systems. The quality of professional preparation of teachers has a crucial role in the educational progress of a nation. Continuous quest for quality teacher education is a primary requisite for enhancing the quality of the teacher community. There is no single specified style of teaching or assessment in OBE; instead, classes, opportunities, and assessments should all help students achieve the specified outcomes. The role of the faculty/educator adapts into instructor, trainer, facilitator, and mentor based on the outcomes targeted. Hence researches are essential for improving the existing practices in teacher education.

### **Blooms Taxonomy**

Benjamin S Bloom suggests three domains in learning process; the cognitive, affective and psychomotor domain. The aim of understanding these domains is to train the learner with knowledge, skills and attitude towards a particular subject. Outcome-based education always focus on achieving outcomes. The educational institutions introduce curricula, assessments and instruction based on expected objectives and enable the students to demonstrate learning outcomes at the end of the program. Bloom's taxonomy recognizes and realizes the realms of learning like Cognitive, Affective and Psychomotor. In addition, bloom's taxonomy is one of the powerful tools that define the **Objectives**. It allows teacher educators and teacher trainees to understand the concept, **Analyze** the same and then **Evaluate** them. That means it enables the theory of OBE by mapping measuring and achieving the predetermined goals of a program. Bloom's education lays the foundation of learning and enables us to *Understand* those objectives and master them towards the end of the program.

### **Blooms' Taxonomy a tool for OBD**

Bloom's taxonomy is a powerful tool to help develop learning outcomes because it explains the process of learning:



- Before we **understand** a concept, we must **remember** it.
- To **apply** a concept, we must first **understand** it.
- In order to **evaluate** a process, we must have **analyzed** it.
- To **create** an accurate conclusion, we must have completed a thorough **evaluation**.

Thus proper training with Bloom taxonomy helps preservice teachers ,to be in the Out Come Based Education track

### NEED AND SIGNIFICANCE OF THE STUDY

UGC has made it mandatory that all higher educational institutions should practice Learning Outcome based Curriculum Framework (LOCF). UGC envisions that this practice would equip our students with knowledge, skills values and attitudes for leading a successful life. Outcome based Education means focusing and organizing an institute entire programme and instructional efforts around clearly defined outcomes. (Spady,1994) All students should be able to demonstrate the outcomes of the programme when they acquire a degree. All instructional experiences are to be planned in such a manner that the outcomes are achievable by each learner. There are many theoretical foundations for practicing OBE, among them Blooms Taxonomy is the widely accepted one. Hence the present study explores the perceptions of student teachers on the application of Blooms Taxonomy in OBE.

## **OBJECTIVES OF THE STUDY**

1. To find out the extent of usage of Blooms Taxonomy among preservice teachers during practice teaching
2. To explore the perceptions of student teachers on the application of blooms taxonomy in outcome-based learning

## **METHODOLOGY**

The sample for the present study consisted of 40 preservice teachers who teach science subjects at secondary level. The investigators directly analyzed the lesson transcripts and classroom teaching of these students to find out the application of blooms taxonomy in their practices. A questionnaire was used to identify their perceptions regarding the application of Blooms taxonomy. Since the study is qualitative in nature, comments and remarks are recorded and percentage analysis was done for the responses of the questionnaire.

## **ANALYSIS AND FINDINGS**

The Lesson transcript analysis of the sample reveals the following:

- All student teachers frame outcomes for the lessons in science topics.
- 100% of the sample are capable of framing outcomes related to remember, understand and apply.
- 90% of the student teachers frame outcomes for analyse and evaluate.
- Only 70% of the sample set outcomes related to create in the achievable manner.

### **By observing the real classroom teaching following inferences are made**

- All student teachers are emphasizing the outcomes remember and understand throughout their teaching.
- The outcomes 'apply' 'analyse' and evaluate are transacting with minimum time and effort.
- The outcome create is not practicing in the classroom teaching.
- The evaluation process of the student teachers indicates the following
- All student teachers include evaluation items to test outcomes of remember and understand.
- Only 58% of the sample promote evaluation based on the objective application
- The outcome analyze and evaluate is assessed by 40% of the sample

- The outcome create is included as extended activity by 70% of the student teachers.

The above observations shows that teaching and evaluation is primarily focused upon two outcomes – ‘remember and understand’.

The findings of the questionnaire reveal the following perceptions of student teachers (Percentage of ‘agree’ in bracket):

- The cognitive process dimension of Bloom’s taxonomy has wide application in teaching science. (100%)
- Outcome based teaching requires in-depth knowledge of the Blooms taxonomy. (100%)
- The instructional outcomes are to be framed through the analysis of the content. (90%)
- The 6 outcomes of cognitive process dimensions can be set properly for all science lessons. (80%)
- The teaching strategies are planned according to the framed outcomes. (70%)
- The classroom oral questions are adequate to ensure the attainment of outcomes. (30%)
- The questions in the achievement tests are framed properly to attain the outcome set for the lessons. (20%)
- The students have understanding about the outcome to be achieved by them. (0%)
- More assessment techniques are to be developed for ensuring outcome achievement. (100%)
- Time of 40 minutes is a constrain for outcome-based learning. (100%)
- More training is essential at teacher education level to practice outcome-based teaching. (100%)

## CONCLUSION

Though the student teachers have basic understanding in Blooms taxonomy, they are unaware of its proper application in teaching learning and assessment. Student teachers have to give more skilled training to frame instructional outcomes, especially in higher order thinking skills. They are to be equipped to integrate appropriate teaching strategies to attain the outcomes. The traditional test paper methods are to be revamped with OBE supporting tools and techniques.

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