

# Evaluating Pre-service Teachers' Level of Understanding of Learning Outcomes

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## Abstract

Learning outcomes are statements that focus on students' attainment of the content at the end of a specific course rather than on teaching strategies or course material. They are quantifiable and quite often noticeable in nature. Although learning outcomes are typically mentioned with program-wide assessments, they may be useful teaching tools in any classroom since they help students focus on their learning. Instead of being instructor-centered, learning outcomes are student-centered. Students are made aware of the course expectations clearly and concisely. Understanding the learning outcome will help the learning communities in enhancing their methods of instruction and evaluation.

This paper aimed to evaluate the student teacher's level of understanding of the learning outcomes. For data collection, a questionnaire that consists of 20 items to evaluate the level of understanding among the pre-service teachers of RIE Ajmer who have completed their first phase of the pre-internship program has been used. The research conducted has a descriptive and analytical nature. The results indicate that the pre-service teachers have not gained in-depth knowledge of learning outcomes. So based on the findings, the investigator has developed a model for framing the learning outcomes.

**Keywords:** Understanding of Learning Outcomes, Learning Community, Pre-service teachers

## Introduction:

*"Change is the end result of all true learning"*

-Leo Buscaglia

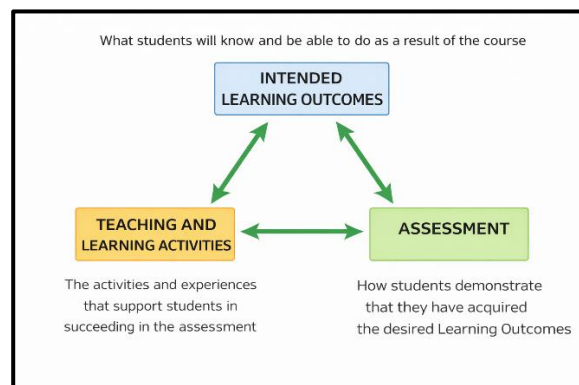
It is critical to emphasise that a child spends a major part of their formative years in a formal schooling system. But it will certainly be a time waste if these years do not bear sweet fruits in making life meaningful for him and society. The length of schooling is essential, but so is the cognitive capacity (as determined by test scores) acquired during that time. If students receive poor instruction, they cannot observe significant rises in productivity even after more than twelve years in the system. It has been observed that the children fail to attain the minimal standards of competence despite joining school. It is one of the major economic and ethical crises for our nation. The most recent findings from the Annual Status of Education Report (ASER) reveal significant learning gaps among students in rural India. According to the report, just 47.8% of students in Class V are able to read a text meant for Class II. Additionally, only 43% of students in Class VIII can solve arithmetic problems designed for the Class V level. These figures indicate that a large number of students are advancing through grades without acquiring basic reading and mathematical skills.

According to Gosling and Moon (2001), "Outcomes-based approach to teaching is becoming more and more popular at an international level. This approach has been progressively adopted within the credit framework and by national quality and qualifications authorities such as the QAA (Quality Assurance

Agency for Higher Education) in the UK, the Australian, New Zealand, and South African Qualification Authorities.”

Learning outcomes have been introduced to ensure the Minimum Level of Learning (MLL) among the students. For every primary school level, it lays out the learning outcomes in the form of competencies or learning levels. Learning outcomes are the specifications in terms of behavior changes that convey the same meaning to all teachers, as they are how the ongoing mental process in a child’s head can be reflected. Besides guiding teachers in planning and delivering instruction effectively, learning outcomes also inform other stakeholders—such as parents, guardians, members of the School Management Committee (SMC), the wider community, and government officials—about their roles and responsibilities. By clearly outlining expectations, they promote accountability and ensure that all stakeholders contribute to maintaining and improving the quality of education.

As shown in the figure below, intended learning outcomes are what you expect the student to be able to do, and therefore they must be measurable through the assessment. So accordingly, teaching-learning activities can be planned to support the student’s attainment of the content. Also, the assessment will be based on learning outcomes, so the student can demonstrate his/her level of understanding.



**Figure 1. Alignment of intended learning outcomes, teaching–learning activities, and assessment.**

(Source: <https://www.adelaide.edu.au/learning/teaching/curriculum/outcomes/writing-course-learning-outcomes.pdf>)

### Need for the study:

Many a time, it has been observed that the students fail to demonstrate the learning from their lower grades. To facilitate quality education, under NEP 2020, NPE 1986 and POA 1992, it has been emphasised that a minimum level of learning should be laid down and children’s learning should periodically be assessed to monitor their development to guarantee that every child learns at least the bare minimum required for a given grade. The NCERT-developed learning outcomes serve as the minimal educational requirements to enable the tracking of pupils’ progress against predetermined standards. While working with the pre-service teachers, the investigators observed that the prospective teachers failed to understand the construction of learning outcomes and their differentiation from instructional objectives. It has been observed that they were struggling to frame an appropriate learning outcome while writing their lesson plans. In order to know at what point they are facing the difficulty, the investigators have felt the need to conduct this study. Also, they tried to make a model which can help them to understand it in a better way.

**Statement of the Problem:** Evaluating the Level of Understanding of Learning Outcomes among Pre-service Teachers

### Definitions of the Terms:

**Evaluate:** It means to assess or estimate the nature, skill, or excellence of something.

**Learning Outcome:** The expected levels of learning that students should attain for that class are indicated by the assessment criteria known as learning outcomes. A learning outcome is a concise description of the skills, knowledge, and/or values that a student should possess upon finishing a unit of study.

**Pre-service Teacher:** A person who is enrolled in a teacher preparation program (two years B.Ed. or 4 years integrated B.Ed. program) and working toward teacher certification. course or course.

### Objectives of the Study:

- to evaluate the level of understanding of learning outcomes among pre-service teachers
- to find out whether pre-service teachers can differentiate between objective and outcome
- to develop a common understanding of learning outcomes and their expression
- to develop a model which will help them to frame learning outcomes while making their lesson plan

### Research Questions:

- Do pre-service teachers understand learning outcomes?
- Are pre-service teachers able to differentiate between outcomes and objectives?
- Are pre-service teachers able to frame the learning outcome based on their understanding?

**Methodology:** The study adopted a descriptive and analytical survey method.

**Sample:** 40 Pre-service teachers from the Regional Institute of Education, NCERT, Ajmer, formed the sample of the study. The selected samples have completed their first phase of pre-internship as per 2 years B.Ed. & 4 years Integrated B.Ed. Curriculum. There were 17 males and 23 females in the entire sample. The purposive non-probability sampling technique was used for the present study.

**Tool:** The investigator constructed the questionnaire using learning outcome documents published by NCERT, and the content of the questionnaire was validated by an expert from the field of Education. The questionnaire consisted of 20 questions of different forms, namely Open-Ended Questions and Yes/No Questions. Open-ended questions enabled the investigator to obtain an understanding of the learning outcomes, useful opinions, and ideas from respondents.

**Data Analysis:** Data was analyzed using descriptive statistical measures i.e. mean and percentage. Also, Item-wise analysis was done for all the open-ended questions.

### Findings & Discussion:

The items of the tool were categorized into three major categories for analysis:

#### a) Understanding of Learning Outcome:

87.5% knew the definition of learning outcomes, but only 67.5% could differentiate between the objectives and outcomes. 82.5% were of the view that learning outcomes are observable and measurable as well. 72.5% agreed that learning outcomes focus on learning rather than teaching, whereas 80% disagreed that learning outcomes are specifications of educational objectives. They were unclear about the fact that learning outcomes are objective-specific.

22.5% of prospective teachers are still in confusion about whether Bloom's taxonomy is to be followed while writing learning outcomes. When the student teachers were asked whether the learning outcome catered to the affective domain, 30% of them denied it.

87.5% of prospective teachers agreed that the assessment should be based on learning outcomes. 71.8% of the trainees focused on the process of teaching rather than the product of what the learner can do after the completion of the lesson. 65% were of the view that there is a need to develop a common understanding of learning outcomes and their expressions so that we may generate an effective assessment level.

62.5% had an opinion that it is useful to distinguish between subject-specific and generic learning outcomes because subject-specific learning outcomes will help to reach the general learning outcome of a particular discipline. Subject-specific outcomes will also help in assessing the knowledge and skills developed in that subject.

#### **b) Framing of Learning Outcome:**

Since 47.5% of prospective teachers are not familiar with the use of the terminology while framing the learning outcomes, they end up using two or more action verbs in a single statement, and 77.5% of prospective teachers try to cater to two objectives in one learning outcome.

Only 17.5% of the students were clear about not using ambiguous terms such as **understand, appreciate, and know**, as these terms do not give us a measure or proof of their apprehension level. Due to the lack of clarity between the term's outcomes and objectives, 80% of students struggled to decide whether **"To develop a sense of civic responsibility"** is an outcome or objective. 35% of the students sampled could make use of the action verbs while framing the learning outcomes for the objective of creating awareness of environmental conservation.

#### **c) Linking Learning Outcomes to a child-centered approach:**

95% of the students agreed that assessing the learner by conducting achievement tests and providing application-based scenarios and activities will ensure that a learning outcome has been achieved, thus fulfilling a particular objective. 87.5% opined that the learning outcomes are to be written from the learner's perspective rather than the teacher's perspective.

Learning outcomes help teachers plan a lesson, design their teaching, and select appropriate strategies for teaching. It provides a clear understanding of what and how much to educate, allowing for planning. It makes the midway assessment mapping clear and easy. It assists educators in avoiding overt instruction, which eventually results in time savings. So, 70% were able to tell the benefits of learning outcomes from students' as well as teachers' viewpoints.

Learning outcomes focus on attainment through learning. In the process of learning, a child plays an active and vital role in constructing their knowledge. Children take responsibility for making choices about what they will learn and explore. Hence, our learning outcomes are based on their need specific to their age. Learning outcomes also help in reducing the unnecessary burden and stress on the students. However, 70% were not very clear on how to link it with a child-centered approach.

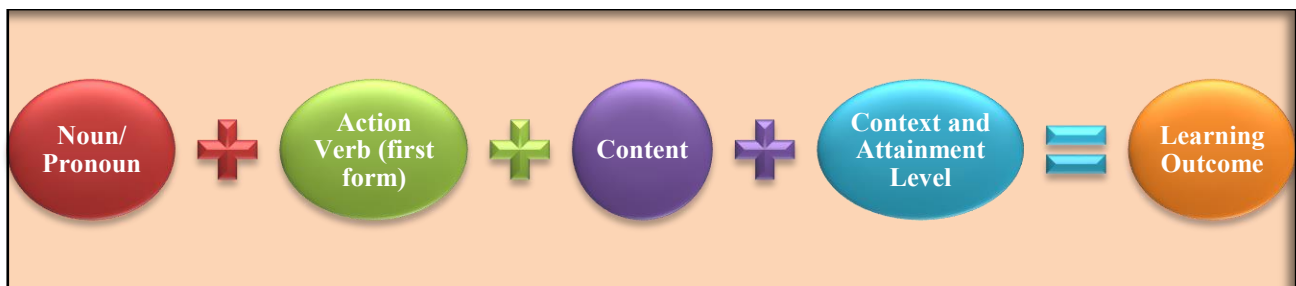
#### **A Model for Framing Learning Outcomes**

The prospective teachers lacked basic clarity in understanding the difference between the objectives and outcomes. While the objectives focus upon the terminal point towards which pupil progress, the learning outcomes are the identifications in terms of learner actions which ensure that the desired objective is realised. Through the investigation, it seems that a trainee faces a major problem in the syntax formation

of the statement of a learning outcome. So, the researcher has emphasised what to include and exclude while writing a learning outcome.

Since the attainment of an objective completely depends upon the behavioural demonstration of the learner, the statement of learning outcomes should essentially begin with terms like “the pupil”, “the learner”, and “the student” and not with “the learners” or “the teacher”. A precise statement of the outcome must include the transformation part and the content part. Where the modification part foretells the tailoring in the way the learner conducts herself towards a particular demeanour, the content part refers to the subject theme which helps in piloting the very change. The terminology of the learning outcome should comprise an action verb, such as **describe**, **explain**, **use**, and **compare**, rather than a verb conveying a mental state, such as **understand**, **know**, **appreciate**, etc., as these terms convey a vague meaning to the evaluator. The examiner must know precisely what a pupil should be able to do if he **understands** or **knows** a particular concept.

The choice of words in the statement must be one-fold to be understood by the pupils, teachers, parents, and other stakeholders. Care must be taken that each learning outcome signifies a worthwhile objective that is achievable and relevant. Also, one learning outcome should be submitted to only one objective to avoid unnecessary confusion in identifying the achievements. If possible, the statement of the learning outcome should signify the level of achievement to make it more exact and meaningful.



**Figure 2: Graphical Representation of Framing Learning Outcome Model**

*( The student/ He/She + the kind of change/modification brought about in the students + through which change is brought about + assessable indicator referring a particular worthwhile objective = Learning Outcome)*

Example:

**Objective: To create awareness of environmental conservation.**

**Learning Outcomes:**

- **The learner** creates posters for display boards.
- She **actively participates** in science fairs/science exhibitions/field trips etc.
- He seeks the **cause and effect of deforestation**.
- The student suggests **measures** to save natural resources.

**Conclusion:**

Overall, this study leads us to the conclusion that the student teachers lacked an in-depth understanding of the concept of learning outcomes. They seemed confused in differentiating between the instructional objectives and learning outcomes. The major difficulty faced by prospective teachers lay in the framing of the statement of learning outcomes. So, we have developed a structural model to simplify the

construction of the statement. This model will help in developing a common understanding of learning outcomes and their expressions to standardise the assessment criteria for teachers and other stakeholders as well. Before implementation, an understanding of the learning outcomes is of utmost importance. Even the National Education Policy 2020 places strong emphasis on learning outcomes as a central part of its vision to reform schooling in India. It promotes a shift from traditional rote learning to a competency-based, outcome-oriented approach, where clear and measurable learning outcomes define what students should know and be able to do at each stage of education. This alignment of curriculum, pedagogy, and assessment with defined outcomes is intended to enhance foundational literacy and numeracy, critical thinking, and other essential skills, ensuring that education becomes more meaningful, transparent, and accountable.

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