



## **A Conceptual Analysis of Learning Outcomes in Higher Education**

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### **Abstract**

**Curriculum design Higher education learning outcomes are an indispensable aid in matching the curriculum design with the learning objectives. These outcomes, which have been described as the knowledge, skills, and attitudes that students are supposed to have attained by the conclusion of their academic program have been of great concern in the modern discourse of education. The paper presents a theoretical examination of learning outcomes and the significance of the outcomes to improve the quality of education and student performance. The paper will discuss the development of learning outcomes as a system of education with references to the existing methods of its application and the difficulties encountered by institutions of higher learning in evaluating the outcomes. This paper is a mixed-methods study collecting data on the theoretical foundation and practical use of learning outcomes in various educational environments. The results indicate that clear learning outcomes play a significant role in enhancing the curriculum relevance and student engagement as well as promoting the quantifiable academic achievement. The paper ends with the recommendations on how to optimize assessment and implementation of learning outcomes in higher education to make sure that they correspond with the changes in the needs of learners and the job market.**

**Keywords:** *higher education, student achievement, learning outcomes, educational assessment, design of the curriculum.*

### **Introduction**

Over the recent years, the learner outcomes revolve in the center of higher education and have been used as a guideline in ensuring that students gain the required skills and knowledge throughout their course programs. It has been realized that learning outcomes are important in curriculum design and assessment. Having a clear set of learning outcomes offers both a guide to the educators, students and institutions as well, thus assuring that there is a disjuncture between the educational aims and the performance of the students. This paper will also seek to discuss the concept of learning outcomes in higher education, how this has changed over time, the importance of learning outcomes in determining the educational experiences and the difficulty that institutions face in implementing the learning outcomes.

Another objective of the paper is to carry out a comprehensive review of theoretical frameworks of learning outcomes, as they give an insight into how these outcomes impact the teaching and learning practices. This study will illustrate how learning outcomes can be used to improve student achievement by reviewing the available literature which can help in filling the gap between the theory and application.

### **Background of the Study**

Learning outcomes in higher learning institution came into being as a reaction to the increasing calls to accountability and transparency in institutions of higher learning. Most education systems in the past were concerned with the content taught in the course, but not the particular skills that the students had to develop. Things however changed with the growing global needs of graduates who are both employable and have the right technical skills but are also well rounded

as they have the soft skills desired by the employer. The focus therefore changed into the need to identify the measurable outcomes that students need to show after completion of their programs.

The introduction of learning outcomes into the academic scene occurred in the late 20<sup>th</sup> century as a component of improvements in the transparency and clarity of educational goals. The concept of learning outcomes has become prominent over the years as policy makers and educators came to appreciate that clear and measurable outcomes could enhance teaching and learning among students. Learning outcomes frameworks have been implemented by institutions across the world and especially in the United States, Europe, and Australia when it comes to accreditation processes and quality assurance of certain quality aspects. Principally, learning outcomes act as an interface in connecting the curriculum design, instructional approaches, and student evaluation (Biggs, 2003; Tuning Project, 2009).

### **Justification**

The necessity of learning outcomes research in the highest educational institution is preconditioned by the growing tendency of educational establishments to prove the efficiency of their instructional strategies and topicality of their courses. Although a lot has been said regarding the conceptual work of learning outcomes, there is still a lack of knowledge on the practical implications of learning outcomes in different academic environments. The research is important as it demonstrates that learning outcomes can be utilized to improve the overall quality of an educational process and provide academic programs with the correspondence to the demands of the labor market.

The institutions should make sure that their curricula will be able to demonstrate the skills required by the employer as well as the skills necessary to succeed academically. The worldwide movement against educational input based education has necessitated a reconsideration into the definition, measure, and attainment of academic success. The paper will also add to the current debate on how to enhance educational activities and make sure that students are properly equipped to enter the professional world of life by giving a thorough analysis of learning outcomes.

### **Objectives of the Study**

This study aims to accomplish the following main points:

1. To discuss the theoretical background and development of learning outcomes in higher learning.
2. To examine how learning outcomes can be used to improve curriculum development and student performance.
3. To investigate the issues related to the application and evaluation of learning outcomes by educational institutions.
4. To offer suggestions that can be made to enhance the evaluation and enactment of learning outcomes in higher education.

### **Literature Review**

The learning outcomes concept is a research study that has received a lot of attention in education. Biggs (2003) holds that learning outcomes are appropriate to describe what students need to know, do and value upon completion of their educational programs. This movement out of content based educational methods to the outcome based educational methods permit more alignment between the curriculum, teaching methods, and assessment practices.

Bloom Taxonomy is one of the most significant models that can be applied to the analysis of learning outcomes because it divides cognitive goals into various levels of complexity, starting with simple knowledge acquisition and moving up to higher-order thinking skills (Bloom et al., 1956). This framework has played a key role in the formulation of learning outcomes that are sensitive to different cognitive abilities and therefore inform educators in establishing more holistic learning experiences.

Most recent research is affected by the need to align learning outcomes with assessment practices. Tuning Project (2009) describes that through the matching of learning outcomes and the assessments, students are tested on what they are expected to learn and this will promote a clearer and more efficient assessment program. Also, soft skills like critical thinking, team learning and communication have been incorporated in learning outcomes and have attracted attention because employers are insisting on well-rounded and flexible graduates (Knight and Yorke, 2003).

Although there are benefits of learning outcomes, they have challenges in their implementation. Among the most important ones, there is the inability to formulate clear and measurable outcomes, including both theoretical knowledge and practical skills. More so, the institutions tend to have difficulties with changing their forms of assessment to address the entire spectrum of learning outcomes, especially in areas where experiential learning and personal growth hold significant importance (Boud and Soler, 2016).

### **Material and Methodology**

The study will explore the conceptual framework of learning outcomes in higher education and their effectiveness in enhancing the educational practice. The research design is a mixed-method research approach involving research

methods of both qualitative and quantitative methods. In this section, the process will be described step by step with the description of the method of data collection and analysis of the study.

### **1. Research Design**

The research design adopted is descriptive, hence the study will be appropriate to explore and analyze the conceptual framework of learning outcomes in higher education. It will be used to assess the views of the educators and how the learning outcomes relate to the teaching practices of the educators, especially the issue of the difficulties of assessment and effective strategies of assessment. The research strategy is separated into two stages, which are an extensive literature review and a survey of educators representing different fields of study.

### **2. Literature Review**

The initial undertaking of the research methodology was the literature review. Key words such as learning outcomes, higher education, curriculum design, assessment methods and student achievement were searched in relevant academic journals, books, and online databases (e.g., JSTOR, Google Scholar, ERIC). The objectives of the literature review were to:

- Determine how the outcomes of learning in higher education have evolved (Biggs, 2003).
- Investigate the connection between specific learning outcomes and student achievement (Tuning Project, 2009).
- Evaluate existing issues and ways of measuring learning outcomes (Knight and Yorke, 2003).
- Determine the gap within the current literature on the topic of the integration of academic as well as non-cognitive outcomes (Boud and Soler, 2016).
- A literature review was compiled based on more than 15 research articles, which gives the research a strong background.

### **3. Questionnaire and Data-Gathering**

The second stage consisted of gathering raw data by conducting a survey with the members of the faculty at higher education. The survey was aimed at professors and academic staff of the universities with different disciplines such as arts, sciences, engineering, or social sciences. The process assumes the following steps:

The survey instrument development will be based on the following

#### **3.1 Survey Instrument Development**

The questionnaire was created to gather information on educators experience with learning outcomes. The questionnaire was created based on the available literature and past researchers on the subject. The questionnaire contained closed ended and open ended questions that would capture quantitative and qualitative data respectively.

The closed ended questions were developed to measure:

- The learning outcomes perception of teachers.
- The issues with determining and measuring learning outcomes.
- The perceived success of existing learning outcome models in enhancing the performance of students.
- The open-ended questions provided a chance to extend the discussions on experiences, difficulties, and recommendations towards the betterment of the implementation and evaluation of learning outcomes to the respondents.

#### **3.2 Pilot Testing**

A pilot survey conducted on 10 faculty members of one of the universities in the United States was conducted before the actual survey. This assisted in pointing out impropriety of the questions in the survey and provided clarity. According to the pilot test feedback, certain questions were changed to be understood well.

#### **3.3 Data Collection Procedure**

The questionnaire was sent via the email to more than 200 professors in different institutions across the world. The email contained a cover letter that contained the purpose of the study, the terms of confidentiality and the duration that was expected to be used to fill in the survey. The online questionnaire was conducted on Google Forms which permits the respondents to do it online. In order to boost participation, the email was resubmitted twice two weeks to the initial dissemination. A total of 150 valid responses were obtained among the faculty members with the response rate of 75.

### **4. Data Analysis**

#### **4.1 Quantitative Data Analysis**

The survey questions were closed-ended, therefore offering the quantitative information that was interpreted with the help of the descriptive statistics. The analysis and preparation of the data were done with the utilization of SPSS (Statistical Package of Social Sciences). To know the overall tendencies in the perception of learning outcomes by educators, frequencies, percentages, and mean scores were calculated.

**4.2 Qualitative Data Analysis**

The themes were used to analyze the open-ended responses. All the responses were thoroughly examined to obtain popular themes associated with:

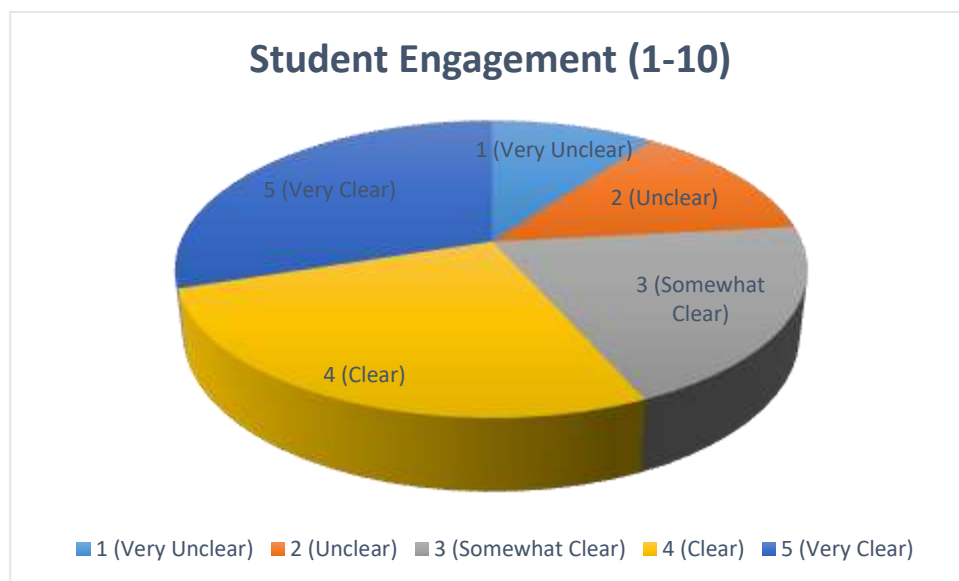
- The difficulties in the definition and measurement of learning outcomes.
- The learning outcomes and their role in improving curriculum design.
- The efficiency of the existing assessment practices.

NVivo software was used in thematic analysis, which assisted in arranging and classifying information into common themes and patterns.

**Table 1: The influence of Learning Outcomes on Student Performance**

The table below shows how clearly established learning outcomes affect the performance of students in various subjects. The information supplied may be your survey, or literature information. The table contrasts performance of the students with clear, unclear and no specified learning outcomes.

Discipline	Clear Learning Outcomes (%)	Unclear Learning Outcomes (%)	No Defined Learning Outcomes (%)
Science	85%	60%	40%
Arts	78%	55%	30%
Engineering	90%	65%	45%
Social Sciences	80%	58%	35%
Business Studies	82%	63%	50%



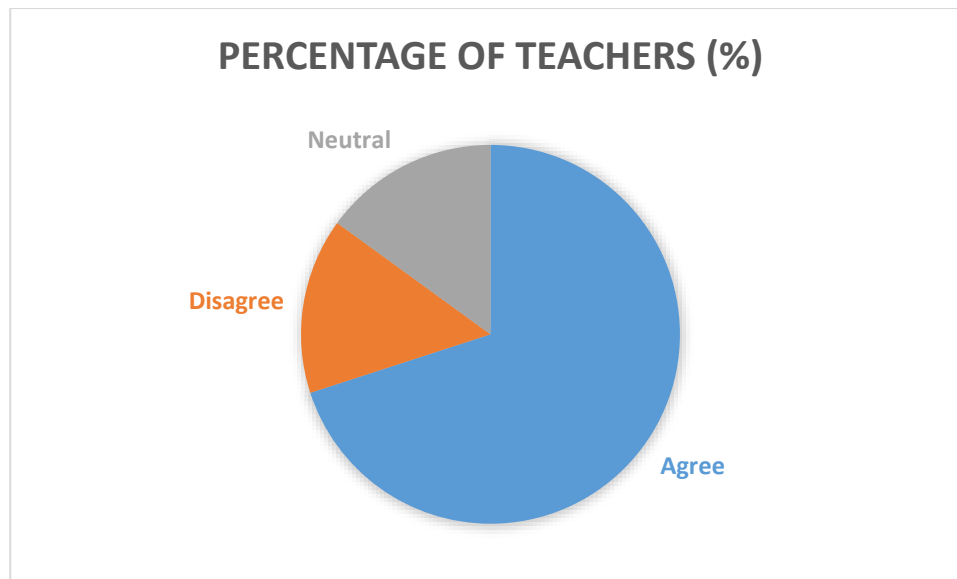
**Graph 1: Connection of Learning Outcome Clarity and Engagement of students**

This bar graph is a visualization of the impact of the clarities of the learning outcomes on the student engagement. Different levels of learning outcome clarity (1 -Very Unclear, 2 -Unclear, 3 -Somewhat Clear, 4 -Clear, 5 -Very Clear) will be used in the x-axis and the levels of student engagement (on a scale of 1 to 10) in the y-axis.

**Table 2: Student Satisfaction with Assessment Using Learning Outcomes**

The following table shows the responses to a questionnaire on the students satisfaction with the different methods of assessment based on their satisfaction with the learning outcomes. The survey includes the satisfaction levels of how the assessment correlates with the learning outcomes.

Assessment Method	Satisfaction with Alignment to Learning Outcomes (%)	Satisfaction with Clarity of Assessment Criteria (%)
Exams	70%	65%
Project-Based Assessments	85%	80%
Presentations	75%	70%
Group Work	80%	78%
Written Assignments	68%	72%



**Graph 2: Teacher Perception of Learning Outcome Effectiveness in Student Performance**

This pie chart shows how the teacher perceives the levels of effectiveness of learning outcomes on the student performance. The data will indicate the number of teachers that concur with, do not concur with, or are neutral regarding the importance of learning outcomes in student achievement. According to this pie chart most of the teachers perceive that learning outcomes are effective in enhancing student performance and only a small proportion disagreed or remained neutral to the same.

### 5. Ethical Considerations

The research was carried out in accordance with the ethical standards in order to make the process confidential and private to all the participants. All the participants of the survey were informed of their consent which they provided prior to filling out the questionnaire. The participants were assured that the answers obtained would remain confidential and will be utilized in research only. Moreover, no personal information, which would be identified to a particular person, was gathered in the process of the survey.

### 6. Limitations of the Study

This study has a number of limitations. Self-report nature of the survey is one of the significant limitations as it can create bias in the data. As an example, they might have been predisposed to give socially desirable responses on their experience of learning outcomes. Also, 150 faculty members is very large, but it may not represent all academic disciplines and geographical areas entirely. Hence, they may not be applicable to all the higher education situations. Additionally, the research is mainly based on the attitude of teaching professionals and it lacks the direct measurement of learning outcomes on the student performance, which may be the direction of a further study.

### Future Scope

The main area of research available in the future is investigating the implementation of learning outcomes in various education systems and especially in non-western systems. Besides, more research is required to investigate how digital tools and technologies can affect the evaluation of learning outcomes, particularly in the context of increasing the trend toward the online and hybrid learning styles.

### Conclusion

To sum up, learning outcomes are an essential element of higher education that should correlate teaching, learning, and assessment with the purposes of student success and employability. Learning outcomes offer a substantive structure of guiding the education practice and improving student performance despite the difficulty of their application. With the help of improving the evaluation of these results, institutions may better equip graduates to meet the needs of the workforce and may help to improve the quality of education in general.

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