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An Exploratory Study of Learning Outcomes Literacy Regarding University Teachers: A Case Study of University of Education

^{1*}Maimoona Naeem, ¹Fariha Gul, ²Javaid Iqbal, ¹Mubashir Shahzad

¹Ph.D. Education Scholar, Department of Education, University of Management and Technology, Lahore. f2021095012@umt.edu.pk, fariha.gul@umt.edu.pk,

²Assistant Regional Director, Allama Iqbal Open University, Islamabad. <u>javaidsleo@yahoo.com</u>

*Corresponding Email: <u>f2021095012@umt.edu.pk</u>

ABSTRACT

Learning Outcome Literacy (LOL) is not only an imperative skill but a prime need to acquire competency in teaching. To make teaching effective and make its flow in the correct direction, LOs competency is indispensable as the whole teaching-learning process is dependent on LOs. The aim of this single "qualitative case study" was to investigate the ambiguity regarding LOs in the "institutions of higher education" and the "University of Education" was selected as a single case for the exploration. Objectives of the study were: to find out the perception of university teachers regarding their knowledge about learning outcomes and to find out the perception of university teachers regarding their understanding of learning outcomes to enable students to attain these LOs. The sample of the study comprised of content teachers of the University of Education, Township Campus, Lahore. Through a purposive sampling method, 12 teachers were carefully chosen. The data of the study was collected through "semi-structured interviews". The thematic analysis technique was used to analyze the qualitative data. The findings of the study revealed that the University of Education Content Teachers had insufficient knowledge of Learning Outcomes (LO) and were misapprehending Learning Outcomes to enable learners to attain these LOs. In light of the study results, it was concluded that content teachers of the University of Education did not possess the Learning Outcomes Literacy (LOL). Both objectives were interconnected in a way that if someone didn't have knowledge of LOs he/she could not have an understanding of LOs for students' attainment. So, the case study concluded that the teachers were not sufficiently literate about LOs.

KEYWORDS

Learning outcomes (LOs), Learning Outcome literacy (LOL), and content teachers.

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INTRODUCTION

The role of teacher is very complex, based on bygone and up-to-date variables. Teachers are always in need of learning to shape and reshape their teaching by thinking up to higher levels in order to inculcate higher-order thinking skills and analytical knowledge. To fulfill this purpose, the education system should provide proper training to university teachers for developing pedagogical and andragogical competencies because sophisticated teaching needs teaching training (Kind & Chain, 2019). Teacher competencies are the main elements of an effective "teaching and learning process". "Pre-service and in-service teacher training" is equally important at all stages of education from "school education to higher education". Pedagogical and andragogical training is vital at all levels of education (Kušić., et al., 2018). In this regard, Pakistani universities need some attention because their hired content teachers do not have any teacher training or any degree/diploma.

Recently many changes were emphasized in Higher Education to improve andragogy by making teaching an outcome-based process by following LOs. That was also the demand of the digital age to inculcate "problem-solving and critical-thinking" skills among students. It is a considerable point that effective teaching cannot be taken for granted by ignoring Student Learning Outcomes (SLOs). So, it is the responsibility of universities to ensure that their teachers should have teaching competencies (GÜVEN, & ARGÜN, 2018).

University teachers are also professionals and they make some significant decisions based on their teaching skills and content specialty. Planning of content teaching also requires some knowledge of teaching and relevant skills and pedagogical competencies. The plan should be executed by incorporating different methods, techniques, and strategies inside the classroom. Clear and meaningful content delivery lies in teaching competencies.

Every content curriculum has some competencies, standards, benchmarks, learning goals learning objectives and learning outcomes. Every teacher gets direction and guidance through learning outcomes or objectives. Student Learning Outcomes (SLOs) also give expression to the knowledge, concepts, skills, and actions that students are expected to perform in a particular course (Hunter et al., 2010). There are three levels of SLOs, the first one is about what students are expected to demonstrate at the end of the course, the next one is based on program objectives and the last one is related to university or institution outcomes or goals or objectives. The focus of this study is the first one and that is student learning outcomes (Biggs and Tang, 2011; Wilkens, 2011; Salame, 2009; UNESCO, 2009).



There is ambiguity in learning outcomes and in its perception by faculty members at the university level. But SLOs literacy is a basic pedagogical competence required for the teaching-learning process (Kušić., et al., 2018). "Having this competence requires sufficient knowledge and skills". Once a teacher initiates planning to teach, he/she ought to first consider what the LO of the lesson is. The alignment and dependence of the whole process is based on learning outcomes (LOs). The LOs are inseparable from the competency of teachers, teaching, and learning. LOs are also indispensable because they give direction to the whole process of learning which includes direction for content, direction for andragogy, and direction for assessment. LOs are equally important for teachers and students as students can approach their expected performance in the relevant course and can make preparations accordingly by viewing their course/lesson LOs. Effective teaching andragogy in educational milieus cannot always be taken for granted, how teachers develop measurable LO and apply them productively remains a stuff of concern. The relevant assessment technique is also vital which totally glues with the already set direction by learning outcomes. So, the literacy of LOs cannot be neglected at any level including higher education level (Nasrallah, 2014; GÜVEN, & ARGÜN, 2018).

Construction of Teacher information covers several different categories, including "content knowledge, general teaching knowledge, teaching content knowledge, and knowledge of students and their characteristics", among other topics. Andragogical and content knowledge cannot be conveyed without considering learning outcomes and thus neglecting it can cause a serious threat to educational standards and quality (Hill, & Chin, 2018). While teaching in higher education institutions the researcher observed that many university teachers are not literate in LOs and do not consider it significant as a direction for the teaching and learning process, thus that issue pushed the researcher to investigate it in her own workplace to confirm the LOL in teachers of the University of Education, Township Campus Lahore, to clear the doubts regarding Learning Outcomes Literacy (LOL). The researcher selected her own university, the University of Education Township Campus Lahore as a single case to explore the phenomenon. To serve this purpose teachers will give their opinion through semi-structured interviews. The opinions of teachers are vital because they can further help to know about the direction of the flow of the teaching and learning process.

STATEMENT OF THE PROBLEM

This single case study will explore the learning outcomes literacy of university teachers from different disciplines at the University of Education, Lahore. Learning outcome literacy includes knowledge of teachers regarding course learning outcomes and understanding of learning outcomes to enable students to attain them.

RELATIONSHIP FRAMEWORK

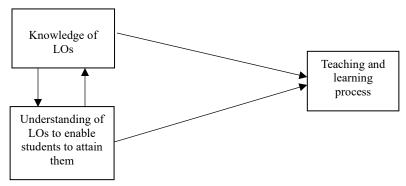


Figure 1: Relational link

Knowledge of learning outcomes and their understanding leads a teaching learning process in a particular direction for students' learning destination. Learning and teaching depend upon planned, organized and intended application of teaching skills outside the classroom (Coetzee, 2020; Morris, Hiebert, & Spitzer, 2009). The most central ability and competency which matters outside the classroom is planning of teaching which enables a teacher for decision making regarding its teaching under the light of curriculum documents by following its learning outcomes (Nasrallah, 2014; GÜVEN, & ARGÜN, 2018). Ultimately, teaching and learning progress into "a cycle that is intended to improve the inputs constantly to improve the learning outcomes" (Apostolou, 1999).

OBJECTIVES OF THE RESEARCH

- 1. To explore the perceptions of university teachers about their knowledge of learning outcomes.
- 2. To explore the perceptions of university teachers about their understanding of learning outcomes to enable students to attain them.

3.

PRIOR LITERATURE TEACHER COMPETENCY

Competency of a teacher includes the knowledge, understanding, skills, application, and attitude of a teacher. Personal and professional characteristics are also included in it. Every teacher needs these competencies to be an effective teacher at any level. The teaching competencies help a teacher to teach effectively and efficiently, competent teachers always have strong planning, alternative strategies, methods, and techniques for better learning in the classroom (GÜVEN, & ARGÜN, 2018).

The same is the case with teachers in higher education as every discussion regarding theoretic, conceptual, and practical concerns of higher education unavoidably comprise the question of learning of andragogy and accordingly the issue of "andragogical competencies". The inclination towards "professionalization of andragogues" in many countries directs towards greater notice in describing the "competency profile of andragogues". Many countries with strong educational systems still lack in ensuring professional competencies of university teachers (Kušić, Zovko, & Vrcelj, 2018; Buiskool et al., 2010).

Andragogues are in real need of "qualifications and competencies" that depend on the field of content teachers and their work. The content teachers who do not possess any teacher training or degree, need to acquire those "pedagogical qualifications and competencies" by joining study "programs for teacher education or by attending lifelong programs as additional pedagogical and psychological education for teachers" (Coetzee et al., 2020; Kind & Chain, 2019; Kušić et al., 2016). For instance in our country, andragogues of higher education or university level need the same "pedagogical qualifications and competencies" for teachers who are busy with kids in "primary and secondary schools".

Some institutions make efforts to coordinate instruction with LOs, and that makes their whole educational system and structure beneficial for teachers, learners, and management. But on the other hand, it is also the case that individual educationalists conduct instruction and assessments without fully understanding them. They apply the ways by using their own experiences, training, and current contexts to influence their practices. In addition, educators and management vary in "their skill and experience with mapping, aligning, or linking discrete LOs to the institutional outcomes in any logical way" (Coetzee et al., 2020).

"Educators in this multipart milieu must have their preparation for instruction and assessment for identification of knowledge, skills, and abilities to include the educator's individual motivation and disposition toward instruction and assessment". Many cognitive models and taxonomies are helping a lot in instructing and assessing of LOs. Bloom and solo taxonomies are the prominent ones. Science teachers and all other content teachers can take clear guidance and direction to know and understand the contexts and structures of LOs. It can also help them to understand the connection of LOs with all other elements of teaching and learning (Coetzee et al., 2020; Heinrich, 2017).

LEARNING OUTCOMES (LOs)

"Learning outcomes" (LOs) are equally significant for students, trainers, teachers and institutions of higher education. "Learning Outcomes are more than a few sentences in lesson plans or curricula; instead, the development of learning outcomes and their use within a teaching unit shape learning and assessment activities and help to improve student engagement and learning". Improving learning by using outcomes properly has become a growing priority for educators, teachers, and administrators over the past decade. The emphasis on incorporated, generalizable, and convertible skills supplement the contemporary loads of graduates and lays a base for lifetime learning. As regime and community interest in Higher Education (HE) grows by using LOs as LOs help to define the aims, goal line, and key features of HE within the institution, for pupils (Coetzee et al., 2020; Hume et al., 2019; Heinrich, 2017).

LOs are the particular statements that explain the knowledge or skills students need to accomplish at the end of a certain task, session, subject, content, and program and also assist pupils to apprehend why this "knowledge and skills" will be advantageous to them. They focus on the perspective and impending applications of "knowledge and skills" also support students to create integration learning in a variety of contexts, and help to guide in the "assessment and evaluation process". Good LOs highlight the "application and integration of knowledge". LO refers to how students can apply the material both in the setting of the classroom and in the broader sense for taking the direction towards better learning (Coetzee et al., 2020; Greenleaf et al., 2008).

Here are some examples of LOs:

At the completion of this course learners will be able to:

- Define blended learning
- Explain the features of hybrid learning
- Identify blended learning and hybrid learning
- Analyze the role of the teacher during Covid-19 (Coetzee et al., 2020; Heinrich, 2017; Greenleaf et al., 2008).

ADVANTAGES OF LOS

Students can clearly understand in advance what they are going to learn from the content. LOs help the student to pick the suitable course/program/area course. So, well-defined LOs eliminate the risk of killing time. It reduces excessive stress on

students. LOs provide students with a clear idea of what they will learn after ending a lesson and before going to start a session. LOs underline what students need to know actually, and more notably, what they need to gain from a particular lesson. By reaching the LOs, students could show that they have extended to the top of the lesson (Lovren et al., 2020).

- LOs support teachers in the preparation and planning of a lesson.
- LOs explain how and what to teach accurately.
- LOs support arranging instructional material in a good way.
- LOs also support the teacher to choose a better plan for teaching a lesson.
- LOs support the teacher to neglect extra work during teaching.

Support in writing assessments and assessments

- LOs explain how to do an easy and clear assessment.
- LOs permit mid-way improvements in assessment.
- LOs permit the students to prepare themselves for better learning.
- LOs support calculating the success of the lesson unit (Hume et al., 2019).
- In preparation for the question paper, Learning outcomes provide help in scattering the points of the paper.
- LOs provide support to the Academic Counselors and Counselors

 LOs support counselors to focus on the question of how to teach and wh
 - LOs support counselors to focus on the question of how to teach and what students need to gain.
- Support in Ensuring Accreditation (Coetzee et al., 2020; Lovren at al., 2020).
- With the help of the learning outcomes, the accreditation organization can find out whether programs and courses fulfill the objectives and mission.
- With the help of the learning outcomes, it can be found whether the program and lesson are constructed properly.
- With the help of learning outcomes, the accreditation bodies find out whether the required objectives are fulfilled or not (Mahajan et al., 2017).

LEARNING OUTCOMES LITERACY (LOL)

"Learning Outcomes Literacy" (LOL) is an instructor's skill or competence. LOL can be addressed with a competency that imparts planning and management of instruction at any level including higher education. To have this ability involves "sufficient knowledge and skills". When a teacher has begun preparation for a lesson, he or she would begin to think about the "learning outcomes" (LOs) of a particular lesson or course.

After that, he/she has to decide on some fundamental questions such as "Why is this Student Learning Outcomes (SLOs) or Learning Outcomes (LOs) included in the curriculum? Which is the most central point for learners in this SLO/LO? What should I teach and how should I teach in the context of this SLO? What else should I do to engage my students with equipment and tools with this SLO/LO? What my students should fix, define, sketch, demonstrate, apply, discuss, explain and/or represent, etc. to make me believe they got this SLO as I intended? LOL is able to address the answer to such specific questions. It entails two key skills in a row; one is understanding of SLOs and the other is translating SLOs to make learners discover them (GÜVEN, & ARGÜN, 2018).

Some prior research investigated a relationship between pedagogical knowledge, "content knowledge, and pedagogical content knowledge of pre-service teachers" in different areas. The results showed "the relationship between content knowledge, pedagogical knowledge, and pedagogical content knowledge". They conclude that "pedagogical content knowledge is a combination of content and pedagogy". At this point, they proved that the combined effect of pedagogical content knowledge is different, more effective, and new organization (Kind, & Chan, 2019). When it comes to pedagogical or pedagogical content knowledge and teachers' competencies the literature also highlights a prominent feature of teachers' knowledge and skill about the SLOs in various courses they teach, they should have appropriate knowledge about SLOs, instructions, learning materials, strategies, techniques, and learning resources, as well as they should have awareness of "the horizontal and vertical curriculum" including curriculum and program goals and objectives (Hume et al., 2019).

METHODOLOGY/DESIGN/APPROACH

This study was a single case study qualitative design. Case study was used to inquire this study as this inquiry is a good way to describe, explain, or explore a phenomenon. "It investigates a phenomenon within its real-life existence, especially when the boundaries between the phenomenon and situation are not really obvious" (Yin, 2013). "It also copes with distinct situations as a comprehensive research strategy" (Yin, 2013). It is investigating the Learning Outcome Literacy of University teachers. It tells about the current state of university teachers regarding their knowledge and understanding of learning outcomes.

POPULATION

All university content teachers from various disciplines. Content teachers of all campuses in the University of Education were taken to generalize the study.

SAMPLING

University of Education Township campus was selected as a case and a "purposive sampling technique" was used to collect the data from content teachers of the university. For that purpose, 12 teachers were selected purposively. Only content teachers were selected purposively for interviews because content teachers usually don't have any teaching training/degree/diploma. Teachers from various disciplines were selected. Teachers were from Fine Arts, English, Mathematics, Urdu, Pakistan Studies, Islamiyat, Physics, Chemistry, Botany, Computer sciences, Information technology, and Zoology.

DATA COLLECTION AND DATA ANALYSIS

Data were collected by using semi-structured interviews, for which face-to-face interviews were conducted in 12 separate sessions in quiet and comfortable surroundings. Most of the interviews were conducted in the offices of teachers. Every session almost took 50 to 60 minutes. The opinions were recorded in audio form. The thematic analysis technique was used. The data was transcribed and then themes and codes were constructed from the data.

RESULTS

KNOWLEDGE ABOUT LEARNING OUTCOMES:

The first objective of this study was about the knowledge of teachers regarding LOs, out of twelve university teachers, eight told that LOs are not as important as clear content delivery, good lesson preparation and interesting lesson presentation are important. They never planned a lesson in writing and they didn't know the lesson plan format. They only prepare the lesson and deliver it with the help of technology, previous research and by using audio-visual aids. They had insufficient knowledge of LOs. Two teachers who had an experience of teaching in the school sector told that they were stating and applying learning objectives in their teaching and lesson planning but they don't know how to state a LOs by following any taxonomy. During their school teaching, they were used to follow LOs that were already written in textbooks curricula. The remaining two had one-year teaching degree of B.Ed. and they had Learning Outcomes Literacy (LOL). They were planning lessons properly, they knew about Bloom's taxonomy and were using it in their teaching. They told that LOs are vital and significant in planning and implementing teaching.

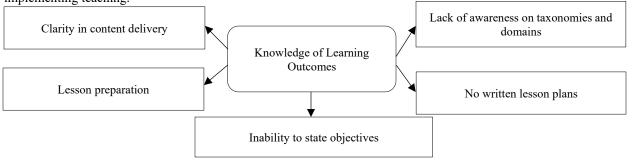


Figure 2: Themes of first objectives

UNDERSTANDING OF LEARNING OUTCOMES TO ENABLE STUDENTS TO ATTAIN THEM

The results of the second objective showed that, 10 teachers out of twelve were of the opinion that there is no need to tell students about LOs because they don't give a direct benefit to students, they said if we are preparing our topics properly and have sufficient content knowledge and delivering it effectively then there is no important role of LOs in it. All these respondents told that they read LOs in their first class of the session as an introduction of course. But they are not following them religiously because that didn't have worth for them. These 10 also said that there is no logical link between LOs and assessment. One of them opined about Los in these words: "I cannot relate LOs to my teaching because it will confuse both teachers and students." The teachers told that students are expected to learn the whole course and if they have taught a particular topic of the course it means that is enough for students, and in that case, they might follow indirectly. All these 10 participants were of the view that LOs don't have any effect or relation with students' performance and learning. They were only focused to content teaching. There were 2 participants, having content degree and teaching degrees, were totally opposite in their opinion. One was a teacher of Pakistan Studies and the other was teacher of Urdu. Both also had the degree of BEd. They were convinced and practicing the combination of content-pedagogical teaching. They said that clear content delivery is incomplete and almost impossible without following the general and specific LOs of any course and they told that teaching is unidirectional without following LOs. A strong relationship and cycle is working with elements such as LOs, content delivery, students' achievement, and assessment. They were not enable to understand the alignment of university, program and course outcomes. One of these two teachers said that content experts should have understanding of LOs, so that they can construct and add some LOs to enhance higher-order thinking skills among learners at higher education level. In her opinion, course outline of Pakistan Studies does not include LOs for higher order thinking skills and they should be included.

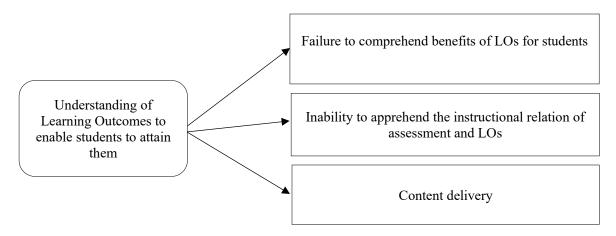


Figure 3: Themes of second objective

CONCLUSIONS AND RECOMMENDATIONS

"Learning Outcome Literacy" (LOL) was compelled by the impression that a teacher must be incapable to know and understand the "Learning Outcomes" (LO), as this is the supreme and salient element of the higher education curriculum and andragogy. The planning, regulation, and conduction of powerful teaching is dependent on LOL. A teacher needs some essential components of teaching competencies at a higher education level and when the findings of this study were observed, it showed that, the specified competence regarding LOL. The results of the study showed that teachers' LOL was insufficient. They were lacking in learning outcomes knowledge. They were also unable to interpret LOs to enable students to acquire them. The content teachers were incapable to know and comprehend LOs. They misapprehend LOs. Having less knowledge of LOs it was not possible to apprehend it for students' acquirement. Most of them were failed to see the alignment of LOs with teaching and learning and unable to see their benefits for students. University teachers were also unable to connect LOs with program and university objectives. Awareness about the relationship of LOs with content delivery and lesson plans was also missing. Many interviewees asked the researcher to explain the term LOs and that observation during the interviews leads us towards the misconception of content teachers regarding LOs.

In light of findings, it is recommended that university teachers really need some pedagogical training for content teaching. Effective teaching needs apprehension and knowledge of apprehension. Secondly, LOs need to be updated according to international standards and there is a need to address higher-order thinking skills through LOs.

CREDIT AUTHOR STATEMENT

Ms. Maimoona Naeem: Conceptualization, Methodology, implementation, Data curation, Writing-Original draft. Dr Fariha Gul: Methodology, Supervision, Reviewing and Editing. Javaid Iqbal: Data curation, Data collection, Reviewing and editing. Mubashir Shahzad: Editing, Reviewing, and Data curation.

COMPLIANCE WITH ETHICAL STANDARDS

It is declare that all authors don't have any conflict of interest. It is also declare that this article does not contain any studies with human participants or animals performed by any of the authors. Furthermore, informed consent was obtained from all individual participants included in the study.

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