

Teaching Technology and Livelihood Education in Geographically Isolated and Disadvantaged and Conflict-Affected Areas (GIDCA) Schools in the Philippines: A Narrative Inquiry

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Abstract

This study explored the lived experiences of teachers as implementers of the agriculture and fisheries curriculum dimension of the TLE content learning area specifically in aligning three essential pedagogic domains: learning outcomes, teaching and learning activities, and assessment tasks within the context of a school categorized as GIDCA of the DepEd as well as the coping mechanisms they employ on specific lived experience. It utilized cooperative inquiry as its design. Data were collected from 12 purposively chosen respondents using a semi-structured interview and analyzed using the Stevick-Colaizzi-Keen framework. Findings showed that TLE teachers could not ascertain whether they are able to align the key learning domains because the content learning area is outside their field of concentration, there is a dearth of available instructional materials intended for the subject matter, and there are little to no opportunities for continuing professional development. To cope with the challenges, they engage in mentoring, access online learning materials, and attend continuing professional development activities. Given this, it is suggested that TLE teachers in GIDCA schools be given.

Keywords: constructive alignment theory, curriculum implementation, GIDCA schools, last mile schools, technology and livelihood education

1. Introduction

Southeast Asian nations have implemented various programs to deliver educational goods and services to learners in remote areas and those who have not completed the state-mandated education cycle for basic education. These initiatives, carried out in partnership with various private stakeholders, have had a significant impact on the learners and the education system. Thailand's Equitable Education Fund (EEF), for example, has made strides in achieving inclusive and equitable quality education. Through financial assistance programs, the EEF has encouraged children to stay in or return to school, provided access to alternative and community-based education for out-of-school youth, and improved the quality of teachers and schools. Cambodia's Secondary Education Improvement Project (SEIP) has also left its mark, aiming to meet minimum standards for school effectiveness, introduce school-based managerial reforms, engage community stakeholders, establish infrastructure, and build capacity for faculty and school administrators. Meanwhile, Indonesia's Kartu Prakerja program has had a transformative effect, encouraging lifelong learning, developing participant competencies, promoting entrepreneurship through skill improvement initiatives, and ultimately increasing productivity and competitiveness (Valenzuela, 2025).

Initiatives like that of what were mentioned and discussed above do yielded positive impacts to the academic welfare of its target beneficiaries. For example, Alam et al. (2023) reported that floating schools, a successful initiative providing basic education to children in Bangladesh residing in flood-prone areas, have been a beacon of hope. These schools, designed for over 30 learners, are equipped with classrooms, Internet access, libraries, and solar-powered computers. Students board the school from several riverbank communities, which are often inaccessible due to flooding and are dropped off near their homes after class recitations. Vietnam's version of floating schools, on the other hand, has been deployed to teach computer skills and financial literacy to disadvantaged youth living in the remote areas of the Mekong Delta Province, transforming the lives of the locals (Hanoi Times, 2014). Similarly, Rise and Adeyemi (2015) reported that Nigeria's floating classrooms have been

hailed as an innovative teaching method by the Makoko water community. Indeed, given climate change, initiatives such as floating schools have generated sustainable and ecological solutions capable of satisfying the social and physical needs of the community.

Moreover, Mohammed (2016) averred that solar-powered floating schools in flood-prone Bangladesh feature internet-linked computers, making learning more interactive and accessible for children from disadvantaged backgrounds. These schools also serve as libraries and adult education centers, where parents and villagers receive information on nutrition, health, hygiene, sustainable farming, and adaptation to climate change. Additionally, these schools also serve as channels to combat discrimination and unequal opportunities for women; boats teach girls additional skills and their rights to education, choices and opportunities, prevention of children, and early and forced marriage. This encourages parents to send their daughters to school while raising awareness, enhancing capabilities, and providing livelihoods and economic opportunities. In like manner, Ahmed et al. (2017) claimed that the BRAC (Building Resources Across Communities) project, utilizing the boat school model, was able to provide education to children in Bangladesh living in the country's wetland areas. Their uninterrupted education resulted in positive socio-economic changes, evident in increased literacy, reduced dropout rates and absenteeism, women's empowerment, and the creation of job opportunities. However, the most significant impact was the improved local economic development in the regions, a testament to the project's long-term sustainability and positive influence on the community. This is because the boats are locally manufactured, and the pickup and drop-off services are carried out by locals.

Just like its neighbouring countries, the Philippines, a member of the Southeast Asian nation bloc, had also initiated what it calls the Last Mile Schools (LMS) program. Spearheaded by the country's Department of Education (DepEd), the program ensures access to quality education in the basic education sector by establishing schools in Geographically Isolated, Disadvantaged, and Conflict-Affected Areas (GIDCA). As explained by the agency, these schools can be described as those having fewer than four makeshifts and nonstandard classrooms, no electricity, and without government subsidies for maintenance and the erection of new instructional rooms and facilities, accessible only through rugged terrain, with multi-grade classes, with less than five teachers, and a population of less than 100 learners, more than 75% of whom are indigenous peoples (IP) (Department of Education 2019). In 2019, DepEd reported that 7,144 schools could be categorized as LMS. To fast-track the program's implementation, DepEd issued DepEd Memorandum No. 59, s. 2019 urging regional directors and management committee members to jointly plan and implement programs, projects, and activities to expedite the delivery of basic education goods and services. They are also directed to spearhead capacity-building activities, hire new teachers and personnel, purchase learning tools, construct laboratories, ensure internet connectivity, implement feeding, health, and greening programs, and introduce computerization (DepEd, 2020).

LMS has since been subjected for an empirical investigation. For example, Brillantes and Nebria (2021) described and examined the lived experiences of elementary teachers teaching in a school categorized as LMS. Findings showed that while teachers find their service to the stakeholders rewarding, they need to face a myriad of practical challenges, including the accessibility of the place, gargantuan teaching and learning preparations, learners' cultural diversity, shedding personal money for the food of their learners and purchase of school materials. These concerns would compel them to think of transferring to a favorable teaching post. In like manner, Equipado & Gilbas (2021) validated the above-mentioned concerns and echoed the many daily struggles of elementary teachers in LMS to include daily sustenance, limited modes of transportation, security, and community relationships. Furthermore, Quejada & Orale (2018) LMS teachers are the living witness to classroom-poverty exuded in the faces of their learners and the community as a whole, which, in turn, they pointed out as the main reason of high illiteracy rate.

Conversely, teaching in LMS is not without joy. According to Barcena (2018), besides challenges, teachers are gratified to see their learners academically grow and help the poorest families in rural locations and their communities. The trust built among their colleagues strengthened their willingness and growth, causing them to select to stay in these schools. Their presence spells a difference in the lives of the children residing in these secluded villages. While the lived experiences of teachers in LMS have been subjected to empirical investigations, as mentioned and discussed in the surveyed literature above, none is pivoted on determining the same experiences involving technology and livelihood education (TLE) teachers assigned in schools categorized as GIDCA of the DepEd in context of being implementers of the curriculum specifically the agriculture and fisheries. Thus, this study explored the lived experiences of TLE teachers as implementers of the agriculture and fisheries curriculum dimension of TLE. Specifically, it looked into their lived experiences on: deliberately aligning three essential pedagogic domains: learning outcomes, teaching and learning activities, and assessment tasks within the context of a school categorized as GIDCA of the DepEd; and, the coping mechanisms employed to ensure effective and efficient

implementation of agriculture and fisheries as dimension of the TLE curriculum. Results are deemed important because these would be able to generate baseline data useful for curriculum policy intervention for more effective and efficient pedagogic delivery of agriculture and fisheries as one of the content learning areas of TLE.

2. Methodology

2.1 Research Design

This study used cooperative inquiry, one of the approaches of participatory research, as its research design. As explained by Kemmis & McTaggart (2005), this design involves participation of all people in the research process but does not explicitly address power relations and the potential transformative effects of the research. In the context of education programs evaluation, this design intends to provide answers to the continued challenges and concerns on its implementation which impede the desired outcomes of the programs. Thus, derail the delivery of educational goods and services to the target learners (Johnson & Christensen, 2008). Furthermore, Reason & Bradbury (2006) averred that of the methodological implications of this design is that it paves the way to review and interpret the data and draw conclusions for change in practice or need for additional research.

2.2 Research Participants

This study utilized 12 purposively chosen TLE teachers assigned in three schools categorized by the DepEd as GIDCA as participants. They are assigned in schools located in isolated islets of three municipalities in Eastern Visayas, the Philippines. Their inclusion is based on two criteria: implementers of agriculture and fisheries dimension curriculum of TLE and those who consented to participate in the study.

2.3 Instrument

This study utilized a validated semi-structured interview guide as its main instrument. According to Creswell (2012), interviews help unfold the story behind a participant's experiences and pursue detailed information around a topic. Furthermore, interviews '*involve a set of assumptions and understandings about the situation which are not normally associated with a casual conversation*'. It has since been used as a tool in gathering data because it is resource-intensive as it compels the researcher to draw information from respondents on a one-to-one basis, produce vast amounts of data, and is focused on gaining insights into the meaning and significance of what is happening. In this study, the interview was focused on how TLE teachers in schools categorized by the DepEd as GIDCA ensure the alignment of the key learning elements specifically learning outcomes, teaching and learning activities, and assessment tasks and how they cope with the challenges posed by this desire. As such, the participants were asked: 1. *How do you ensure the alignment of your intended learning outcomes, teaching and learning activities, and assessment tasks in the context of implementing the agriculture and fisheries curriculum dimension of TLE in your school environment;* 2) *What coping mechanisms do you employ to ensure that alignment of these key learning episodes is ensured?*

2.4 Validity and Reliability Tests

The semi-structured interview guide was subjected to validation through an inter-rater validity using the Cohen's kappa coefficient to ensure the level of agreement of the raters. The kappa statistics validity index was set at 1.0. Results showed a 1.0 index or a perfect validity rating.

2.5 Data Analysis

Guided by Moustakas' principle in employing a few participants, data derived from interview transcript was analyzed using the Stevick-Colaizzi-Keen framework, which involved a series of processes including a description of the participant's experiences with the phenomenon, bracketing, identification, and listing of significant statements, coding and clustering to determine common themes, creation of textual description to capture the essences of the experiences, development of structural descriptions to provide a deeper understanding of the phenomenon, and integration of this description to form a detailed description of the essences. The study findings were submitted for member checking to cross-examine the interpretation and validity of the gathered data.

2.6 Ethical Considerations

Ethical issues were addressed by seeking consent from the participants through the prepared Informed Consent Form on their participation in the study. Subsequently, the study's nature, scope, and purpose were explained in detail to the TLE teachers implementing crop and production. All 12 of them were assured of data confidentiality, anonymity, and access to the study's findings.

3. Results

This section presents the results of the phenomenological analysis conducted based on the domains of inquiry. Tables 1 and 2 in the succeeding pages presents the codes, sample verbatim responses, and clustering of themes for lived experiences of the TLE teachers as implementers of the agriculture and fisheries curriculum in aligning three essential pedagogic domains and on their coping mechanisms respectively.

Table 1. Codes, Sample Verbatim Responses, and Clustering of Themes

Codes and Sample Verbatim Responses	Subthemes	Main Themes	Description of Themes
I am unaware of whether I ensure alignment of my learning objectives, activities I provide to my learners, and how I assess them because I am not a TLE major graduate (P ₁).	Out-of-field teachers	Theme 1: Lived experiences of the TLE teachers as implementers of the agriculture and fisheries curriculum in aligning three essential pedagogic domains: learning outcomes, teaching and learning activities, and assessment tasks within the context of a school categorized as GIDCA of the DepEd.	TLE teachers assigned in schools categorized by the DepEd as GIDCA do not have baccalaureate preparations intended for this content learning area.
I just teach whatever is asked or suggested in the curriculum guide and mindless about such thing as alignment after all my undergraduate preparation is not really into technology and livelihood education (P ₂).			This theme means that dearth of instructional materials constraint the desire of the TLE teachers to ascertain alignment of the key elements of the teaching and learning processes.
Aligning the key pedagogic elements is beyond possibility since there is an imminent scarcity of instructional resources useful for implementing the curriculum (P ₃).	Dearth of available instructional materials		
The curriculum is greatly conceptualized but no support of instructional resources is immediately given to us even if there is already this program. (P ₄).			TLE teachers in the GIDCA schools are not given optimal opportunities to grow professionally. Thus, limit their knowledge on constructively aligning the key learning elements.
My feeling as a TLE teacher in this GIDCA school is that I am truly isolated because I never received seminar and training in implementing this curriculum for the purpose of ensuring that my practices in the classroom are reflective that of what existing teaching and learning theories suggest such as aligning the key elements of the teaching and learning process (P ₅).	Unavailability of opportunities for continuing professional development		

Table 2. Codes, Sample Verbatim Responses, and Clustering of Themes

Codes and Sample Verbatim Responses	Subthemes	Main Themes	Description of Themes
<i>On being out-of-field teachers</i>		Theme 1:	TLE teachers usually consult their more senior colleagues for guidance.
I always solicit help from a more senior faculty in the school who have had wealth of experience in delivering the TLE curriculum (P ₁).	Mentoring	Coping mechanisms employed by the TLE teachers in GIDCA identified schools of the DepEd in relation to their lived experiences in ensuring constructive or deliberate alignment of the key element of the teaching and learning processes-learning outcomes, teaching and learning activities, and assessment tasks	
The exact term is mentoring. You know, being not a TLE major in college, I have no other recourse but to seek mentorship from the more senior colleagues teaching TLE (P ₂).			
<i>On dearth of available instructional materials</i>			
I would just look for alternatives or download video clips showing the lessons listed in the curriculum guide (P ₄).	Access to online instructional materials		This theme means resorting to online instructional tools in lieu of unavailability of instructional materials.
I go to the center of the municipality during Saturdays and Sundays and explore the internet and other online search engine for me to be able to find the necessary instructional tools (P ₂).			
<i>On unavailability of opportunities for continuing professional development</i>			
I pursue master's degree with funds coming from my on pocket (P ₃).	Personal Drive to Grow Professionally		This theme means the personal motivation of the TLE teachers assigned in GIDCA school to grow professionally through enrolment in higher education.
I enroll in the graduate school (P ₄).			
I pursue diploma and short-term programs delivered online (P ₁).			

4. Discussions

4.1 Lived Experiences of the TLE Teachers as Implementers of the Agriculture and Fisheries Curriculum in Aligning Three Essential Pedagogic Domains

Theme One: Out-of-field teachers. TLE teachers assigned in schools categorized by the DepEd as GIDCA are assigned to teach the content learning area despite not having a baccalaureate degree in technology and livelihood education. As a result, they could not categorically claim whether they are able to align the key learning aspects of the teaching and learning processes. Castro et al. (2023) explained this phenomenon as the practice of assigning teachers to teach content learning areas outside their undergraduate preparation. Furthermore, they enumerated the primary causes of the out-of-field phenomenon, which include: perennial teacher shortages, asymmetrical distribution of teachers across district learning centers, a system employed by teacher education institutions that focuses mainly on graduating specialists instead of generalists, and the ratio between teachers and learners in the classroom.

The impact of teaching content learning areas outside teachers' baccalaureate preparations has since been studied. According to Yanhua (2022), these teachers often experience stress, uneasiness, and a lack of motivation to teach, despite their students motivating them to improve intellectually and professionally. In addition, Ortega et al. (2022) reported that non-education degree holders teaching content outside their field of specialization usually encounter instructional-related challenges that necessitate immediate action, such as support for training and continuing professional development, and to some extent, tutorial assistance in specific subjects through flexible arrangements, as noted by Saquing (2023). These findings are supported by the result of the study conducted by Hobbs and Torner (2019) who said that out-of-field teachers have difficulty understanding and overseeing instruction outside the field, which was further affirmed by Abadianao & Boco (2020), who claimed that educators faced difficulties, roadblocks, doubts, and a desire for self-assurance.

With the myriad concerns that usually arise on this phenomenon, de Pablo and Dordas (2022) stated that academic authorities should extend the help these teachers need to address the complexities of daily pedagogic rigors such as creating lesson plans, choosing teaching strategies, and managing class activities. Similarly, Montebon (2019) noted that out-of-field teachers who face challenges in their instructional practices may seek guidance from more senior colleagues, be given access to educational resources, and participate in various professional education forums as mechanisms to enhance their content understanding and teaching skills. Furthermore, Caylao (2019) suggested that this educational concern be addressed by crafting competency standards specific to teacher education programs. This is to ensure that the demand for highly qualified teachers is met. Lopez & Roble (2022) recognize, on the other hand, the need for discipline-specific development programs. These programs play a crucial role in helping teachers understand the complexities of the teaching and learning processes, thereby enhancing content and pedagogical knowledge of the out-of-field teachers.

Theme Two: Dearth of available instructional materials. This theme suggests that the scarcity of instructional materials hinders the TLE teachers' ability to ascertain the alignment of key elements in the teaching and learning processes. Teaching materials are resources that teachers use to deliver instruction with ease and greater effectiveness. These tools play a significant role in ensuring a successful teaching and learning recital as they aptly aid teachers' efficiency and improve learners' performance. They serve as a springboard in making the delivery or recital of learning competencies appealing, practical, and realistic, ensuring vibrant participation from teaching and learning actors throughout the delivery of lessons, which may subsequently result in knowledge acquisition and skills development. Learning tools can be categorized as visual and audiovisual aids, and they can be either concrete or abstract.

Academic scholars have outlined five primary uses of teaching and learning tools: they provide a structure for learning, help make content more engaging, aid in meaningful learning encounters, and level the playing field among diverse groups of learners with varying learning needs. Given the immense importance of instructional materials, scholars have urged teachers to select and utilize various tools that complement and support the intended learning outcomes of the prescribed curriculum (Pappas, 2018). Conversely, the unavailability of instructional materials is a perennial problem in Philippine schools. Basilan (2016), for example, claimed that teachers are troubled by the limited supply of instructional tools, which hampers their teaching activities, let alone the usability of the available materials provided to them.

Theme Three: Unavailability of opportunities for continuing professional development. In the context of this study, TLE teachers in the GIDCA schools are not provided with optimal opportunities for professional growth, which limits their knowledge on constructively aligning the key learning elements. In the Philippines, the foundation of professional growth is firmly established in Republic Act No. 10912. This law, a legal mandate, requires all professionals, regardless of their discipline, to enhance their professional practice through Continuing Professional Development (CPD). The law defines CPD as the acquisition of advanced knowledge, skills, and ethical values in a post-licensure specialization or an interdisciplinary field of study. This is to be assimilated into professional practice, self-directed research, and/or lifelong learning. CPD, as per the law, is a program or a set of accredited learning activities such as seminars, workshops, technical and non-degree training lectures, and scientific meetings. These activities aim to equip professionals with advanced knowledge, skills, and values, empowering them to excel in their respective fields. Attendance at these activities guarantees the professional CPD credit unit, which is a measure of the learning achieved. The Continuing Professional Education Department of San Diego State University (2022) in the United States of America (USA) emphasizes that learning is a continuous process. This underscores the need for teachers to be relentless in their pursuit of knowledge, particularly in the face of a constantly evolving educational landscape. Lifelong learning is not just a commitment, but a central aspect of becoming a teacher. It is an intrinsic attribute that teachers must possess. Engaging in continuing professional development is a recognition of the dynamic nature of the curriculum and the need to adapt to its changing contents.

4.2 Coping Mechanisms Employed by the TLE Teachers in GIDCA Identified Schools of the DepEd in Relation to Their Lived Experiences

Theme One. Mentoring. In this study, this theme refers to the fact that TLE teachers typically consult their more senior colleagues for guidance in implementing the agriculture and fisheries curriculum. Existing literature suggests that mentorship-type programs exist across various disciplines, where novice employees are paired with seasoned employees who can demonstrate skills and provide further knowledge on specific aspects required for the job. Teaching is no different; one-on-one coaching is a form of professional advancement utilized in the academic community. Jones (2018) claimed that mentorship can only be successful when mentoring partnerships demonstrate identifiable skills that enable learning and change. The mentor and mentee must have a successful partnership through active listening, trust, and shared goals.

The findings of several studies suggest that mentoring programs do have a positive impact on both teachers and their learners. For example, Mullen (2023) reported that novice teachers who participated in a mentorship program showed improved teaching performance after a year of mentorship activities focused on teaching styles and classroom management, as indicated by students' evaluations. Similarly, Rockoff (2018) found a strong correlation between the quality of mentoring and students' performance, suggesting that an important aspect of mentoring may be the provision of specific knowledge to mentees by their more senior colleagues. Finally, Sundli (2017) claimed that quality mentoring significantly contributes to the professional and academic success of the mentees who underwent a series of mentoring programs provided by their immediate supervisors.

Theme Two. Access to online instructional materials. This theme involves resorting to online instructional tools due to the unavailability of instructional materials. The advent of the internet has created a so-called information superhighway where all forms of information are available on the web and made accessible with just a click of the mouse. Inarguably, technology has drastically changed many dimensions of our lives, including education. In fact, alongside the advent of technology, there is the emergence of educational technology, commonly referred to as a wide range of digital educational resources, from online courses to games and podcasts that facilitate learning. The following are some of the advantages of online instructional resources: they make learning accessible to more people, provide a range of resources for all learning styles, offer instant feedback on work, emulate a one-on-one teaching style, and save schools time and money (e-learning industry, 2022).

Theme Three. Personal Drive to Grow Professionally. This theme refers to the personal motivation of TLE teachers assigned to the GIDCA school to grow professionally through higher education enrollment. The need to grow professionally is paramount among people in the academe. It should be considered as a personal responsibility and a motivation to do so. Engaging in professional growth not only benefits the students but also enhances the educator's skills and knowledge, fostering a sense of personal achievement. People in the academe across grade levels must keep abreast of current trends in the teaching and learning landscape; otherwise, they will not be able to respond to the highly demanding call for effective and efficient teaching. This coping technique supports the Magna Carta for Public School Teachers provisions, which require all teachers to attend activities designed to enhance their professional growth, such as seminars and conferences.

5. Conclusion

The curriculum for TLE is not just about academic learning; it's about preparing students for the real world. It affords junior high school Filipino learners or those enrolled in grades 7-10 a multitude of specializations, including cookery, crop production, refrigeration and air conditioning, and electric installation and maintenance, and other exploratory tracks useful when they enrol in Senior High School (SHS). Upon completing these specializations in SHS, individuals can earn either National Certificates I and II (NC I and NC II) or a Certificate of Competency (COC). Specifically, on agriculture and fisheries, the curriculum outlines three concentrations. First, animal production. For this dimension, the content standards require junior high school learners to demonstrate an understanding of practical theories as active communicators in a workplace set by industry and specific government agencies, such as the Department of Labor and Employment (DOLE). The second area of focus is on crop production. In this, junior high school students are expected to demonstrate an understanding of foundational knowledge, theories, and principles in utilizing farming tools and equipment, which, in turn, must be applied through their actual usage in crop production. Finally, the third concentration is on fishery operations. The curriculum explicitly requires learners to demonstrate an understanding of concepts, underlying theories, and principles in the use of tools and equipment in aquaculture, which should be evident when these are utilized in aquaculture production (TLE Curriculum, Most Essential Learning Competencies, 2024).

This study was able to unravel the lived experiences of the teachers as implementers of the agriculture and fisheries curriculum dimension of the TLE content learning area specifically in aligning three essential pedagogic domains: learning outcomes, teaching and learning activities, and assessment tasks within the context of a school categorized as GIDCA of the DepEd as well as the coping mechanisms they employ on specific lived experience.

Phenomenological analysis conducted based on the domains of inquiry point out that these teachers have difficulty in aligning these three domains due to three compelling reasons – the content learning area is out of their field of concentration, there is a dearth of available instructional materials intended for the subject matter, and there are no available opportunities for continuing professional development. In light of the foregoing, they cope with these challenges by subjecting themselves to mentoring, accessing online instructional materials, and exercising their personal will to grow professionally through attending various continuing professional development activities. The results of these phenomenological analyses strongly suggest that teachers teaching in schools categorized by the DepEd as GIDCA require immediate support from the Philippine education department. TLE teachers teaching agriculture and fisheries must be afforded support, such as continuing professional development activities, to ensure that the implementation of this curriculum, especially the core facets of the teaching and learning processes, is achieved.

Indeed, in the 21st-century teaching and learning landscape, teachers being at the forefront of curriculum implementation need to be mindful of ensuring the alignment of key pedagogic elements. This call is attuned to the theory on Outcomes-Based Teaching and Learning (OBTLE). This learning theory has three essential features. First, its outcome statements are used solely for enhancing teaching and assessment. Outcome statements specify the criteria for determining whether learners have learned and how effectively they have learned what was intended. These further inform teachers of the actual performance of learners on aspects they were previously unable to perform or perform incompletely. Second, instruction is facilitated in a bid to augment the chances for the learners to achieve the target outcomes. It is achieved by engaging them in learning activities that are directly related to achieving the intended outcomes. Finally, assessment tasks require the learners to perform the intended outcome itself (Biggs and Tang, 2007).

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