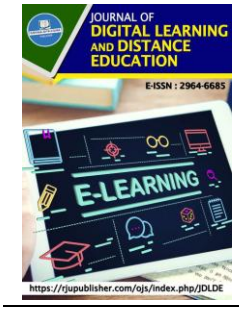

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Self-Directed Learning Toward Outcome-Based Education (OBE): An Approach to Teaching Pedagogy

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Abstract

Modern educational transformation demands a paradigm shift from conventional teaching to more dynamic approaches, where self-directed learning (SDL) and outcome-based education (OBE) serve as crucial elements in fostering student independence and ensuring measurable competency. This study aims to analyze the integration of SDL and OBE as a pedagogical teaching approach. A descriptive quantitative research design was employed, utilizing a purposive sampling technique to select 25 respondents. The results indicate that assessing learning readiness focuses on student-centered outcomes to define OBE expectations, while setting learning goals provides students with independent opportunities, feedback mechanisms, and decision-making skill development. Furthermore, engagement in the learning process emphasizes the interconnection between SDL approaches and instructional goals. Monitoring and evaluation provide a well-articulated roadmap for teaching and learning experiences, while reflection fosters adaptability and lifelong learning approaches necessary for quality education. Structurally, the OBE approach empowers students through personal goal setting, time management, and accountability. In conclusion, the synergy between SDL and OBE effectively empowers students as the center of learning, ensuring the acquisition of intended learning outcomes through a transparent and structured pedagogical framework.

Keywords**:** Self-directed learning (SDL), Outcome-based education (OBE), and teaching pedagogy.

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Introduction

Self -directed learning toward outcome-based education in teaching pedagogy empowers the learning journey of teachers at the school level. It identifies the learning goals, methods, strategies, resources, and needs to adopt in teaching pedagogy. It gains a set of knowledge, skills, outcome

evaluation, and implementation readiness. It utilizes innovative approaches in teaching. It prepares students for the demands in the educational system. It innovates teaching instructions to solve problems and inadequacies in the learning and teaching convention to emphasize on students' transformative pedagogy. It is centered on practice and modern ideas in adapting the impact of adaptability and critical thinking process. It indicates various strategies and techniques for self-directed learning toward the implementation of outcome-based education (McCarthy et al., 2023). It provides a positive connection on learners' engagement teaching pedagogy in the various educational systems. However, self-directed learning toward outcome-based education in teaching pedagogy analyzes the paradigm of self-directed learning emerging in the modern classroom setting. It helps in the self-learning directed process to be adopted by the teachers in effective learning practices. It prioritizes mastery and overall content in educational approach and program. It accomplishes the utilization of self-directed learning and outcome-based education in teaching proficiency contents and curriculum strategy. It offers an innovative perspective on the teaching and learning transaction performance to meet the demands of everchanging outcome-based education as to adaptability, skills, and teachers' knowledge. It links with transformative pedagogy in teaching implementation. It contributes to limitations on the technology teaching, expectation, and educational gaps (Bitar & Davidovich, 2024).

On the other hand, self-directed learning toward outcome-based education in the classroom setting describes the process in identifying the goals, layout complete activities and timeline, sequence activities, structure, achievement, outlining respect, assessment, and development goals in teaching. It evaluates the systematic development of outcome-based education toward self-directed learning integration knowledge and guideline. It indicates self-directed learning innovation in defining outcome-based education specification for students' learning process. It structures the curriculum and educational process teaching strategies and methods. It designs the assessment to facilitate learning outcome and achievement. It defines teaching and learning outcome experiences. It ensures that curriculum must be aligned on the support of direct activities output. In contrast, self-directed learning toward outcome-based education in the classroom setting is driven by changing dynamics emerging through transformative integration of traditional teaching models for students as centers of learning. It rapidly fosters the educational contribution in proposing a personalized experience of the learning system (Hong, 2025). It establishes the integration of self-directed learning to support the analysis of the needs and improved academic gains teaching modalities. It provides insights and learning preference performance on learning trajectories as a basis for intervention in the educational system. It includes the approach of self-directed learning and outcome-based education patterns in learning pathways. It accesses the interactive learning experience and the proficiency level style of skills. It is the ever-growing diversity, inclusivity, and diversity toward self-directed learning (Aladini et al., 2025).

Furthermore, outcome-based education is focused on defined outcome, instructional efforts, entire school program, and organization to demonstrate teaching for students as centers of learning. It is a teaching pedagogy approach to align and define learning outcomes in the achievement of instructional practice. It implements potential attention and impact in the different behavior of students. It explores the outcome-based education effect to engage the increased demonstration of clear learning objectives and motivation. It is an accountability to foster the outcome-based education for active involvement of students in the learning process. It contributes to problem solving, critical thinking, and development of outcome-based education in adaptive learning and behavior. It promotes necessary skills in enhancing the performance of teaching and learning (Panakaje et al., 2024). Indeed, outcome-based education focuses on quality education. It emphasizes effective and learning strategies and learning outcomes. This ensures that teaching and learning provide necessary skills for teachers to achieve quality education based on the curriculum of outcome-based education. It promotes and facilitates sustainability of quality education. It enhances outcome-based education to equip the knowledge and skills of students to address the complex challenges in building inclusive

diversified equitability in the educational system. It examines the systematic outcome-based education that is aligned on sustainable development for students as centers of learning. It implements the framework for outcome-based education collaboratively. It provides evidence on the alignment of outcome-based education in quality education goals for self-directed learning (Kim et al., 2019).

Similarly, the key principles of outcome-based education enhance expanded opportunities, high expectations, designing down, and clarify of focus. It implements the development and guiding principles for outcome-based education to align with learning support and success. It integrates and explores the approach capability to enhance the outcome-based education inclusivity and quality of educational practice. It structures the gained acceptance in fostering potential holistic development. It offers freedom on the approach of teaching and learning based on the needs of students. It advocates to empower the learners broader view in education beyond defined skills and outcomes. It discusses the foundation of teaching and learning approaches and potential synergies and key principles. It highlights varying outcomes and challenges in the implementation of outcome-based education (Chowdhury & Alzarrad, 2025). Lastly, the key principles of outcome-based education transform the landscape of the global school system. It emphasizes the increased centric learning among students. It transforms the demands of the traditional model in outcome-based education competency and adaptable needs. It aligns with the needs of students as centers of learning as to the reliability of teaching responsibilities. It innovates teaching sensitivity in the global context of learning, regulatory compliance, and technological advancement. It emphasizes cultivating the mindset and skills components for learning skills, problem solving, communication knowledge, and technical proficiency. The principles of outcome-based education analyze critical thinking and competency in teaching and learning. It provides practical insights in the attainment, assessment, delivery of teaching, curriculum design, and learning (Edwin & Susanta, 2025).

Methodology

The descriptive quantitative research design is utilized in the study because it measures the process of self-directed learning toward outcome-based education as an approach to teaching and learning pedagogy in the area of assessing readiness to learn, setting learning goals, engaging in the learning process, monitoring progress and evaluating learning, and reflecting on the learning process. This includes the concentration of outcome-based education in the self-directed learning in teaching pedagogy among the respondents in terms of focus, structure, key aspects, and benefits. It is a cornerstone in providing scientific inquiry on systematic approach to self-directed learning toward outcome-based education learning complex phenomena in understanding various disciplines. It describes the condition and foundation of identifying the potential cause and effect of establishing controlled processes and methods.

Respondents of the Study

The subjects of the study are the professional licensed teachers from the secondary level who are practicing self-directed learning toward outcome-based educational systems. This is based on the criteria set by the researcher that the respondents must be teaching in the Senior or Junior High School for at least 3 years and above. The respondents are teaching in private school institutions. The study consisted of Twenty-Five (25) respondents only.

Sampling Techniques

The study employs the purposive sampling technique in gathering data and selection of the sample size. It is widely utilized for purposive sampling technique because it is a non-probability that is focused on contextual and detailed understanding. It is defined as selection for intentional units such as events and cases on research questions relevant to self-directed learning toward outcome-based education as an approach to teaching pedagogy. It enables us to gain deep insights on the

research process and complex phenomena. It offers an advantage in the selection of sample size because it provides flexibility on the target ability of the information process (Tajik, et al. 2024).

Results

What is the process of self-directed learning toward outcome-based education as an approach to teaching and learning pedagogy?

Table 1. Process of SDL Toward OBE in the area of assessing readiness to learn among the respondents

Indicators	WM	I	R
It involves evaluating the framework of students' ability for self-directed learning to take ownership, set goals, and progress for outcome-based education.	3.56	A	3.5
It ensures effective learning which is crucial in the assessment of instructional needs to achieve learning outcomes for students.	3.56	A	3.5
It processes self-directed learning in understanding the initiative of the learning needs and identifies the progress, resources, and formulation of learning goals.	3.32	MA	5
It focuses on student-centered learning outcomes in defining the self-directed learning for outcome-based education expectation.	4.24	SA	1
It assesses the readiness tools and instruments as reflected on observation in the performance task of teaching and learning outcome.	3.76	A	2
Average weighted mean	3.688	A	
Standard deviation	0.345		

Table 1 presents the weighted mean and the corresponding interpretation on the process of Self-Directed Learning toward Outcome-Based Education in the area of assessing readiness to learn among the respondents. It shows in the table that rank 1 is "It focuses on student-centered learning outcomes in defining the self-directed learning for outcome-based education expectation", with a weighted mean of 4.24 or Strongly Agree which means that SDL toward OBE in the area of assessing readiness to learn is highly observed. Rank 2 is "It assesses the readiness tools and instruments as reflected on observation in the performance task of teaching and learning outcome", with a weighted mean of 3.76 or agree which means that SDL toward OBE in the area of assessing readiness to learn is observed. Rank 3 is shared by the two indicators which are "It involves evaluating the framework of students' ability for self-directed learning to take ownership, set goals, and progress for outcome-based education" and "It ensures effective learning which is crucial in the assessment of instructional needs to achieve learning outcomes for students", with a weighted mean of 3.56 or Agree which means that SDL toward OBE in the area of assessing readiness to learn is observed. The least in rank is "It processes self-directed learning in understanding the initiative of the learning needs and identifies the progress, resources, and formulation of learning goals", with a weighted mean of 3.32 which means that SDL toward OBE in the area of assessing readiness to learn is limited. The overall average weighted mean is 3.668 (SD=0.345) or Agree on the process of Self-Directed Learning toward Outcome-Based Education in the area of assessing readiness to learn is observed among the respondents.

Table 2. Process of SDL Toward OBE in the area of setting learning goals

Indicators	WM	I	R
It focuses on outcome assessment in aligning the learning activities and achievement on identifying the set goals effectively.	3.68	A	3.5
It develops learning outcomes through SMART goals and focuses on competency to clearly define student knowledge, understanding, experiences, and development skills.	4.20	SA	2
It defines the program outcome and objectives for the result-oriented purpose learning process.	3.68	A	3.5
It aligns with the assessment and learning activities on identified curriculum design, development support for teaching strategies, accurate assessment, and constructive learning outcome.	3.64	A	5
It provides students with independent learning opportunities and choices for goal setting framework, learning reflection, progress feedback performance, and decision-making skills development.	4.40	SA	1
Average weighted mean	3.920	A	
Standard deviation	0.354		

Table 2 presents the weighted mean and the corresponding interpretation on the process of Self-Directed Learning toward Outcome-Based Education in the area of setting learning goals among the respondents. It shows in the table that rank 1 is “It provides students with independent learning opportunities and choices for goal setting framework, learning reflection, progress feedback performance, and decision-making skills development”, with a weighted mean of 4.40 or Strongly Agree which means that the process of SDL Toward OBE in the area of setting learning goals is highly observed. Rank 2 is “It develops learning outcomes through SMART goals and focuses on competency to clearly define student knowledge, understanding, experiences, and development skills”, with a weighted mean of 4.20 or Strongly Agree which means that the process of SDL Toward OBE in the area of setting learning goals is highly observed. Rank 3 is shared by the two indicators which are “It focuses on outcome assessment in aligning the learning activities and achievement on identifying the set goals effectively” and “It defines the program outcome and objectives for the result oriented purpose learning process”, with a weighted mean of 3.68 or agree which means that the process of SDL Toward OBE in the area of setting learning goals is observed. The least in rank is “It aligns with the assessment and learning activities on identified curriculum design, development support for teaching strategies, accurate assessment, and constructive learning outcome”, with a weighted mean of 3.64 which means that the process of SDL Toward OBE in the area of setting learning goals is observed. The overall average weighted mean is 0.392 (SD=354) or Agree on the process of Self-Directed Learning Toward Outcome-Based Education in the area of setting learning goals is observed among the respondents.

Table 3 presents the weighted mean and the corresponding interpretation on the process of Self-Directed Learning toward Outcome-Based Education in the area of engaging in the learning process among the respondents. It shows in the table that rank 1 is “It emphasizes self-directed learning approaches and interconnection outcomes aligned with instruction and educational curriculum goals”, with a weighted mean of 4.36 or Strongly Agree which means that the process of

SDL toward OBE in the area of engaging in the learning process is highly observed. Rank 2 is "It explores the key aspects of active participation in the learning process through assessment, guided practice, and setting goals based on the needs of students", with a weighted mean of 4.24 or Strongly Agree which means that the process of SDL toward OBE in the area of engaging in the learning process is highly observed.

Table 3. Process of SDL Toward OBE in the area of engaging in the learning process

Indicators	WM	I	R
It emphasizes self-directed learning approaches and interconnection outcomes aligned with instruction and educational curriculum goals.	4.36	SA	1
It ensures to assess the self-directed learning to empower students as centers of learning journey through outcome-based education.	3.52	A	5
It engages with the learning process in setting goals for the approaches of learning progress toward outcome-based education.	3.88	A	3
It explores the key aspects of active participation in the learning process through assessment, guided practice, and setting goals based on the needs of students.	4.24	SA	2
It utilizes the resources learning support journey in continuous reflection and evaluation progress for the areas of improvement and weaknesses in adapting teaching and learning strategies.	3.76	A	4
Average weighted mean	3.952	A	
Standard deviation	0.345		

Rank 3 is "It engages with the learning process in setting goals for the approaches of learning progress toward outcome-based education", with a weighted mean of 3.88 or Agree which means that the process of SDL toward OBE in the area of engaging in the learning process is observed. The least in rank is "It ensures to assess the self-directed learning to empower students as centers of learning journey through outcome-based education", with a weighted mean of 3.52 or Agree which means that the process of SDL toward OBE in the area of engaging in the learning process is observed. The overall average weighted mean is 3.952 (SD=0.345) or Agree on the process of Self-Directed Learning toward Outcome-Based Education in the area of engaging in the learning process is observed among the respondents.

Table 4 presents the weighted mean and the corresponding interpretation on the process of Self-Directed Learning toward Outcome-Based Education in the area of monitoring progress and evaluating learning among the respondents. It shows that rank 1 is "It defines the well-articulated learning outcome and learning experiences to provide a clear roadmap and outcome for teaching and learning", with a weighted mean of 4.12 or agree which means that the process of SDL toward OBE in the area of monitoring progress and evaluating learning is observed. Rank 2 is "It guides self-directed learning and continuous feedback through practice mental exercises in the adjustment of learning strategies", with a weighted mean of 4.08 or agree which means that the process of SDL toward OBE in the area of monitoring progress and evaluating learning is observed. Rank 3 is "It emphasizes the approach for learning journey and student responsibility in utilizing the learning goals

and feedback in the progress and guidance for self-directed learning and outcome-based education", with a weighted mean of 3.96 or agree which means that the process of SDL toward OBE in the area of monitoring progress and evaluating learning is observed.

Table 4. Process of SDL Toward OBE in the area of monitoring progress and evaluating learning

Indicators	WM	I	R
It involves self-directed learning in evaluating and monitoring progress of students' achievement in adapting learning, strategies, and fostering measurable outcomes.	3.92	A	4
It emphasizes the approach for learning journey and student responsibility in utilizing the learning goals and feedback in the progress and guidance for self-directed learning and outcome-based education.	3.96	A	3
It defines the well-articulated learning outcome and learning experiences to provide a clear roadmap and outcome for teaching and learning.	4.12	A	1
It assesses regularly the reflection and self-monitoring learning progress to identify the needed improvement of students in fostering knowledge and skills.	3.64	A	5
It guides self-directed learning and continuous feedback through practice mental exercises in the adjustment of learning strategies.	4.08	A	2
Average weighted mean	3.944	A	
Standard deviation	0.188		

The least in rank is "It assesses regularly the reflection and self-monitoring learning progress to identify the needed improvement of students in fostering knowledge and skills", with a weighted mean of 3.64 or agree which means that the process of SDL toward OBE in the area of monitoring progress and evaluating learning is observed. The overall average weighted mean is 3.944 (SD=0.188) or Agree on the process of Self-Directed Learning toward Outcome-Based Education in the area of monitoring progress and evaluating learning is observed among the respondents.

Table 5. Process of SDL Toward OBE in the area of reflecting on the learning process

Indicators	WM	I	R
It thrives to encourage students' learning journey and framework on measurable outcomes and progress toward specific achievement in self-directed learning and outcome-based education.	4.12	A	2
It fosters in navigating and crucial adaptability and lifelong learning approaches to equip students for quality education.	4.32	SA	1
It develops personalized plans to identify the students' learning outcome and desire to acquire skills and knowledge, strategy, identifying learning gaps, and assessment.	3.60	A	5
It reflects on regular evaluation and active monitoring for the	4.08	A	3

learning process in excelling ability, application knowledge, and understanding to define teaching and learning outcomes.			
It adapts flexibility in emphasizing the application of new knowledge in different contexts needed for the desired learning outcome.	3.96	A	4
Average weighted mean	4.016	A	
Standard deviation	0.266		

Table 5 presents the weighted mean and the corresponding interpretation on the process of Self-Directed Learning toward Outcome-Based Education in the area of reflecting on the learning process among the respondents.

It shows that rank 1 is "It fosters in navigating and crucial adaptability and lifelong learning approaches to equip students for quality education", with a weighted mean of 4.32 or Strongly Agree which means that the process of SDL toward OBE in the area of reflecting on the learning process is highly observed. Rank 2 is "It thrives to encourage students' learning journey and framework on measurable outcomes and progress toward specific achievement in self-directed learning and outcome-based education", with a weighted mean of 4.12 or agree which means that the process of SDL toward OBE in the area of reflecting on the learning process is observed. Rank 3 is "It reflects on regular evaluation and active monitoring for the learning process in excelling ability, application knowledge, and understanding to define teaching and learning outcomes", with a weighted mean of 4.08 or agree which means that the process of SDL toward OBE in the area of reflecting on the learning process is observed. The least in rank is "It develops personalized plans to identify the students' learning outcome and desire to acquire skills and knowledge, strategy, identifying learning gaps, and assessment", with a weighted mean of 3.60 or agree which means that the process of SDL toward OBE in the area of reflecting on the learning process is observed. The overall average weighted mean is 4.016 (SD=0.266) or Agree on the process of Self-Directed Learning toward Outcome-Based Education in the area of reflecting on the learning process observed among the respondents.

What is the concentration of Outcome-Based Education (OBE) in the Self-Directed Learning (SDL) in teaching pedagogy among the respondents?

Table 6. Outcome-based education and self-directed learning in teaching pedagogy in the area of focus among the respondents

Indicators	WM	I	R
It is concerned primarily on the capabilities of students' outcome-based learning assessment design and curriculum.	4.08	A	2.5
It focuses on self-directed learning for students' approach to social-emotional development and hands-on exploration in providing support and guidance as needed.	4.08	A	2.5
It demonstrates to define the outcome skills, knowledge, and attitude in the learning approach and measurable outcome for specific achievement of outcome-based education toward self-directed learning.	3.92	A	5
It delivers an outcome-based approach in various activities for learning accountability and delivery mode of teaching and learning.	4.20	SA	1

It directs clearly on the predefined outcome learning specifically on assessment and teaching to develop and help students in ensuring to meet the intended outcome skills and knowledge.	4.00	A	4
Average weighted mean	4.056	A	
Standard deviation	0.104		

Table 6 presents the weighted mean and the corresponding interpretation on the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of focus among the respondents. It shows in the table that rank 1 is "It delivers an outcome-based approach in various activities for learning accountability and delivery mode of teaching and learning", with a weighted mean of 4.20 or Strongly Agree which means that OBE and SDL in teaching pedagogy in the area of focus is highly observed. Rank 2 is shared by the two indicators which are "It is concerned primarily on the capabilities of students' outcome based learning assessment design and curriculum" and "It focuses on self-directed learning for students' approach to social-emotional development and hands-on exploration in providing support and guidance as needed", with a weighted mean of 4.08 or Agree which means that OBE and SDL in teaching pedagogy in the area of focus is observed. Rank 3 is "It directs clearly on the predefined outcome learning specifically on assessment and teaching to develop and help students in ensuring to meet the intended outcome skills and knowledge", with a weighted mean of 4.00 or agree which means that OBE and SDL in teaching pedagogy in the area of focus is highly observed. The least in rank is "It demonstrates to define the outcome skills, knowledge, and attitude in the learning approach and measurable outcome for specific achievement of outcome-based education toward self-directed learning", with a weighted mean of 3.92 or agree which means that OBE and SDL in teaching pedagogy in the area of focus is observed. The overall average weighted mean is 4.056 (SD=0.104) or Agree on the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of focus observed among the respondents.

Table 7. Outcome-based education and self-directed learning in teaching pedagogy in the area of structure

Indicators	WM	I	R
It integrates a powerful learning experience for self-directed learning in aligning the outcome activities.	3.84	A	4.5
It focuses on the active participation, setting goals, and learning process in the educational system control and directions.	3.88	A	3
It develops and nurtures the educational delivery system for outcome-based and self-directed learning to help students' academic performance.	3.84	A	4.5
It defines a clear learning outcome which involves personal setting goals in a broader perspective for students as centers of learning.	4.40	SA	1
It designs learning activities to encourage students to think critically and explore interest and preference style in teaching and learning.	4.08	A	2

Average weighted mean	4.008	A
Standard deviation	0.240	

Table 7 presents the weighted mean and the corresponding interpretation on the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of structure among the respondents. It shows that rank 1 is "It defines a clear learning outcome which involves personal setting goals in a broader perspective for students as centers of learning", with a weighted mean of 4.20 or Strongly Agree which means that OBE and SDL in teaching pedagogy in the area of structure is highly observed. Rank 2 is "It designs learning activities to encourage students to think critically and explore interest and preference style in teaching and learning", with a weighted mean of 4.08 or Agree which means that OBE and SDL in teaching pedagogy in the area of structure is observed. Rank 3 is "It focuses on the active participation, setting goals, and learning process in the educational system control and directions", with a weighted mean of 3.88 or Agree which means that OBE and SDL in teaching pedagogy in the area of structure is observed. The least in rank is shared by the two indicators which are "It integrates a powerful learning experience for self-directed learning in aligning the outcome activities" and "It develops and nurtures the educational delivery system for outcome-based and self-directed learning to help students' academic performance", with a weighted mean of 3.84 or agree which means that OBE and SDL in teaching pedagogy in the area of structure is observed. The overall average weighted mean is 4.008 (SD=0.240) or Agree on the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of structure observed among the respondents.

Table 8. Outcome-based education and self-directed learning in teaching pedagogy in the area of key aspects

Indicators	WM	I	R
It complements and emphasizes the approach of student-centered learning in the desired outcome and personal responsibility for self-direct learning and outcome-based education.	4.00	A	4
It defines the learning outcome and focuses on assessment, teaching strategies, and curriculum development guidance.	4.08	A	2.5
It empowers self-direct learning to evaluate the progress, time management, setting goals, and learning process for students as centers of learning.	4.24	SA	1
It encourages fostering students in the development of necessary skills and success for self-directed learning and outcome-based education.	4.08	A	2.5
It involves the process of understanding to outline the independent learning as to engagement, evaluation, goals, and being ready.	3.96	A	5
Average weighted mean	4.072	A	
Standard deviation	0.107		

Table 8 presents the weighted mean and the corresponding interpretation on the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of key aspects among

the respondents. It shows in the table that rank 1 is "It empowers self-direct learning to evaluate the progress, time management, setting goals, and learning process for students as centers of learning", with a weighted mean of 4.24 or Strongly Agree which means that OBE and SDL in teaching pedagogy in the area of key aspects is highly observed. Rank 2 is shared by the two indicators which are "It defines the learning outcome and focuses on assessment, teaching strategies, and curriculum development guidance" and "It encourages fostering students in the development of necessary skills and success for self-directed learning and outcome-based education", with a weighted mean of 4.08 or Agree which means that OBE and SDL in teaching pedagogy in the area of key aspects is observed. Rank 3 is "It complements and emphasizes the approach of student-centered learning in the desired outcome and personal responsibility for self-direct learning and outcome-based education", with a weighted mean of 4.00 or Agree which means that OBE and SDL in teaching pedagogy in the area of key aspects is observed. The least in rank is "It involves the process of understanding to outline the independent learning as to engagement, evaluation, goals, and being ready", with a weighted mean of 3.96 or Agree which means that OBE and SDL in teaching pedagogy in the area of key aspects is observed. The overall average weighted mean is 4.072 (SD=0.107) or Agree on the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of key aspects is observed among the respondents.

Table 9. Outcome-based education and self-directed learning in teaching pedagogy in the area of benefits

Indicators	WM	I	R
It motivates outcome-based learning for more engagement in the achievement of specific goals in learning.	3.88	A	5
It allows flexibility in the teaching domain and strategies for curriculum design in adapting educational needs and change.	4.04	A	4
It fosters problem solving skills and aligns with critical thinking advantage to focus learning outcome measure application.	4.08	A	2.5
It intends to achieve learning outcome acquisition that is designed on the perspective of students in emphasizing self-directed learning and outcome-based education.	4.12	A	1
It develops student centered learning to engage progress and responsibility in outcome-based education problem solving and critical thinking.	4.08	A	2.5
Average weighted mean	4.040	A	
Standard deviation	0.093		

Table 9 presents the weighted mean and the corresponding interpretation on the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of benefits among the respondents. It shows in the table that rank 1 is "It intends to achieve learning outcome acquisition that is designed on the perspective of students in emphasizing self-directed learning and outcome-based education", with a weighted mean of 4.12 or Agree which means that OBE and SDL in teaching pedagogy in the area of benefits is observed. Rank 2 is shared by the two indicators which are "It fosters problem solving skills and aligns with critical thinking advantage to focus learning outcome measure application" and "It develops student centered learning to engage progress and responsibility

in outcome-based education problem solving and critical thinking", with a weighted mean of 4.08 or Agree which means that OBE and SDL in teaching pedagogy in the area of benefits is observed. Rank 3 is "It allows flexibility in the teaching domain and strategies for curriculum design in adapting educational needs and change", with a weighted mean of 4.04 or Agree which means that OBE and SDL in teaching pedagogy in the area of benefits is observed. The least in rank is "It motivates the outcome-based learning for more engagement in the achievement of specific goals in learning", with a weighted mean of 3.88 or Agree which means that OBE and SDL in teaching pedagogy in the area of benefits is observed. The overall average weighted mean is 4.040 (SD=0.093) or Agree on the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of benefits observed among the respondents.

Is there a significant relationship between the process of self-directed learning toward outcome-based education as an approach to teaching and learning pedagogy and the concentration of outcome-based education in the self-directed learning in teaching pedagogy among the respondents?

Table 10 presents the test of the significant relationship between the process of Self-Directed Learning toward Outcome-Based Education and concentration of OBE in the SDL in teaching pedagogy among the respondents. It shows that when the different variables are tested with each other. It reveals that all computed values are lower than the critical r value of 0.3365, df of 23 at 0.05 level of significance, one tailed test which resulted in all non-significant which is accepted on the hypothesis.

Table 10. Test of significant relationship between the process of SDL toward OBE and concentration of OBE in the SDL in teaching pedagogy among the respondents

Test of Variables	Computed r value	Relationships	Decision
Assessing readiness to learn			
● focus	0.05173794	not significant	accepted
● structure	0.05205310	not significant	accepted
● key aspects	0.05163415	not significant	accepted
● benefits	0.51842358	not significant	accepted
Setting learning goals			
● focus	0.05015067	not significant	accepted
● structure	0.05045616	not significant	accepted
● key aspects	0.05005007	not significant	accepted
● benefits	0.05025189	not significant	accepted
Engaging in the learning process			
● focus	0.04994301	not significant	accepted
● structure	0.05024723	not significant	accepted
● key aspects	0.04988428	not significant	accepted
● benefits	0.05004380	not significant	accepted
Monitoring progress and evaluating learning			
● focus		not significant	accepted
● structure	0.04999468	not significant	accepted
● key aspects	0.05029922	not significant	accepted
● benefits	0.04989439	not significant	accepted
	0.05009558		

Reflecting on the learning process			
● focus	0.04953530	not significant	accepted
● structure	0.04988270	not significant	accepted
● key aspects	0.04943594	not significant	accepted
● benefits	0.04963529	not significant	accepted

One tailed test, df of 23 at 0.05 level of significant with critical r value of 0.3365

Therefore, it is safe to say that there is no significant relationship between the process of Self-Directed Learning toward Outcome-Based Education and concentration of OBE in the SDL in teaching pedagogy among the respondents.

Discussion

It shows that the process of Self-Directed Learning (SDL) toward Outcome-Based Education (OBE) in the area of assessing readiness to learn focuses on student-centered learning outcomes. It assesses the readiness tools and instruments as reflected on observation in the performance task of teaching and learning outcome. It actively participates in the learning process and responsibility for the educational approach in evaluating learning progress, identifying resources, and setting goals (Fuchs et al., 2025). It designs the curriculum for the self-directed learning resources for students' access to facilitate knowledge concept and deeper understanding process. It empowers the application of self-learning pace based on the instructional models and innovation of teaching context and system. It identifies the adaptive learning platforms for advanced technology based on self-directed learning promotion (Arnold, 2022). On the other hand, the process of assessing the teaching and learning involves evaluating the framework of students' ability for self-directed learning to take ownership, set goals, and progress for outcome-based education. It ensures effective learning which is crucial in the assessment of instructional needs to achieve learning outcomes for students. It processes self-directed learning in understanding the initiative needs and identifies the progress, resources, and formulation of learning goals. It recognizes the development and implementation of a self-directed learning curriculum toward outcome-based education. It addresses the gaps and interventions of self-directed learning skills and enhancement development processes. It assesses the readiness of students to enhance support in fostering learning for effective self-directed learning.

Furthermore, the process of Self-Directed Learning toward Outcome-Based Education in the area of setting learning goals provides students with independent learning opportunities and choices for goal setting framework, learning reflection, progress feedback performance, and decision-making skills development. It develops learning outcomes through SMART goals and focuses on competency to clearly define student knowledge, understanding, experiences, and development skills. It emerges on the goals and analysis to explore self-directed learning (Ponomariovienė et al., 2025). It focuses on self-regulated learning, motivation, and integrated approach for self-directed learning attention. It engages in an active management learning process. It links with independent learning, self-regulated learning, and autonomous learning. It adapts a greater responsibility platform which is crucial in the access to diverse resources and transformation for the interest of students. In addition, the process of Self-Directed Learning toward Outcome-Based Education in the area of setting learning goals focuses on outcome assessment in aligning the learning activities and achievement on identifying the set goals effectively. It defines the program outcome and objectives for the result-oriented purpose learning process. It aligns with the assessment and learning activities on identified curriculum design, development support for teaching strategies, accurate assessment, and constructive learning outcome. It discusses the educational setting, strategies, challenges with implementation, and self-directed learning. It defines the development and strategies of the usage of self-directed learning in the educational system. It is the pedagogy for self-directed learning and setting goals in the classroom

system. It describes setting the knowledge and goals for the students as centers of learning.

Moreover, the process of Self-Directed Learning toward Outcome-Based Education in the area of engaging in the learning process among the respondents emphasizes instruction and educational curriculum goals. It explores the key aspects of the active participation learning process through assessment, guided practice, and setting goals based on the needs of students. It is a self-directed learning which is necessary in providing potential for learning in motivating and creating fascinating favorable outcomes in the learning environment (Hua et al., 2024). It is based on strategy innovation for self-directed learning and engagement as to knowledge acquisition and learning instruments. It adopts the demands and challenges for the engagement learning process in incorporating lifelong learning and critical thinking. It allows the self-learning approach on student proficiency and flexibility. Hence, the process of Self-Directed Learning toward Outcome-Based Education in the area of engaging in the learning process and setting goals for the approaches of learning progress toward outcome-based education. It ensures that self-directed learning to empower students as centers of learning journey through outcome-based education. It utilizes the promotion of self-directed learning through the engagement process to possess skills and life-long learning. It explores to improve diversity and inclusive learning experiences. It utilizes the program for self-directed learning. It focuses on the assessment of learning experiences in self-directed learning engagement as to influence, curriculum elements, and learning experiences. It improves the implementation program for the methods of self-directed learning engagement.

Indeed, the process of Self-Directed Learning toward Outcome-Based Education in the area of monitoring progress and evaluating learning defines the well-articulated learning outcome and learning experiences to provide a clear roadmap and outcome for teaching and learning. It guides self-directed learning and continuous feedback through practice mental exercises in the adjustment of learning strategies. It promotes effective teaching strategies and the methods utilized in the classroom learning and setting. It aims to examine the learning performance through self-directed learning and monitoring progress and evaluation. It demonstrates the improvement of students' learning outcome for self-directed learning toward outcome-based education techniques. It highlights the potential in elevating substantial learning performance. It relies on the teaching techniques in monitoring and evaluating the progress of learning (Didisyahrir et al., 2023). Apparently, the process of Self-Directed Learning toward Outcome-Based Education in the area of monitoring progress and evaluating learning emphasizes the approach for learning journey and student responsibility in utilizing the learning goals and feedback progress and guidance for self-directed learning and outcome-based education (Miranda et al., 2023). It assesses regularly the reflection and self-monitoring learning progress to identify the needed improvement of students in fostering knowledge and skills to understand the digital world of transformation in redefining the educational system based on the needs of students as centers of learning. It enhances the emerging technologies for essential learning for self-directed learning to strengthen the autonomy of students, support personalized learning, policymakers, instructional designers, and education. It responds to the dynamic educational environment and flexibility (Grannäs et al., 2026).

Notably, the process of Self-Directed Learning toward Outcome-Based Education in the area of reflecting on the learning process among the respondents fosters in navigating and crucial adaptability and lifelong learning approaches to equip students for quality education. It thrives to encourage students' learning journey and framework on measurable outcomes and progress toward specific achievement in self-directed learning and outcome-based education. It examines the professional growth of the lecturers in the learning process and reflection. It conditions the reflection of the learning process as to attitude, motives, learning factor, and reflection activities. It improves the practice of learning process initiatives to foster growth in the educational setting. It directly changes the effect of challenges and demand of professional implementation of self-directed learning curriculum. Certainly, the process of Self-Directed Learning toward Outcome-Based Education in the area of reflecting on the learning process evaluates and actively monitors for the learning process

in excelling ability, application knowledge, and understanding to define teaching and learning outcomes. It develops personalized plans to identify the students' learning outcome and desire to acquire skills and knowledge, strategy, identifying learning gaps, and assessment. It represents self-directed learning as core theory for adult learning as a fundamental process of learning and reflection. It highlights the dimension of self-directed learning, reflection construction learning, and responsibility toward outcome-based education. It explains the proper theory and competency for self-directed learning opportunity practice to facilitate the support process. It is the central framework and understanding of lifelong learning practice (Morris et al., 2025).

Apparently, the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of focus among the respondents delivers an outcome-based approach in various activities for learning accountability and delivery mode of teaching and learning. It is concerned primarily on the capabilities of students' outcome-based learning assessment design and curriculum. It focuses on self-directed learning for students' approach to social-emotional development and hands-on exploration in providing support and guidance as needed. It discusses self-directed learning knowledge and concepts. It explores the advanced theory and concept understanding of focus toward self-directed learning. It analyses the framework focus and utilization of self-directed learning. It is a strategy that engages on the focus of self-directed learning engagement. Similarly, the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of focus directs clearly on the predefined outcome learning specifically on assessment and teaching to develop and help students in ensuring to meet the intended outcome skills and knowledge. It demonstrates to define the outcome skills, knowledge, and attitude in the learning approach and measurable outcome for specific achievement of outcome-based education toward self-directed learning. It implements the challenges of the meaning and focus of self-directed learning. It defines the strategies and development of self-directed learning focus. It describes the utilization of self-directed learning to determine the lecture-based classroom pacing course and assessment. It defines the sequence and structure of self-directed learning activities (Wong et al., 2019).

Consequently, the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of structure defines a clear learning outcome which involves personal setting goals in a broader perspective for students as centers of learning. It designs learning activities to encourage students to think critically and explore interest and preference style in teaching and learning. It features the platform for the ability of self-directed learning. It promotes the structure and feature of self-directed learning as part of the trend in the educational system. It examines the dimension contribution of self-directed learning reflection, self-monitoring, and goal setting. It enhances the digital learning readiness and framework context and self-regulation platform and implication structure of self-directed learning. It highlights the reflection and structure for the dashboard in adapting the learning path to enhance engagement in learning. Accordingly, the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of structure focuses on the active participation, setting goals, and learning process in the educational system control and directions. It integrates a powerful learning experience for self-directed learning in aligning the outcome activities. It develops and nurtures the educational delivery system for outcome-based and self-directed learning to help students' academic performance. It revolutionizes the self-directed learning structure in emphasizing foster skills, transformation in education, and learner autonomy. It enhances the paradigm commitment and motivation for the educational journey and structure as to content, selecting goals, and aligning the techniques aspirations for the promotion of flexible self-directed learning enhancement and diverse preferences. It adopts various contents for effective and efficient self-directed learning (Shalini Roy & Gandhimathi, 2025).

Nonetheless, the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of key aspects among the respondents empowers to evaluate the progress, time management, setting goals, and learning process for students as centers of learning. It defines the learning outcome and focuses on assessment, teaching strategies, and curriculum development

guidance. It encourages fostering students' development of necessary skills and success for self-directed learning and outcome-based education. It requires accepting knowledge and focusing on basic educational context for digital learning. It enhances the key aspects in enhancing independent learning, engagement, and motivation. It varies depending on the key aspects and the process of responsible educational system and technology process. It manages the self-directed learning and key aspects in determining the factors for adaptive learning. Consequently, the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of key aspects among the respondents complements and emphasizes the approach of student-centered learning in the desired outcome and personal responsibility for self-direct learning and outcome-based education. It involves the process of understanding to outline the independent learning as to engagement, evaluation, goals, and being ready. It presents the self-directed learning concept, focus practice and system approach. It is a self-directed learning mantra in the practice of educational system learning context. It presents concepts, discussion, theory and exchange of ideas. It challenges the design for the increased program and key aspects of self-directed learning responsibility and activity. It focuses on the increased self-directed learning reflection and utilization (Geng et al., 2019).

Similarly, the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of benefits among the respondents intends to achieve learning outcome acquisition that is designed on the perspective of students in emphasizing self-directed learning and outcome-based education. It fosters problem solving skills and aligns with critical thinking advantage to focus learning outcome measure application. It develops student centered learning to engage progress and responsibility in outcome-based education problem solving and critical thinking. It adopts the challenges of profound knowledge and application to promote development and comprehensive benefits of self-directed learning. It requires deep learning knowledge of integration, transformation, critique, and reflection process. It focuses on the benefits of cultivating problem solving abilities and critical thinking of the learner. Finally, the Outcome-Based Education and Self-Directed Learning in teaching pedagogy in the area of benefits among the respondents allows flexibility in the teaching domain and strategies for curriculum design in adapting educational needs and change. It motivates outcome-based learning for more engagement in the achievement of specific goals in learning. It underscores the landscape of increased knowledge for self-directed learning in the school setting. It requires autonomous motivation, self-management, and self-control. It challenges individual self-directed learning benefits. It highlights the benefits of self-directed learning motivation. It examines and supports a positive attitude toward facilitating the interaction for self-directed learning as to collaborative learning and problem solving. It outlines possible directions for shaping the learning process in the educational experiences (Rincon-Flores et al., 2024).

Conclusion

The integration of Self-Directed Learning (SDL) and Outcome-Based Education (OBE) places students at the center of the entire educational process. Through a structured assessment of learning readiness, students are empowered to take ownership of their education by setting learning objectives using the SMART framework. This approach ensures that every learning activity, from active participation to guided practice, aligns with established learning outcomes, enabling students to develop competencies, knowledge, and decision-making skills independently and measurably. Furthermore, this process emphasizes the importance of continuous progress monitoring and self-reflection as a roadmap to academic success. With consistent feedback and regular evaluation, students are able to identify learning gaps and adjust their strategies to achieve maximum results. The focus on accountability and the development of critical thinking and problem-solving skills not only helps students meet curriculum standards but also equips them with the adaptability and lifelong learning skills crucial for addressing changing educational needs in the future.

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Author contribution

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Declaration of generative AI in scientific writing

The author utilized Grammarly to enhance the linguistic quality and grammatical precision of this manuscript. Following this automated review, the content was manually refined and edited by the author(s), who maintain full responsibility for the integrity and accuracy of the final work.

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