

Innovation of educational system for a self-driven curriculum development

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Abstract

The study aims to explore innovations in the educational system for self-driven curriculum development and identify the extent and key principles of student-centered learning. Mixed methods were employed, and non-probability purposive sampling was used. The study included only thirty (30) respondents. The results show that the key principles and innovations in the educational system for self-driven curriculum development include competency, experience, and knowledge processes for content delivery, as well as the implementation of teaching and learning strategies that develop skills and critical thinking and promote effective teaching and self-directed learning. Student autonomy involves planning and setting learning goals, helping students outline activity sequences and structures, and establishing learning-task competencies that support student learning. Personalized learning supports a self-driven educational system by accommodating students’ pace, interests, and learning paths; providing individualized instruction and student choice; and using technology to address students’ needs, interests, and weaknesses. Teachers, as facilitators, assist and guide students through various teaching techniques and self-exploration activities to monitor learning progress, discover learning processes, and set goals. Finally, focusing on processes and skills promotes self-directed learning and teaching approaches that develop students’ skills and critical thinking, leading to self-actualization, knowledge retention, and the development of self-directed learning skills.

Keywords: Focus on process skills, Innovation of educational system, Personalized learning, Self-driven curriculum development, Student autonomy, Teacher as facilitator.

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Contribution of this paper to the literature

This study contributes to the development of a self-driven curriculum in educational research and innovation. It enables educational institutions to provide a practical framework for reviewing, designing, and improving curricula based on students' needs as the center of learning, industry demands, and technological advancements.

1. Introduction

The research gaps, issues, and barriers in the innovation of the educational system for a self-driven curriculum have been identified, contributing to research on the limited studies pertaining to self-curriculum development. It focuses on curriculum reform directed at the educational system and authorities to continuously examine the initiated curriculum development improvement by institutions through innovation (Tran & Nguyen, 2026). This includes insufficient integration of educational innovation and curriculum design in exploring educational system innovatively that influences curriculum improvement, lack of comprehensive frameworks for integration of technology, practical framework, quality assurance, stakeholder participation, and continuously evaluation to support the curriculum development and self-driven innovation, limited evidence from Higher Education Institutions to examine the innovative education and support for curriculum development, minimal focus on stakeholder collaboration to provide attention and limitation on how administrators, community stakeholders, industry partners, students, and faculty members in collecting the contribution of self-driven curriculum development innovation, need for data-driven curriculum innovation learning analysis utilization, emerging technology, institutional data, and guiding educational decision-making, and curriculum enhancement, and limited empirical validation on the various models of educational innovation for effectiveness and evidence in the improvement and competency of curriculum and institutional performance. The study addresses the gaps, barriers, and issues for the innovation of educational system to facilitate self-driven curriculum development and improvement for evidence-based decision-making, technology integration, and stakeholder engagement. It provides expectations and practical model framework in the HEIs to develop and adopt flexible, responsive, and future-ready curricula (Osman, 2025).

Indeed, the innovation of the educational system for self-driven curriculum development enhances the shifting of traditional to current trend systems in the digital era, a student-centered approach, model teacher practice in designing the content and path of teaching and learning intervention in the educational setting (Mallillin, 2022). It utilizes various teaching approaches such as digital tools, interdisciplinary studies, and project-based learning. It identifies to empower students' strategies, resources and learning goals with teachers as sole instructors and facilitators. It is the key innovation in fostering collaboration, critical thinking and creating experiences for personalized learning. It integrates emerging topics in real-world skills into curriculum development (Goh & Abdul-Wahab, 2020). It discusses the implications of the innovation and paradigm of the educational system in the technology-driven process. It provides teachers' role in the process of the educational system and learning environment. It accesses the driven platform of the technology innovation system in education for flexible learning, framework, concept, and system theory (Mallillin, 2023). It undergoes a change in education to help student learners and their potential. It provides self-driven curriculum development, pedagogy competency, technology-driven for the new era experiences. It reforms teaching and content for students and teachers, that are imperative for higher learning. It asserts the imparting of knowledge and educational needs through innovation and learners' technology. It utilizes the concept of educational system innovation and teaching-learning approaches (Dao, Nguyen, & Pham, 2025).

Certainly, self-directed learning through curriculum development design is a process through which individual educators take initiative in supporting learning, diagnosing students' needs as learners, evaluating learning outcomes, selecting appropriate learning strategies, implementing instruction, choosing learning resources and materials, and formulating goals. It is a practice and a demand of the innovative educational system of the 21st century, particularly for self-driven curriculum development programs that adapt advanced technology. It raises standards of innovation in the educational system by reshaping the global competencies of school systems and contributing critical resources for self-directed learning. It advances educational innovation and technology to accelerate teaching and learning through self-directed processes. It addresses the challenges of self-directed learning by developing the knowledge and skills necessary for the success of the educational system (du Toit-Brits, Blignaut, & Vos, 2024). Hence, self-directed learning through curriculum development design involves professional activities that support learner-centered instruction and classroom strategies. It supports the implementation of various self-directed learning strategies and analyzes the involvement of self-directed learning activities to further strengthen the educational system. It promotes assessment policies and curriculum statements that center teachers and learners in active classroom management through instructional strategies. It provides methods for implementing instructional strategies in classroom settings. These include simulation, fieldwork, cooperative learning, inquiry-based learning, role-playing, and problem-based learning. Self-directed learning emphasizes the importance of instructional strategies for enhancing teaching skills and fostering critical thinking (Golightly, 2025).

Furthermore, the curriculum development system is described as a coherent program and customized system process to continually explore instruction. It discusses the curriculum system, learning outcomes, functions, experiences, and learning content. It analyzes the landscape of educational system curriculum, evolving the response and development of digital transformation of the school system. It identifies the framework of the curriculum development system imperative to competency and integration technology to enhance capability of teaching and learning. It develops to adopt the innovation of curriculum development in the educational system and challenges. It encompasses adaptive innovation of curriculum development system orientation and strategy. It supports the curriculum development system imbibed with advanced technology competency in the academic performance of students as centers of learning (Hutahaeen, Telaumbanua, Tamba, Hutabarat, & Sumani, 2024). In consequence, the curriculum development system focuses on exploring the innovation process and characteristic development system. It is a foundation of educational goals, instructional methods and strategies, and learning objectives in shaping quality education. It plays a vital role in the context of scientific technology advancement and quality of education in the global system. It is essential and capable of relevant curriculum revision based on the needs of the learners

competency process and system. It is a structured curriculum development system for self-directed learning in achieving the objectives of the educational system. It evolves the systematic stage and content analysis for curriculum development systems for verification of learning and conclusions. It analyzes the concept and curriculum innovation and approach. It identifies support for the new techniques in learning approach. It emphasizes that the instructional approach must be based on the curriculum development system (Nurhasanah, Lasmanawan, Suharta, & Widiana, 2025).

Moreover, self-driven learning empowers the approach in the educational system that leads to the journey of learning. It identifies resources, adapts strategies, learning needs and learning goals. It is widely considered deep learning in the educational system for fostering the key approach and development to comprehend the ability of students. It promotes effective deep learning in different educational settings and challenges. It is the context of self-directed learning to facilitate the process of student achievement and experience in the educational environment. It facilitates the process of deep learning based on the self-driven environment. It explores and addresses the various gaps and self-directed learning empowerment in a systematic promotional effect to support deep learning of students (Rui, Mohamad Nasri, & Mahmud, 2024). Hence, a self-driven learning empowers the approach in educational system expectation of the various higher learning. It is self-motivated learning for students to be achieved. It ensures that students have enough and sufficient self-directed learning in teaching. It advances the utilization and proposed framework for development and fosters understanding of self-directed learning empowerment. It is utilized to mediate and acquire the context of fostering self-directed learning from the various educational institutions. It adopts an approach to resolve and address the agitation and concerns of self-directed learning among students. It encompasses educational system activities to provide essential skills in fostering lifelong learning (Adigun, Mpofu, & Maphalala, 2025).

Similarly, the purpose of self-driven learning is to encourage the development of teachers' skills in innovating the educational system. It analyzes the impact of exploring educational reform theory and applications for technological innovation and equal educational opportunities in a self-driven learning transformation. It recognizes the role of intelligent image recognition and deep learning in the educational system for self-driven learning. It drives education toward a personalized approach to the lifelong learning process. It revamps technological innovation resources to differentiate various instructional materials, promoting and enhancing educational equity and self-learning abilities. It demonstrates support for self-driven learning in optimizing the educational process (Sun & Liu, 2026). Finally, self-driven learning encourages individual approaches to education and responsibility for one's own learning, including when, how, and what to learn. It empowers students through self-driven learning experiences tailored to their knowledge, interests, and autonomy, fostering lifelong learning habits at their own pace. It enhances the ability to analyze students' attitudes toward self-driven learning design. It requires self-motivation, self-monitoring, and self-management. It shows that self-driven learning changes teaching and learning techniques and engagement through various collaborative instructional approaches. It implies exploring pedagogical approaches and applications for self-driven learning. It provides greater competency in teaching and learning (Pokhrel & Sharma, 2024).

1.1. Research Questions

1. To what extent are the key principles and innovations of the educational system for a self-driven curriculum development process?
2. How may the innovation of the educational system for a self-driven curriculum development be based on the needs of students as centers of learning?

1.2. Research Design

The research integrates mixed methods as to both quantitative and qualitative approaches, discussion, and interpretation of the results. The quantitative comes from the question of the extent as to the key principles and innovation of the educational system for a self-driven curriculum development process. Hence, the qualitative is obtained through Focus Group Discussion on the question as to how may the innovation of the educational system for a self-driven curriculum development be based on the needs of students as centers of learning. It is being analyzed through thematic. The interview responses are carefully reviewed, transcribed and coded to identify the meaning of the response of the participants. Similar codes are grouped accordingly, which are organized as basis for themes related to innovation in the educational system and self-driven curriculum development. It ensures the rigor of the methodology maintains for coding consistency verified and validated to enhance trustworthiness, and credibility of the study results (Sousa et al., 2021).

On the other hand, mixed methods research design has been defined as the integration of data sets for both quantitative and qualitative processes. It is a component to answer the research questions posited in the statement of the problem. This includes the explicit integration of interrelating components of the mixed methods process. The integration of both data sets and conclusions of the study provided in the phenomenon and comprehensive understandings (Zhou, Zhou, & Machtmes, 2024).

1.3. Validation and Reliability of the Research Instruments

The research instruments are being validated by experts in both quantitative and qualitative research. They hold doctoral degrees and are psychometricians. The validators are 2 doctorate holders and 2 psychometricians. All their suggestions and feedback are given emphasis prior to the floating of questionnaires for initial validation and development (Murashko, Kolesovs, & Ruza, 2026).

Notably, the research instruments are also pilot-tested among 5 respondents that are not included as respondents in the study to ensure clarity, relevance and alignment of the research objectives of the questionnaires. The result of pilot testing is 0.91, which indicates the research instruments are reliable using Cronbach's Alpha principles and practices (Bazán, 2026).

1.4. Subjects of the Study

The subjects of the study are the different heads, coordinators, deans, and curriculum designers of the various educational institutions from the Higher Education Institutions in both public and private sectors. They are chosen based on the criteria set by the researcher. Participants must be exposed to self-directed learning and curriculum design from the University of Caloocan City which the data are being collected. They have been exposed to teaching in the educational system for at least 3 years. The study comprised thirty (30) respondents only.

1.5. Sampling Techniques

Purposive sampling is employed in the study. It is a non-probability sampling method that is being utilized as an integral technique for the mixed methods. It focuses on the contextual understanding and details of purposive sampling. It is defined as the selection of specific units and intentional sampling for events, cases, and individuals based on the research questions and relevance. It provides insights into complex phenomena and offers advantages such as flexibility, cost-efficiency and the ability to target information. It generalizes the susceptibility to explore the purposive sampling concept (Tajik, Golzar, & Noor, 2025).

1.6. Data Gathering Procedure

Presented in this section is the data-gathering procedure for innovating the educational system through self-driven curriculum development, as follows:

1. Mapping. The mapping is conducted by reading a wide range of literature on innovation in the educational system for self-driven curriculum development. This is one of the trends related to the research topic being explored.
2. Formulation of the Research Topic. After the mapping is completed, the research topic is formulated based on the topic to be explored. The proposed topic is “Innovation of the Educational System for Self-Driven Curriculum Development.” This topic is the one to be explored in the research process.
3. Formulation of the Research Questions. After analyzing the research topic, the variables are identified to facilitate the formulation of the research questions, as follows:
 - 3.1. To what extent do the key principles and innovations of the educational system support a self-driven curriculum development process?
 - 3.2. How can innovation in the educational system for self-driven curriculum development be based on students' needs as centers of learning?
4. Formulation of the Research Instrument. The research instrument is a self-made questionnaire based on the relevant literature. This ensures that the questionnaire addresses the different variables of the study.
5. Validation of Instruments. The self-made questionnaire is being validated by experts in mixed methods. They hold doctoral degrees and have experience validating instruments. All suggestions from the validators are being considered to improve the content of the questionnaire before it is distributed to respondents.
6. Administration of the Questionnaire. The questionnaire is administered at the respondents' convenience through Google Forms.
7. Statistical Analysis of Data. The data are being analyzed using statistical methods.

Figure 1 illustrates the independent variable and dependent variable on the innovation of educational system toward self-driven curriculum development.

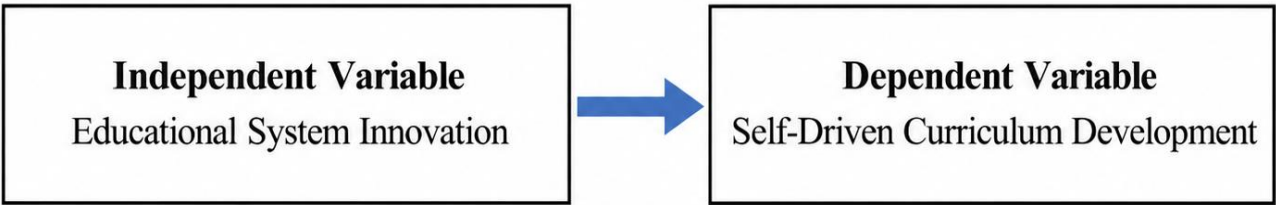


Figure 1. Conceptual framework of educational system innovation and self-driven curriculum development.

2. Results

1. To what extent do the key principles and innovations of the educational system support a self-driven curriculum development process?

Table 1. Extent of key principles and innovations in the educational system for a self-driven curriculum development process.

Indicators	WM	I	R
1. It deepens techniques in critical thinking skills to be utilized in the educational system in promoting effective teaching and self-directed learning.	4.20	SA	2
2. It assists and guides students in the learning process through various teaching techniques and self-exploration concepts.	4.10	A	6.5
3. It is a flexibility of personalized learning to accommodate various learning styles, assessments, content delivery methods, and learning format.	3.39	MA	20
4. It monitors the progress of students to discover the process of learning, setting goals, change makers, and role models.	4.10	A	6.5
5. It identifies the planning and setting development goals for learning to help students outline activities sequence, structure, and activities in establishing the learning task competency.	4.05	A	9
6. It is a pacing mastery for the progress of students through achievement of goals in the task completion of learning.	4.13	A	4.5
7. It helps the learners with proper techniques and explores critical learning skills in the alternative course of learning process.	4.00	A	10.5
8. It assesses reflection to students to achieve learning competency in adapting the learning process and strategy improvement.	4.18	A	3

9.	It is a self-driven educational system for pace, interests, learning path, creating individual instructions, student choice, and technology personalized learning.	3.94	A	13.5
10.	It supports learning and building trust to foster self-efficacy and self-confidence to motivate in making desired learning and connecting interests.	3.87	A	16
11.	It is a student-centered approach that focuses on the system of students' needs as to interest, weaknesses, and strengths tailored with learning experiences.	3.77	A	19
12.	It develops students in skill-based development and teaching methods through application and hands-on practice learning.	4.00	A	10.5
13.	It implements curriculum development competency, experience, knowledge process for content delivery, and execution of teaching and learning.	4.23	SA	1
14.	It provides students the opportunity for fostering voice and choice involving decision making to empower student learning.	3.85	A	17
15.	It describes the process of self-directed learning skills development as to resources of goals, timeline of activities, structure, sequence, and outline assessment.	3.80	A	18
16.	It is a student empowerment involving decision making and goal setting to foster a sense of learning and motivation.	3.94	A	13.5
17.	It facilitates professional development through workshops, conferences, and training opportunities in the school system.	3.90	A	15
18.	It promotes self-learning and teaching style to assist student skills and development of critical thinking that leads to self-actualization and retain knowledge.	3.97	A	12
19.	It controls the scaffold approach and self-regulation in the instruction process moving to more directed activities and greater self-direction to explicit skills and reflection in teaching and learning.	4.07	A	8
20.	It develops to explore self-directed learners to support instructional models as to evaluation, reflection, adjustment, monitoring, and planning for the process of learning.	4.13	A	4.5
Average Weighted Mean		3.981	A	
Standard Deviation		0.192		

Note: Legend: WM=Weighted Mean, I=Interpretation, R=Ranking, SA=Strongly Agree, A=Agree, and MA=Moderately Agree.

Table 1 presents the weighted mean and the corresponding interpretation on the extent of key principles and innovation of the educational system for a self-driven curriculum development process among the respondents. The table shows that Rank 1 is “It implements curriculum development competencies, experience, knowledge, processes for content delivery, and the execution of teaching and learning,” with a weighted mean of 4.23, interpreted as Strongly Agree. This means that the key principles and innovations of the educational system for a self-driven curriculum development process are highly observed. Rank 2 is “It deepens techniques in critical-thinking skills to be utilized in the educational system to promote effective teaching and self-directed learning,” with a weighted mean of 4.20, interpreted as Strongly Agree. This means that the key principles and innovations of the educational system for a self-driven curriculum development process are highly observed. Rank 3 is “It assesses students’ reflections to achieve learning competency in adapting learning processes and improving strategies,” with a weighted mean of 4.18, interpreted as Agree. This means that the key principles and innovations of the educational system for a self-driven curriculum development process are observed. The lowest-ranked item is “It is a flexible personalized learning approach that accommodates various learning styles, assessments, content delivery methods, and learning formats,” with a weighted mean of 3.39, interpreted as Moderately Agree. This means that the key principles and innovations of the educational system for a self-driven curriculum development process are limited. The overall weighted mean is 3.981 (SD = 0.192), which means that the key principles and innovations of the educational system for a self-driven curriculum development process are observed among the respondents.

The study findings show that teacher education has identified the key principles and innovations of the educational system for a self-driven curriculum development process as the most important pathways for the transition toward self-driven curriculum innovation. The research gaps also identify the role of Higher Education Institutions in decision-making, policy, and frameworks that support sustainability in the educational system. The study identifies and adopts the perspective of teacher education and its connections in recognizing ripples of change and action that can affect the educational system, including policy commitment, competency through micro- and macro-credentials, professional standards for teachers, peer learning, collaborative inquiry, and new experiences in framing educational innovation, self-driven curriculum development, educational resource development, and sustainability-focused initiatives (Mulà & Tilbury, 2025).

2. How may the innovation of the educational system for self-driven curriculum development be based on the needs of students as centers of learning?

Table 2 presents a thematic analysis of focus group discussions with thirty (30) professional lecturers regarding innovations in the educational system and self-driven curriculum development in higher education institutions. The participants were heads, coordinators, and deans involved in curriculum design within the educational system. This analysis was adapted from interview excerpts used in a qualitative focus group discussion approach (Geampana & Perrotta, 2025). Responses were categorized as follows: General, when 50% or more of respondents provided the response; Typical, when 25% to 49% provided the response; and Variant, when 24% or fewer provided the response. Verbatim text was included in the data analysis during the focus group discussion process, as illustrated below.

Table 2. Themes, respondents’ responses, and core ideas on innovation in the educational system for self-driven curriculum development.

Themes	Respondents’ Responses	Core Ideas
1. Student Autonomy	General	• Learning task competency • Empower student learning • Reflection in teaching and learning • Self-efficacy and self-confidence • Learning process and strategy
2. Personalized Learning	General	• Self-driven educational system • Student-centered approach • Mastery progress • Sense of learning and motivation • Flexibility and learning styles
3. Teacher as Facilitator	General	• Assists and guides students • Monitors progress of students • Facilitates professional development • Explore self-directed learners • Execution of teaching and learning
4. Focus on Process and Skills	General	• Self-learning and teaching style • Self-directed learning skills • Hands-on practice learning • Explores critical learning skills • Promoting self-directed learning

1. Student Autonomy

Student autonomy in innovating the educational system for self-driven curriculum development is achieved through teacher-centered and student-centered processes. It emphasizes the use of delivery tools and fosters independent learning. It supports students' autonomy in identifying learning practices and specific features that contribute to the teaching process. It promotes student autonomy through task flexibility, self-paced learning, immediate feedback, and on-demand access to materials (Suwadini & Ismail, 2025). The participants stated:

“It identifies the planning and setting development goals for learning to help students outline activities sequence, structure, and activities in establishing the learning task competency”. T1, P27 & P3
“It provides students the opportunity for fostering voice and choice involving decision making to empower student learning”. T1, P25 & P5
“It controls the scaffold approach and self-regulation in the instruction process moving to more directed activities and greater self-direction to explicit skills and reflection in teaching and learning”. T1, P23 & P7
“It supports learning and building trust to foster self-efficacy and self-confidence to motivate in making desired learning and connecting interests”. T1, P21 & 9
“It assesses reflection to students to achieve learning competency in adapting the learning process and strategy improvement”. T1, P17 & P13

The study findings show that student autonomy supports the development of planning and learning goals, enabling students to outline the sequence, structure, and activities required to establish competence in learning tasks. It also fosters student voice and provides opportunities for decision-making, thereby empowering student learning. The research gaps identify the need to examine students’ learning autonomy in relation to self-directed learning, decision-making, capacity, self-regulation, and management. This ability is vital for exploring tools that can influence autonomous learning. The study highlights unpredictable mechanisms, features, transitional learning stages, and relative independence (Zhu & Jiang, 2025).

2. Personalized Learning

Personalized learning, as an innovation in the educational system for self-driven curriculum development, utilizes a standards-setting approach to meet the needs of students as the center of learning. It examines students' engagement in personalized learning within the school environment. It identifies key indicators of personalized learning, including social engagement, academic challenges, self-evaluation, extracurricular activities, and cognitive engagement (Anderson, 2025). The participants stated:

“It is a self-driven educational system for pace, interests, learning path, creating individual instructions, student choice, and technology personalized learning”. T2, P26 & P4
“It is a student-centered approach that focuses on the system of students' needs as to interest, weaknesses, and strengths tailored with learning experiences”. T2, P25 & P5
“It is a pacing mastery for the progress of students through achievement of goals in the task completion of learning”. T2, P23 & P7
“It is a student empowerment involving decision making and goal setting to foster a sense of learning and motivation”. T2, P22 & P8
“It is the flexibility of personalized learning to accommodate various learning styles, assessment, content delivery methods, and learning formats”. T2, P20 & P10

The study findings show that personalized learning is gaining prominence in an increasingly globalized era. It evolves through translation to facilitate the integration of diverse domains into educational-system innovation, including diplomatic relations and international, self-driven curriculum development. The research gaps also

highlight the sophisticated cognitive processes involved in various learning domains, specialized knowledge, context, and culture. These findings advance the development of self-driven curricula and educational-system innovation (Liu, 2026).

3. Teacher as Facilitator

Teachers, as facilitators of innovation in the educational system for self-directed curriculum development, are central to the organization of the school system. This role promotes motivation for higher learning and raises expectations for students' academic achievement. It also addresses the expectations that the educational system must meet. Teachers provide sufficient guidance to support the development of students' learning and understanding (Ksioura, Tazi Cherti, & Senhaji, 2025). The participants stated:

"It assists and guides students in the learning process through various teaching techniques and self-exploration concepts". T3, P28 & P2

"It monitors the progress of students to discover the process of learning, setting goals, change makers, and role models". T3, P26 & P4

"It facilitates professional development through workshops, conferences, and training opportunities in the school system". T3, P24 & 6

"It develops to explore self-directed learners to support instructional models for evaluation, reflection, adjustment, monitoring, and planning for the process of learning". T3, P22 & P8

"It implements curriculum development competency, experience, knowledge, process for content delivery, and execution of teaching and learning". T3, P20 & P10

The findings of the study show that teachers, as facilitators, promote student-centered learning amid a global shift toward active learning and pedagogical facilitation. They evaluate resources within the educational context. The research gaps also assess the roles and performance of schools and teachers in implementing learner-centered approaches across core instructional domains. The findings indicate that classroom management and teacher proficiency facilitate student-centered learning and the emergence of effective instructional planning practices. They also highlight the various factors influencing technology-integration practices in support of an innovative educational system and a self-driven curriculum (Fathima, Prabhu, Sathyanarayana, Saxena, & Guruprasad, 2026).

4. Focus on Process and Skills

The focus on process and skills in the innovation of the educational system for self-driven curriculum development utilizes methods of transformation and inquiry to reflect on individual learning habits and practices in professional teaching and learning. It examines reflection and transformation in the roles of professional lecturers within a self-driven, outcomes-based education process. It identifies improvements in the learning process (Newman & Farren, 2018). The participants stated:

"It promotes self-learning and teaching style to assist student skills and development of critical thinking that leads to self-actualization and retain knowledge". T4, P25 & P5

"It describes the process of self-directed learning skills development as to resources, goals, timeline of activities, structure, sequence, and outline assessment". T4 P21 & P9

"It develops students in skill-based development and teaching methods through application and hands-on practice learning". T4, P20 & P10

"It helps the learners with proper techniques and explores critical learning skills in the alternative course of learning process". T4, P17 & P13

"It deepens techniques on the critical thinking skills to be utilized in the educational system in promoting effective teaching and self-directed learning". T4, P16 & P14

The findings of the study show that a focus on processes and skills in innovating the educational system through self-driven curriculum development integrates the widespread use of artificial intelligence and its application in the learning system. It also identifies research gaps in the field of knowledge transmission in education, particularly regarding learner-centered approaches and competency development. It supports the use of technology in learning approaches and individual educational transformation. It promotes a lifelong learning context in which students' self-driven approaches and practices serve as core competencies for developing sustainable learning outcomes, with respect to cultivation pathways and formation mechanisms (Sun & Liu, 2026).

3. Discussion

It shows that the extent of key principles and innovation of the educational system for a self-driven curriculum development process implements experience, knowledge processes for content delivery, and execution of teaching and learning. It deepens techniques on the critical thinking skills to be utilized in the educational system for promoting effective teaching and self-directed learning. It is the philosophy of Outcome-Based Education (OBE) to enhance the self-driven curriculum as part of the innovation process of the educational system. It designs strategies in teaching mode, teaching evaluation, formulation, and construction of resources. It assesses the objectives and effectiveness of student learning performance and outcomes. It involves demands and curriculum design for self-driven learning in the school system (He & Liu, 2024). On the other hand, the extent of key principles and innovation of the educational system for a self-driven curriculum development process assesses reflection by students to achieve learning competency in adapting the learning and strategy improvement. It is a flexibility of personalized learning to accommodate various learning styles, assessment, content delivery methods, and learning format. It amplifies the leadership skills and innovation of the educational system for a self-driven curriculum development process. It stands as holistic development in the educational system for both the teachers and students. It analyzes self-leadership in fostering the role of educators as molders and shapers of young generations and minds. It examines the domains of learning as to the attribute of students and assessment (Zhao & Wang, 2025).

Furthermore, student autonomy in innovating the educational system toward self-driven curriculum development involves planning and setting learning goals to help students outline the sequence, structure, and activities required to establish learning-task competencies. It provides students with opportunities to foster voice and choice in decision-making, thereby empowering their learning. It guides the scaffolding approach and self-regulation instruction process, moving from directed activities toward greater self-direction, explicit skill development, and reflection in teaching and learning. It promotes student autonomy in exploring the role of the educational system. It is embedded in innovations in the educational system that shift learning toward student- and teacher-centered approaches. It uses content-delivery tools while addressing the limitations of independent learning (Suwadini & Ismail, 2025). Hence, student autonomy in innovating the educational system toward self-driven curriculum development supports learning and builds trust to foster self-efficacy and self-confidence, motivating students to pursue desired learning outcomes and connect with their interests. It assesses students' reflections to develop learning competencies by adapting learning processes and improving strategies. It supports autonomous learning, which contributes to the success of students as centers of learning. It enhances classroom observation to better meet learning demands for task flexibility, self-paced learning, immediate feedback, and access to materials. It monitors progress in teaching and learning initiatives in the classroom setting. It reflects on activities, goals, innovative educational settings, and teacher practices to enhance learners' independence (Nasri, 2025).

Certainly, personalized learning is an educational innovation that supports self-driven curriculum development by tailoring pacing, interests, learning pathways, instructional activities, student choice, and technology to individual learners. It is a student-centered approach that addresses students' interests, strengths, and weaknesses through customized learning experiences. Mastery-based pacing enables students to progress as they achieve learning goals and complete tasks. Personalized learning also contributes to the development of innovative teaching and learning models. However, its implementation in classrooms remains insufficient because instructors may lack adequate motivation and preparation for the process (Ding, Santos, & Borja, 2024). Indeed, personalized learning empowers students to make decisions and set goals, fostering ownership of learning and motivation. Its flexibility accommodates diverse learning styles, assessment approaches, content-delivery methods, and learning formats. It also examines educational programs and innovations that support self-driven curriculum development, knowledge creation, and complex problem-solving. In addition, it provides strategies and context for evaluating and addressing issues related to self-driven curriculum development and educational innovation. Personalized learning incorporates students' perceptions and experiences to improve academic outcomes and considers the school context in the curriculum-development process (Anderson, 2025).

Indeed, teachers and facilitators in innovative educational systems that support self-driven curriculum development assist and guide students through various teaching techniques and self-exploration concepts. They monitor students' progress throughout the learning process, including goal setting, engagement with change makers, and the identification of role models. They facilitate professional development through workshops, conferences, and training opportunities within the school system. They adapt to twenty-first-century educational processes and innovations, transitioning from traditional instruction to current teaching trends that use advanced technology to promote more learner-driven practices. They emphasize self-determined learning by drawing on good, better, and best practices to empower learners to take control of their educational journeys. This approach contributes to improved learning in society (Khairani, Huda, Razak, & Wulan, 2025). Notably, teachers and facilitators in innovative educational systems that support self-driven curriculum development help learners explore self-directed learning and instructional models for evaluation, reflection, adjustment, monitoring, and planning. They apply curriculum development competencies, experience, and knowledge to content delivery and the execution of teaching and learning. They use innovative pedagogical practices to improve traditional lectures and adopt current teaching trends based on advanced educational technology. They focus on effective teaching strategies and methods. They provide guidance to teachers as facilitators on collaborative learning, AI tools, gamification, project-based learning, flipped classrooms, and active learning. They analyze how learning can boost engagement and critical thinking to enhance mastery and motivation. They also leverage digital teamwork skills to improve knowledge development (Alisoy, 2025).

Lastly, a focus on processes and skills in innovative educational systems that support self-driven curriculum development promotes self-learning and teaching styles that enhance students' skills and critical thinking, leading to self-actualization and knowledge retention. It describes the development of self-directed learning skills in terms of resources, goals, activity timelines, structure, sequence, and assessment outlines. It explores essential curricula for self-driven curriculum development and analyzes learning networks involving various educators in improving the learning process. It maintains the credibility of learning processes and skills. It also highlights self-driven curriculum content that sustains and fosters the development of competencies in emerging educational technologies and promotes awareness of innovation in educational systems (Ghorbani & Mirshah Jafari, 2025). Finally, a focus on processes and skills in innovative educational systems that support self-driven curriculum development is based on students' development through teaching methods that incorporate application and hands-on learning. It provides learners with appropriate techniques and develops critical learning skills through alternative learning processes. It strengthens critical-thinking skills for use in educational systems, promoting effective teaching and self-directed learning. It fosters collaboration and resilience through interdisciplinary approaches that integrate technology and flexibility. It responds to rapid curriculum changes based on learners' needs and the demands for educational

innovation. It equips learners with the competencies needed to navigate educational challenges and provides appropriate guidance (Ismiati, 2024).

4. Conclusions

It shows that the key principles and innovations of an educational system supporting a self-driven curriculum development process include competency, experience, and knowledge-based content delivery, as well as the execution of teaching and learning. It also deepens techniques that develop critical-thinking skills for use in the educational system, promoting effective teaching and self-directed learning. This includes assessing students' reflections on their achievement of learning competencies and adapting learning processes and strategies for improvement.

This shows that student autonomy involves planning and setting learning goals, helping students outline the sequence, structure, and activities required to establish competence in learning tasks. It provides students with opportunities to develop voice and choice in decision-making, thereby empowering their learning. This includes using scaffolding and self-regulation instruction, progressing from more directed activities to greater self-direction, explicit skills development, and reflection in teaching and learning.

Personalized learning is a self-driven educational approach that accommodates students' pace, interests, learning paths, individual needs, choices, and use of technology. It is student-centered and focuses on students' interests, weaknesses, and strengths by providing tailored learning experiences. This approach includes mastery-based pacing, enabling students to progress by achieving goals and completing learning tasks.

It shows that a teacher, as a facilitator, assists and guides students in the learning process through various teaching techniques and self-exploration concepts, while monitoring students' progress as they discover the learning process, set goals, become change-makers, and develop as role models. This includes facilitating professional development through workshops, conferences, and training opportunities within the school system.

It shows that a focus on processes and skills promotes self-directed learning and teaching approaches that support students' skill development and critical thinking. These approaches lead to self-actualization and knowledge retention by describing the development of self-directed learning skills, including setting goals, identifying resources, establishing activity timelines, organizing structure and sequence, and outlining assessment. This also includes developing students' skills through teaching methods that emphasize application and hands-on practice.

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