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## Student-Centered Approaches to Curriculum and Course Design

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### Abstrak

Tinjauan pustaka ini mengeksplorasi prinsip dan praktik pendekatan yang berpusat pada siswa terhadap kurikulum dan desain kursus, dengan fokus pada bagaimana model pedagogis ini memprioritaskan kebutuhan, minat, dan partisipasi aktif pelajar dalam proses pembelajaran. Dengan mensintesis penelitian utama dan perspektif teoritis, tinjauan ini meneliti bagaimana pendekatan yang berpusat pada siswa berbeda dari metode pengajaran tradisional yang digerakkan oleh guru dan menyoroti dampaknya dalam menumbuhkan pemikiran kritis, kreativitas, dan otonomi pelajar. Strategi utama yang dibahas meliputi pembelajaran berbasis proyek, pembelajaran berbasis masalah, dan pembelajaran dengan bantuan teknologi, yang semuanya menekankan pendekatan partisipatif dan langsung yang melibatkan siswa sebagai rekan pencipta aktif dari pengalaman pendidikan mereka. Tinjauan ini juga mempertimbangkan bagaimana teknologi dan perangkat digital dapat meningkatkan lingkungan pembelajaran yang berpusat pada siswa dengan menyediakan peluang untuk jalur pembelajaran yang dipersonalisasi, pembelajaran mandiri, dan kolaborasi global. Melalui sintesis ini, tinjauan ini menunjukkan potensi transformatif dari desain yang berpusat pada siswa dalam mempromosikan hasil pembelajaran yang lebih dalam dan lebih bermakna sambil mempersiapkan siswa untuk pembelajaran seumur hidup dan pemecahan masalah di dunia yang terus berkembang.

Kata Kunci: *Pembelajaran Berpusat pada Siswa, Desain Kurikulum, Desain Kursus, Pembelajaran Aktif*

## Abstract

This literature review explores the principles and practices of student-centered approaches to curriculum and course design, focusing on how these pedagogical models prioritize the learner's needs, interests, and active participation in the learning process. By synthesizing key research and theoretical perspectives, the review examines how student-centered approaches differ from traditional, teacher-driven instructional methods and highlights their impact on fostering critical thinking, creativity, and learner autonomy. Key strategies discussed include project-based learning, problem-based learning, and technology-aided learning, all of which emphasize hands-on, participatory approaches that engage students as active co-creators of their educational experiences. The review also considers how technology and digital tools can enhance student-centered learning environments by providing opportunities for personalized learning pathways, self-directed learning, and global collaboration. Through this synthesis, the review demonstrates the transformative potential of student-centered design in promoting deeper, more meaningful learning outcomes while preparing students for lifelong learning and problem-solving in an ever-evolving world.

Keywords: *Student-Centered Learning, Curriculum Design, Course Design, Active Learning*

## INTRODUCTION

A curriculum outlines the anticipated learning outcomes for a course or program, focusing on the development of knowledge, skills, and attitudes. It specifies the teaching, learning, and assessment strategies to be used, as well as the resources required to facilitate effective instruction (McKimm & Barrow, 2009). In Indonesia, the curriculum plays a central role in achieving educational objectives and serves as a guiding framework for learning across all levels of education. It must align with the nation's foundational values, including Pancasila and the 1945 Constitution, which reflect the nation's worldview and cultural identity (Lestari & Widiastuty, 2023). Additionally, The curriculum across all levels and types of education should be designed based on principles of diversification, tailored to the specific educational units, local contexts, and the capabilities of the students. Therefore, the curriculum is not only an academic tool but also a means of fostering national values and promoting a holistic approach to education.

On the other hand, course design refers to the systematic process of crafting effective and engaging educational experiences tailored for students. This involves making informed decisions about teaching methods, learning materials, instructional aids, and assessments that align with specific learning goals (Mustakim et al., 2024). The main objective of course design is to enhance students' comprehension and mastery of the subject matter. It often incorporates active, collaborative, and problem-based learning strategies, aiming to deliver

meaningful and relevant experiences that help students acquire essential skills, knowledge, and attitudes (Roseno et al., 2024). This underscores that effective learning design is crucial for creating engaging educational experiences that empower students to achieve their learning objectives and develop vital competencies.

The student-centered approach is crucial as it focuses on engagement, collaboration, and student independence, with the goal of fostering a learning environment that meets, challenges, and aligns with the needs and aspirations of students (Kerimbayev, 2023). The student-centered approach to teaching and learning has gained significant traction in the education sector, marking a crucial transition away from traditional teacher-centered methods. In conventional teacher-centered education, the focus is primarily on delivering knowledge and information to meet syllabus requirements, with the content often dictated by the curriculum (Tang, 2023).

This study explores the principles and strategies of student-centered approaches in curriculum and course design. It examines their impact on student engagement and learning outcomes, aiming to provide insights for educators and institutions striving to enhance the effectiveness of their teaching methods. By synthesizing existing literature, this study contributes to the broader understanding of student-centered practices. It provides educators with actionable strategies and highlights the potential of these approaches to transform traditional education systems.

## RESEARCH METHOD

This study employs a literature review method, which involves systematically and comprehensively analyzing existing academic research on a specific topic or question (Jalali & Wohlin, 2012). The research focuses on examining student-centered approaches to curriculum design and their impact on enhancing learning outcomes.

The process begins by establishing criteria to determine which literature is relevant for inclusion. These criteria may include factors such as the publication's date, academic quality, and alignment with the research questions. A thorough search is then conducted across academic databases, journals, books, and other credible sources to identify scholarly works that shed light on the principles, implementation, and effects of student-centered curriculum design. This search is guided by targeted keywords and phrases to ensure the review remains focused and comprehensive. After gathering relevant literature, a careful screening and selection process is carried out. Titles and abstracts are reviewed to determine whether each source aligns with the study's objectives. Only sources that make meaningful

contributions to the understanding of student-centered curriculum design are included, resulting in a curated body of literature for analysis.

Critical evaluation is a fundamental aspect of this process (Jalali & Wohlin, 2012). Each source is assessed for its strengths and weaknesses, considering aspects such as research methods, sample sizes, and applicability to diverse educational settings. This critical analysis ensures the literature review provides a balanced and informed perspective on the field.

The findings are presented in a structured format, grouped around key themes or topics. The aim is to provide a clear summary of current knowledge, highlight agreements or differences among studies, and identify opportunities for future research and innovation in student-centered curriculum design. This approach offers valuable insights into how education systems can better meet students' needs and promote effective learning.

## RESULT AND DISCUSSION

### Findings

#### Traditions of curriculum design

Curriculum refers to the comprehensive framework for educational instruction, encompassing the planned experiences and content delivered to students. It serves as a blueprint for teaching and learning, designed to facilitate the achievement of specific educational outcomes (Richards, 2001). Creating an English language curriculum involves the processes of designing, implementing, and assessing a program that caters to the unique needs of students. There is no one-size-fits-all method for curriculum design; rather, it develops over time and is influenced by student requirements, community input, and previous experiences. An effectively crafted curriculum significantly affects both teaching methods and student learning outcomes (Lestari, Widiastuty, 2023).

The emerging knowledge perspective argues that the traditional canon should be broadened to encompass a diverse range of knowledge viewpoints instead of relying on just one. To provide students with a comprehensive undergraduate experience, it advocates for the inclusion of interpretivist, feminist, critical theory, post-structuralism, and multicultural scholarship within the curriculum (Haworth & Conrad, 1990). By incorporating these diverse perspectives into the curriculum, educators can foster a more inclusive and nuanced understanding of knowledge, ultimately enriching the educational experience for all students.

The student-centered curriculum originates from philosophical viewpoints on how we acquire knowledge. In contrast, traditionalist epistemologies, such as those rooted in logical

positivism, consider knowledge to be an objective reality existing independently outside both the individual who knows it and their own perceptions (Emes & Innes, 2003). By fostering an environment that values multiple perspectives, educators can better prepare students to navigate and contribute to an increasingly complex and interconnected world. Ultimately, embracing this broader epistemic landscape is essential for cultivating critical thinking and adaptive learning skills in future generations.

### Student-Centered Approaches

The term "student-centered approach" in teaching and learning has gained significant traction in the education sector, highlighting a crucial transition from traditional teacher-centered methods. In this framework, students are no longer viewed as passive recipients of information, merely being instructed on what they should learn and how to perform. Instead, the focus shifts to actively engaging students in their own educational experiences, encouraging them to take ownership of their learning process (Tang, 2023). According to Woolf (2009), student-centered teaching approaches, such as inquiry-based and collaborative instruction, necessitate that students engage in discussions and work together. In this model, students are encouraged to reflect on and express their understanding while sharing knowledge with their peers.

The role of the teacher in a student-centered environment involves continuously adapting what and how material is taught, responding to the evolving understanding of the students and the subject matter. Thus, in student-centered learning, the primary emphasis is on the students themselves, making them the focal point of classroom activities. In contrast, teacher-centered learning prioritizes the teacher's role, with the instructor maintaining control over the classroom. In this approach, students primarily absorb the information and instruction provided by the teacher (Latif, Dollah and Weda, 2020).

Implementing student-centered learning aligns with current educational demands by presenting students with challenges that enhance their ability to make effective decisions and tackle problems independently. Active participation is crucial in this approach, requiring students to continually exercise critical thinking and analytical skills to resolve issues on their own. For educators acting as companions in the learning process, understanding the principles, philosophies, and methodologies behind student-centered learning is essential. Enhancing teachers' competencies in this area necessitates expanding their knowledge, comprehension, and practical skills to effectively facilitate student-centered activities (Wangid, 2015).

## Strategy in Student-Centered Approaches

### *Project-Based Learning*

In collaborative project-based learning, students frequently engage in projects that focus on community issues. They are tasked with identifying these issues, conducting thorough research to analyze them, and then proposing and implementing potential solutions. Community projects empower students to tackle real-world challenges while fostering connections with the communities they assist. These initiatives enhance students' communication, leadership, and interpersonal skills, all while providing them with the independence to steer the projects toward their desired results (Tang, 2022).

Project-based learning can also be illustrated through laboratory and experimental design. In this approach, students engage in several key stages:

- a) Conceptualization: Students begin by developing an idea for their design.
- b) Active Experimentation: They then conduct experiments to test their design.
- c) Concrete Experience: This involves implementing the full design in practice.
- d) Hands-on Operations: Students observe the design's performance and efficiency through practical operations.
- e) Reflective Observation, throughout each stage, students reflect on their experiences and the knowledge gained, allowing them to validate and refine their designs.

This structured process not only enhances understanding but also fosters critical thinking and practical skills through active engagement in real-world applications. Experimental design projects are linked to experiential learning, encouraging students to achieve advanced learning outcomes like investigation, critical thinking, problem-solving, and engineering skills through hands-on tasks, specifically in the context of creating an experimental design (Zhang, 2022).

### *Problem-Based Learning*

Problem-based learning differs from project-based learning in that a problem does not necessarily entail a project that requires students to implement or create a proposal for its execution (Guo, 2020). A problem can be defined as a question or scenario that students are tasked with solving. In a student-centered approach, this problem is typically presented before lectures to promote self-directed learning. During the lectures, students can discuss their solutions, while teachers guide the conversation and explore the subject matter in greater depth (Lahdenperä, Rämö & Postareff, 2022; Knorn, Topalovic & Varagnolo, 2022).

### *Technology-aided learning*

Technology-aided learning is a significant theme that has emerged in the literature concerning student-centered teaching and learning approaches. This concept involves integrating technology into the educational process to actively engage students and facilitate their access to digital platforms that encourage self-directed learning (Chen & Tsai, 2021; Knorn, Topalovic & Varagnolo, 2022). With mobile technology connecting students across different locations, they can collaborate in their learning regardless of where they are. Additionally, the rise of artificial intelligence enables the training of mobile technology to perform specific tasks (Chen & Tsai, 2021). Therefore, The collaborative, gaming, interactive, research-oriented, and adaptive features of mobile technology significantly enhance student-centered learning. In addition to mobile technology, the availability of numerous other technologies, such as online platforms that support conceptualization, design, interaction, and gamification, is likely to facilitate the shift towards a student-centered approach (Yu et al., 2021).

### *Advantages of student-centered approaches*

A study from Davis (2015) found that using a student-centered teaching method, combining elements like lectures, student presentations, group activities, discussions, and guided research, led to better quiz scores overall for all students compared to traditional student-centered approaches.

### *Student-Centered Affects Students' Motivation*

Ivey (2011) demonstrated the positive impact of student-centered learning on students' motivation in his study titled "Opening up the conversation on literacy, college, and career." He posited that this pedagogical approach aligns with Piaget's (1963) theory, which asserts that students construct personal meanings about the world through dialogue and shared experiences. Advocates of student-centered teaching argue that students should have the autonomy to select topics that resonate with their interests, as pre-established knowledge often lacks relevance for them. Furthermore, it is believed that reliance on external motivators may diminish students' interest once these incentives are removed, emphasizing the need for intrinsic motivation in the learning process.

### *Student-Centered Affects Students' Social Skill*

Student-centered learning strategies often provide distinct opportunities for students to engage in problem-solving with support from their peers. These approaches are based

on the belief that knowledge is most effectively acquired when students actively participate in collaborative efforts and share ideas to complete educational tasks (Brush & Saye, 2000). However, student-centered strategies, like cooperative learning, distinguish themselves from other teaching approaches by fostering a classroom environment that emphasizes the development of essential social skills. The effectiveness of these learning strategies lies in positioning students at the heart of the knowledge acquisition process, making them the central element in this approach (Hannafin & Land, 2000).

According to Brandes and Ginnis in Hodge (2010), student-centered learning (SCL) primarily encompasses:

- a. Delegation of Learning Responsibility: Placing the responsibility of learning directly onto the students.
- b. Constructive Topic Selection: Creating topics that are relevant and meaningful for students.
- c. Encouraging Student Engagement: Fostering involvement and participation from students to enhance their learning experience.
- d. Promoting collaboration Among Students, Enhancing teamwork and cooperation among students.
- e. Reorienting Teachers' Roles, transforming teachers into resources and facilitators rather than sole authorities, thereby facilitating the learning process.

### Student-Centered Curriculum

Brown (1995) defines curriculum as a series of activities that contribute to the growth of consensus among the staff, faculty, administration, and students. Curriculum is a historical accident—it has not been deliberately developed to accomplish a clear set of purposes. Rather, it has evolved as a response to the increasing complexity of educational decision-making. Curriculum can also be seen as a means of achieving specific educational goals and objectives (Su, 2012). Lunenburg (2011) also defines curriculum as content, as learning experiences, as behavioral objectives, as a plan for instruction, and as a nontechnical approach. Therefore, curriculum is the standard competencies that are made by the government in planning the material for the teaching and learning process to make it equal from every school.

A student-centered curriculum is a concept that has developed from various epistemological views on inquiry and knowledge. It emphasizes the importance of learning rather than just teaching, fostering the development of knowledge. This approach addresses

the need for increased student engagement and allows students to take a more active role in shaping their educational experiences and building their own understanding of knowledge (Gagnon & Collay, 2001).

A key discussion in sociological theory focuses on understanding how individual actions relate to the larger societal structures that shape the context in which these individuals operate. Durkheim's macroperspective allows for individual agency, while Mead's concept of "actors" emphasizes that individuals shape their thoughts, emotions, and behaviors based on generalized responses from past interactions with others. Understanding how external social factors shape an individual's actions offers insights into interpreting a student-centered curriculum within its broader societal context. Sociologists like Mead and Durkheim provide perspectives that help us see how responses from society can better integrate students.

#### Principles guide of a student-centred curriculum

Innes & Emes (2005) has explained the principles guide of a student-centered curriculum as follows:

#### Explicit and Accessible Documentation of Required Outcomes for Content Mastery and Skills Development

An explicit program syllabus is fundamental in a student-centered curriculum, outlining the knowledge and skills students are expected to acquire throughout their studies. This syllabus serves as a comprehensive guide, detailing the purposes and objectives of the program, assessment protocols, and graduation requirements. By providing clear expectations, it enhances student understanding of their educational journey and assists them in making informed decisions about course selection aligned with their interests and career goals.

The syllabus should be presented in a user-friendly web format, accessible to students prior to the commencement of their studies. This allows students to delve into the specifics of course experiences beyond mere descriptions, thereby fostering a better understanding of what is required for successful completion of the program. As students progress, they will gain insight into instructional purposes and become more engaged in their learning experiences. Instructors benefit as well, as they can better align course content with overall program objectives, making the syllabus an essential reference tool for both teaching and learning.

## Explicit and Continuous Reference to Documented Evidence of Beneficial Student Experiences

Currently, knowledge regarding student development is primarily held by student services personnel and select faculty members. A student-centered curriculum aims to integrate this knowledge throughout all courses rather than relegating it to orientation sessions or extracurricular activities. This integration ensures that student development processes are explicitly addressed in the curriculum.

Students will be encouraged to identify their learning styles early in their programs through various assessments, which will help tailor their educational experiences. Additionally, as they advance, students will learn about deep and surface learning theories, which highlight different motivational patterns and strategies for effective learning. This approach ensures that learning outcomes encompass not only content mastery but also the development of skills related to effective learning processes.

## Choices Available Regarding Pathways to Master Skills and Knowledge

A core principle of a student-centered curriculum is providing choices that empower students in their learning pathways. This can be achieved through a menu-driven approach at the course level, allowing students to select from various assessment methods or learning activities. For instance, students may choose between participating in online discussions or submitting reflective journal entries based on written material interpretations.

The flexibility of curriculum delivery is enhanced through blended learning, which combines face-to-face instruction with online components. This method allows students to negotiate their preferred balance between online and traditional classroom experiences, accommodating individual learning preferences while maintaining rigorous academic standards.

## Clarity of Role Expectations and Required Behaviors as Lifelong Students

In a student-centered curriculum, students are expected to take on more active roles in their education compared to traditional models, where they are often passive recipients of information. This shift is particularly relevant given the increasing age diversity among university students. The new curriculum design encourages students to engage actively in determining their learning outcomes and the methods they will employ to achieve them.

Students will not only follow predefined outcomes but will also be required to establish personal learning objectives that align with their interests. This fosters a culture of continuous learning beyond formal education settings, equipping graduates with the

necessary skills and behaviors for lifelong learning. The curriculum thus evolves into a framework that prepares students for ongoing personal and professional development after graduation.

## CONCLUSION

Student-centered approaches to curriculum and course design prioritize the needs, interests, and active participation of students in the learning process, shifting the focus from traditional teacher-led instruction to a more collaborative and engaging environment. This educational paradigm significantly enhances student engagement by allowing learners to take ownership of their education, fostering a sense of responsibility and commitment to learning outcomes. By tailoring educational experiences to individual student needs, preferences, and learning styles, student-centered curricula promote personalized learning that caters to diverse backgrounds and enhances the relevance of the material. Furthermore, these approaches encourage the development of critical thinking, problem-solving skills, and independence through collaborative activities that challenge students to analyze information and synthesize knowledge. Research indicates that when students are actively involved in their learning processes, they retain information better and achieve deeper understanding, making engagement crucial for academic success.

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