



Student-Centered Learning Strategies To Enhance Learning Experience, Academic Self-Reliance, And Work Mindset In The Era Of Educational Industry And Society 5.0

Wahidin¹, Cucu Sutionah², Nana³, Mufti Ali⁴

^{1,3,4}Siliwangi University, Tasikmalaya, Indonesia

²Universitas Pendidikan Indonesia, Bandung, Indonesia

***Corresponding Author:** Wahidin

Email: wahidin@unsil.ac.id

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ABSTRACT

The independent learning policy in Higher Education demands instructors to initiate a paradigm shift in the teaching methodology. Empowering students through pedagogy that actively involves them is deemed crucial in responding to the learning outcomes tailored to user needs. The objective of this research is to empower all aspects of student potential, including potency base strengthening, the improvement of student experience, fostering student loyalty, reinforcing student base, instilling student trust, and enhancing overall student experience to elevate learning experience, academic autonomy, and work mindset among students. The research design employs a quasi-experimental approach involving five student classes with four different courses. The instruments utilized include interview guidelines, observation protocols, questionnaires through Google Forms, and academic tests during Midterm and Final Semester Examinations. Data gathered from observations, interviews, questionnaires, and academic tests aim to measure self-potential, academic autonomy, learning experience, and work mindset. Data processing involves descriptive analysis and ANCOVA tests for academic autonomy, work mindset, and learning experience variables. The research results indicate that student-centered learning has fortified various facets: 1) Student Potency, giving rise to creative ideas, courage, responsibility, and the discovery of interests; 2) Academic Autonomy, demonstrating the ability to understand, manage, and employ learning strategies, skills, and contributions in both academic and professional environments; 3) Learning Experience, fostering openness to change, innovation, adaptability, and readiness to face complex challenges in the workplace and modern society; and 4) Work Mindset, involving the evaluation of their own learning processes, time management, and resource utilization.

Keywords: *Student Potential, Academic Autonomy, Learning Experience, Work Mindset.*

INTRODUCTION

The demands of the global community are inseparable from the technological, social, and cultural changes that significantly differ from the lifestyle patterns of the past decade. Graduates were once deemed sufficient with a broad knowledge base, attitudes, and skills, even if they were still somewhat "manual". However, contemporary societal expectations have shifted towards a truly global stage where all aspects of life are digitally driven. Individuals lacking support in various digital literacies, data literacy, scientific literacy, market literacy, and the like will find themselves unable to compete effectively. Academic proficiency and mindset constitute an individual's potential to become a lifelong learner who continually enhances their abilities, fostering character and competitiveness throughout their lives. The necessity for adjusting Higher Education curricula is based on

the fact that society has entered a new era, known as Industry 4.0 and Society 5.0. The concept of Society 5.0 originated in Japan, signifying the next stage of society that focuses on integrating technology into daily life to achieve social and economic well-being. In the educational context, Society 5.0 demands that Higher Education institutions produce graduates prepared to face future challenges with high creativity, collaboration, and innovation skills.

This research aims to introduce a new dimension to the empowerment of students, enhancing their learning experience, academic autonomy, and work mindset. According to Sari, Pramono, and Susanto (2020), implementing a student-centered learning model can improve the quality of learning and students' learning outcomes. Their research found that a student-centered learning model enhances students' self-directed learning, motivation, and academic achievements. This is essential in response to the current digital era, where students must possess skills and competencies aligned with the evolving and complex demands of the workforce.

Student-centered learning models have proven effective in enhancing students' skills and competencies to face future challenges. Although student-centered learning has been widely used by both teachers and lecturers, this research focuses on empowering all aspects of students' potential (potency base strengthen), improving student experience, student loyalty, student base strengthening, and student trust through learning that emphasizes improving the student experience. Thus, this approach places a greater emphasis on the learning experience, academic autonomy, and work mindset of students.

Student-centered learning models also take into account the changing times and the demands of the education industry in the Society 5.0 era, which is becoming increasingly complex and requires specific skills. Therefore, this learning model can significantly contribute to improving the quality of education in the Faculty of Teacher Training and Education (FKIP) and preparing students to face the challenges of the Society 5.0 era. The novelty of this research lies in the combination of a student-centered learning approach with the goal of developing students' academic autonomy, work mindset, and learning experience that empowers students, with an emphasis on relevance to the demands of the education industry in the Society 5.0 era.

Empowerment in the learning experience can refer to various aspects that enhance confidence, motivation, and student self-reliance in learning, encompassing Self-Empowerment: Improvement in self-confidence, self-awareness, and the ability to overcome challenges. In the context of learning, self-empowerment encourages students to become active learning agents. Motivational Empowerment: Empowering motivation encourages students to have high intrinsic motivation in learning. This can be achieved by setting clear goals, emphasizing the personal benefits of learning, and recognizing students' achievements. Collaborative Empowerment: Collaborative empowerment involves interaction and cooperation among students, teachers, and peers. This collaboration gives students a sense of ownership and involvement in the learning process. Assessment Empowerment: Assessment empowerment allows students to take an active role in assessing and understanding their progress. Effective formative assessment provides constructive feedback to improve students' learning performance.

The demands of the 21st Century education consist of six skills: character, citizenship, critical thinking, creativity, collaboration, and communication. While these skills require conceptual understanding, the current concept must naturally become a part that students can independently learn through internet-based applications. Learning experience is also related to the application of constructivist learning theory. This theory posits that students actively construct their knowledge through interaction with their learning environment. Effective learning experiences enable students to build knowledge and skills through active interaction with their learning environment. In the context of student-centered learning, the learning experience becomes key to motivating students and engaging them in the learning process. By providing effective and meaningful learning experiences, students can develop a deeper understanding of the subject matter, enhance their academic autonomy, and cultivate a positive work mindset.

Fundamentally, academic autonomy refers to students' ability to independently acquire, process, and use information to achieve academic success. According to Zimmerman (1990), academic autonomy involves setting specific learning goals, creating effective learning plans, managing time and resources, monitoring and evaluating learning progress, and assessing the effectiveness of learning strategies used. In this context, academic autonomy is not just about the ability to learn but also about the ability to choose and take appropriate actions in acquiring the knowledge and skills needed.

Personal factors include academic ability, self-confidence, motivation, and maturity. The learning environment encompasses family support, peer support, and instructor support. Meanwhile, institutional factors include educational policies, academic support, and available resources. Collaborative learning is a form of learning that involves interaction among learners in achieving learning goals collectively. In collaborative learning, students work together, exchange information, and build understanding together.

Work mindset can influence an individual's performance in the workplace. Research indicates that employees with a growth mindset tend to have better performance, better adaptability, and are more motivated to improve their performance (Dweck, 2010; Hong & Ye, 2012). In practice, the development of a work mindset can be achieved through employee training and development programs. These programs aim to help employees develop more adaptive and productive mindsets in facing challenges in the workplace.

The Kolb Learning Theory, developed by David Kolb in 1984, suggests that learning occurs through a cycle of learning experiences consisting of four stages: concrete experience, reflection, conceptualization, and

experimentation. According to this theory, individuals actively learn through experiences and reflection on those experiences. The Kolb Learning Theory refers to an experiential learning concept, based on the observation that humans learn actively and differ from one another. In this theory, individuals have different learning preferences, including learning through direct experience, observation, reflection, or abstract concepts.

Vygotsky's Learning Theory, developed by Lev Vygotsky in the early 20th century, emphasizes the importance of the social environment in the learning process and individual development. Vygotsky believed that language, culture, and social relationships play a crucial role in the learning process. According to this theory, individuals learn through social interaction and collaboration with others, known as "social learning." In social learning, individuals learn through observation, imitation, and participation in social situations. Vygotsky also highlighted the significance of the "zone of proximal development" and the "actual development zone." The actual development zone is the ability an individual possesses independently, while the zone of proximal development is the ability that can be enhanced through interaction with others or through instructional support. This theory emphasizes the role of teachers in the learning process and individual development. According to Vygotsky, teachers can help develop students' zone of proximal development through appropriate instruction and providing needed support. Vygotsky's Learning Theory has been applied in various educational and training contexts, from formal education to employee training and organizational development. It has also been utilized in the fields of psychology and leadership development.

METHODS

This research constitutes an applied study aimed at assessing the effectiveness of learning strategies. It seeks to measure students' learning experiences, academic autonomy, and work mindset after completing a specific course. The evaluation of student empowerment through collaboration between instructors and students, as well as among students, is quantified using indicators for these three variables. The research design adopts a quasi-experimental approach involving five different classes with distinct courses and varying semesters. Instruments employed encompass interview guidelines, observation protocols, questionnaires utilizing Google Forms, and academic tests administered during Midterm and Final Semester Examinations. Data collected from observations, interviews, questionnaires, and academic tests are utilized to gauge self-potential, academic autonomy, learning experiences, and work mindsets. Data processing involves descriptive analysis and ANCOVA tests for academic autonomy, work mindset, and learning experiences variables.

The object of this research is students. The population comprises all students majoring in Biology Education at the Faculty of Teacher Training and Education (FKIP), Universitas Siliwangi Tasikmalaya, Odd Semester of the Academic Year 2023/2024. The sample was purposively selected from 5 classes offering 4 different courses: Foundations of Education, Chemistry for Biology, Learning and Teaching, and Research Methodology.

The instruments utilized include interview guidelines, observation guidelines, questionnaires administered through Google Forms, and academic tests conducted during mid-term and final exams. The research instruments aim to measure the variables of student learning experience, academic autonomy, and work mindset. The instruments were validated according to the required criteria based on construct, content, readability, and the selection of each answer by fellow faculty members for evaluation.

This quantitative data encompasses three research variables. First, qualitative data is obtained from interview results, observations, and discussions with students and lecturers teaching the respective courses. All these data undergo triangulation validation to ensure alignment with the research objectives. Second, quantitative data involves questionnaire results distributed to students upon completing all course modules. This data comprises scores obtained by each student, which will be statistically processed in accordance with the research objectives.

RESULT

Measuring the Development of Students' Basic Potential (Potency Base)

The basic potential of students, which can enhance their learning experience, academic autonomy, and work mindset, is outlined below. How students prioritize decision-making in their courses is crucial. Only 1.2% of students prioritize potential development, with the majority still prioritizing course grades, GPA, and the number of completed credit hours each semester. The shift to the independent learning curriculum and the teaching system implemented by lecturers inside and outside the classroom necessitate a reorientation of students' learning goals towards more meaningful and broader aspects beyond just grades. Prioritizing self-development is preferred over mere academic abilities, measured by academic test scores. Generally, 61.4% of students remain uncertain, confused, and unable to engage in creative activities, innovative projects, and new ideas that foster their potential development. Only 1.2% of students are ready and capable of doing so, willingly participating in learning strategies aimed at developing potential for creative work.

Measuring the Development of Student Trust Potential

The overall potential possessed by students reveals that 91.5% of students believe in the competence,

integrity, and capabilities of lecturers to provide guidance and course material, while 80.8% believe in the ability of classmates to access and interact with lecturers. However, some indicators of these potential areas still show confusion and doubt, as reflected by neutral responses, indicating that students lack clear confidence in their own potential. The fact shows that students' mindsets and orientations are overly focused on grades, GPA, and course completion. This mindset adversely affects the social culture among students, leading to time wastage and energy diversion from other skill advancements. Lecturers should not only expect students to believe that the services provided are satisfactory and fair but also encourage students to position themselves wisely and realistically. These findings are beneficial for the department and lecturers, suggesting that a lack of trust potential in academic and administrative services exists among students, although the percentage is small.

Measuring Student Base Strengthened Potential in Learning

The basic capabilities of students to respond to feedback provided by lecturers or classmates during lectures are measured by this indicator. It indicates that a small fraction of students (1.2%) is unresponsive to the feedback given by lecturers or classmates during lectures, signifying an inability to follow lectures and respond to feedback. This fact highlights a student mindset waiting for information from lecturers, preferring to receive rather than seek information. This mindset aligns with the previous findings, where the focus is on grades, GPA, and the number of credit hours for course completion. Unrealistic expectations of lecturers pose a significant obstacle to changing this habit. Considering fellow students as inferior and doubtful indicates a low potential for students' basic strength. Furthermore, such thinking negatively impacts academic culture and the development of student and lecturer potential. Though this group is small in number, addressing these issues is essential for establishing an empowering academic culture.

Measuring Student Loyalty Potential (Loyalty Base)

Student loyalty potential, as demonstrated by consistent attendance in every lecture, is assessed. This indicator reveals a small percentage (1.2%) of students who are not always present in every lecture, implying disloyalty to their own commitment to attend every lecture. This fact reflects a mindset where students wait for reprimands from lecturers or invitations from fellow students, or pursue momentary satisfaction by opposing lecturer policies. This mindset differs from the earlier findings, which focused on grades, GPA, and the number of credit hours for course completion, as attendance determines assessment. Excessive expectations of lecturer services also differ for this group of students, as loyalty is a crucial factor in determining the success of lectures. Insufficient loyalty to oneself, perhaps due to low regard for fellow students or disagreements with lecturer policies, indicates a low potential for student loyalty. This thinking further impacts the decline in academic culture and the development of student and lecturer potential. Despite the small number of this group, addressing these issues is crucial to establish an academic culture that empowers both students and lecturers. The strategy of centering lectures on students using loyalty potential shows that a small percentage of students (1.2%) does not inform their peers about lectures centered on students. This means that this group of students is not loyal to themselves or their lecturers, as they do not inform their peers about lectures centered on students. Therefore, they are indifferent to others, including their lecturers and peers. This fact indicates a weak loyalty mindset among students towards their lecturers and peers. This mindset differs from the earlier findings, which focused on grades, GPA, and the number of credit hours for course completion, as loyalty is a crucial factor in determining success in lectures. Though this group is relatively small, it is intriguing to address to establish an academic culture in the learning process so that both lecturers and students have a high level of loyalty.

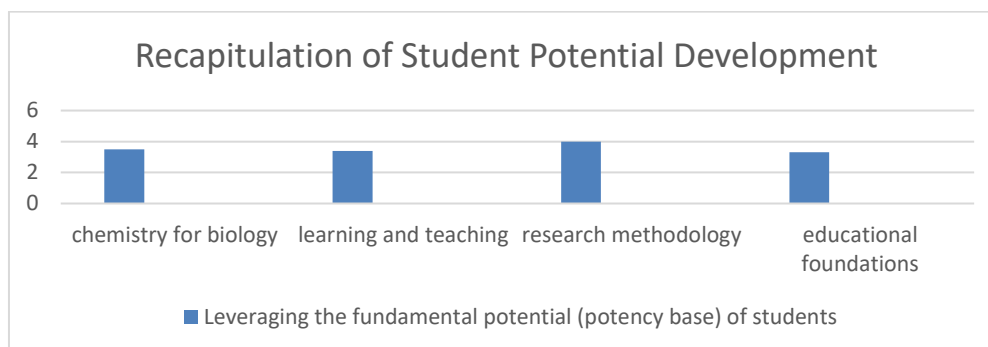
Measuring the Development of Student Learning Experience Potential (Improving Student Experience)

Research results indicate that basic potential, belief potential, basic strength potential, and loyalty potential of students have not become an improving student experience for them. Improving student experience is a crucial aspect in shaping the student mindset. When associated with earlier findings, where the focus is on grades, GPA, and the number of credit hours for course completion, for students, the learning process does not impact self-confidence improvement. The low levels of basic potential, belief potential, basic strength potential, and loyalty potential in students are the causes of improving student experience being less meaningful for students, and vice versa. Further, the thoughts built during the learning process from the four steps culminating in the dimension of improving student experience impact the habits that build academic culture and the development of student and lecturer potential.

DISCUSSION

Potential Work Mindset of Students for Each Student Group

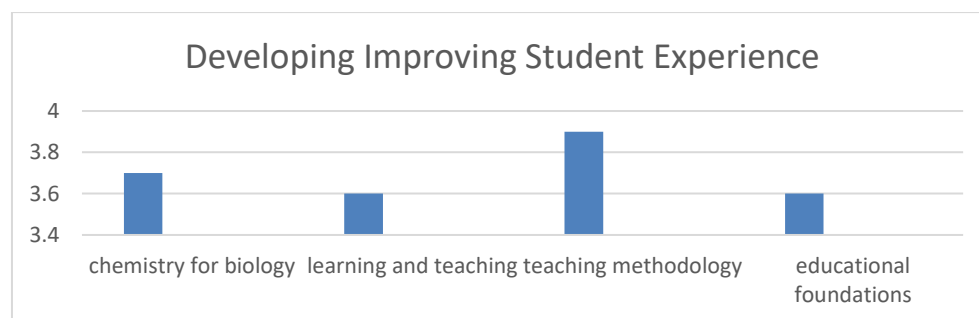
Overall, the implementation of student-centered learning strategies aimed at improving learning experiences, academic autonomy, and work mindset can develop students' basic potential.



The basic potential of students, in general, is built by employing student-centered learning strategies. This means that the information provided by the lecturer at the beginning, followed by student collaboration, exploration, competition, creativity, and creative exercises, is sufficient to develop basic student potential. This includes self-awareness for learning, awareness of one's abilities, self-discipline in the face of difficulties, patience in carrying out tasks collaboratively, the courage to try, resilience in the face of challenges, a desire to progress, collaborative skills, responsibility, leadership, information-seeking skills (searching, choosing, utilizing, managing, and storing), self-development skills, and the ability to interact socially with fellow students. All these basic student potentials are encompassed within academic autonomy and the work mindset of students.

Potential for Improving Student Learning Experience for Each Student Group

The research results indicate that upper-level students are more capable of utilizing the learning experience potential within themselves to engage in beneficial learning experiences. The Research Methodology course in their fifth semester is more active, and their potentials are more developed compared to lower-level students. Upper-level students (third and fifth semesters) prioritize logic and academic interests over feelings of certainty and being active in their activities. This is crucial because the teaching strategy is found to be more effective for upper-level students compared to their lower-level counterparts. This implies that this strategy influences the development of student loyalty potential that can enhance other potentials if learning is centered on student involvement as a social potential strength in education. The potential for improving the learning experience is demonstrated through responsible activities, commitment to all learning process activities, maintaining self-success, and having trust in one's honesty and that of peers to implement the vision and goals of the lectures. All these aspects become valuable experiences for students.



Potential for Improving Academic Autonomy for Each Student Group

Academic autonomy is a key element in shaping students' success in the era of Society 5.0. The challenge lies in providing adequate support and guidance so that students can manage their time, formulate personal academic goals, and develop independent skills. Student work mindsets indicate that the implementation of student-centered learning strategies should accelerate changes in students' mindsets according to the demands of Society 5.0. This includes the development of creative, collaborative, and adaptive attitudes towards change. The challenge here is how to create a learning situation that allows students to recognize values such as innovation, leadership, and entrepreneurship as an integral part of their personal and professional development.

Students understand the ideal norms, such as the support system indicating that success is supported by both internal and external support systems. This support system can include family, friends, mentors, or work environments that provide support and motivation to achieve goals. Classmates indicate that classmates can hinder success by undermining someone's mentality. This shows that the social environment can influence an individual's success, both positively and negatively. Mental bankruptcy indicates that classmates can influence someone's mentality with words or actions that degrade. This can hinder someone's ability to achieve goals and attain success. Overall, the statement suggests that success is supported by both internal and external support

systems, but classmates can hinder success by undermining someone's mentality. Therefore, it is important to choose a positive and supportive social environment to achieve success.

CONCLUSION

The implementation of student-centered learning strategies facilitates students to take an active role in their learning processes. This encourages the development of academic autonomy, including the ability to understand, manage, and evaluate their own learning processes. Consequently, students become more independent in managing their time, resources, and learning strategies.

Student-centered learning strategies pay attention to the unique potentials possessed by each student. Through this approach, students can more effectively harness their potentials and talents. This can help them discover areas of interest, expertise, and contributions they can make in academic and professional environments.

The application of student-centered learning strategies helps shape a more proactive and creative work mindset. Students become more open to change, innovative, and capable of adapting to the dynamics of the Society 5.0 era. This has a positive impact on their readiness to face complex challenges in the modern workplace and society.

By empowering students' potentials and developing academic autonomy, this research makes a significant contribution to embracing the Society 5.0 era. Students with enhanced learning experiences and good academic autonomy will become human resources capable of adapting quickly and contributing to a society driven by technology and knowledge. Thus, this research helps shape a smarter, sustainable, and humane society.

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