

Academic Resilience of Mathematics Education Students in Outcome-Based Education at PTKI through Ivan Illich's Perspective

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Abstrak

The implementation of Outcome-Based Education (OBE) in Islamic Higher Education Institutions (PTKI) has commodified learning and increased academic pressure. This study explores how the Mathematics Education students develop academic resilience amid these challenges, analyzed through Ivan Illich's perspectives on institutionalization and conviviality. Using a qualitative case study approach, data were gathered from 4 Mathematics Education students in the 5th and 7th semesters at one of the PTKI through in-depth interviews, observation, and document analysis. Data were analyzed using a thematic model involving data familiarization, initial code generation, theme searching, theme review, theme definition and naming, and final report production. The findings indicate that, ontologically, students feel alienated from the essence of mathematics itself; epistemologically, they turned learning into instrumental task completion, and axiologically shifted the value of knowledge from *ilmu nafi* to credential pursuit. Students demonstrate resilience through three strategies: 1) spiritual grounding and meaning-making, 2) peer convivial learning networks, and 3) critical resistance to excessive institutional demands. This study concludes that while OBE institutionalizes and dehumanizes learning, students' resilience emerges when they reclaim autonomy and communal values aligned with Illich's concept of convivial tools. The implication is the need to reconstruct OBE in PTKI by integrating Islamic educational values and convivial principles to foster more humane and sustainable academic resilience.

Keywords: Academic Resilience; Islamic Value; Ivan Illich; Mathematics Education Students; Outcome-Based Education.

How to cite: Eline Yanty Putri Nasution, & Rukiyati. (2026). Academic Resilience of Mathematics Education Students in Outcome-Based Education at PTKI through Ivan Illich's Perspective. *Journal of School Mathematics Learning Research*, 10(2), 111–122. <https://doi.org/10.21009/jrpms.102.10>

Received: 06 September 2026 | Revised: 12 September 2026
Accepted: 13 September 2026 | Published: 24 September 2026



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INTRODUCTION

The implementation of the Outcome-Based Education (OBE) curriculum and the mandate for science-Islam integration in Islamic Higher Education Institutions (PTKI) have significantly transformed the learning culture of students. In the Mathematics Education Study Program, this transition has led to a substantial increase in academic workload (Venkatesh & King, 2021). Students are now required to complete dense pure mathematics assignments involving abstract proof, such as Calculus, Abstract Algebra, and Real Analysis, alongside pedagogical tasks and Islamic studies courses. Paradoxically, this increase in assignment volume is not matched by enough time to complete them (Walkington et al., 2019).

This massive workload and time constraint gradually erode students' academic resilience, defined as the psychological capacity to withstand and recover from academic pressure. Resilience refers to a psychological trait that enables individuals to achieve success despite hardship, reflecting a valuable human capacity to recover from adversity and beat the odds (Cassidy, 2016). Empirical indications from the field show rising levels of student burnout and anxiety (Leiter & Maslach, 2024). Instead of learning to cultivate transcendental contemplation (*tafakkur*) (Zainal & Ansar, 2022), students are compelled to study merely to meet administrative obligations by submitting assignments on time to secure formal grades (GPA). Consequently, mathematics, which should foster independent reasoning, has been reduced to a mechanical routine that depletes psychological energy and diminishes students' adaptive capacity (Deci & Ryan, 2000).

This phenomenon is especially relevant through the lens of Ivan Illich, a prominent critic of modern educational institutions. Ivan Illich (1926-2002) was a radical philosopher and social critic who challenged modern educational systems by asserting that most learning is not the result of instruction. It is rather the result of unhampered participation in a meaningful setting. Ivan Illich is In Deschooling Society and Tools for Conviviality, Illich contends that institutions overly focused on bureaucracy and formal procedures become manipulative (Illich, 1971; Illich, 1973). His perspective is that educational institutions undermine human autonomy and damage natural abilities by monopolizing individuals' time for administrative output (Carpenter, 2020; Husna & Mundiri, 2023).

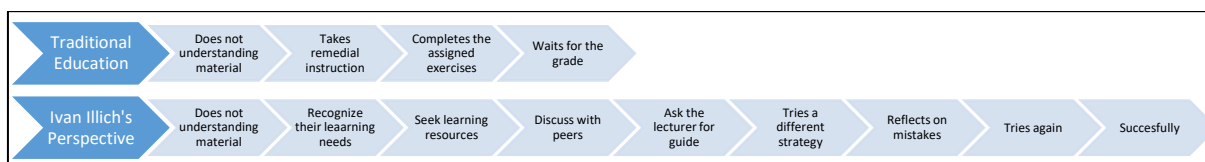


Figure 1. An Illichian's Perspective on Learning Patterns

The two learning patterns illustrate contrasting approaches to dealing with academic difficulties among mathematics education students. The first pattern reflects a passive and institution-dependent approach, in which students who do not understand the material tend to wait for the lecturer, rely on remedial instruction, complete assigned exercises, and ultimately wait for their grades. In contrast, the second pattern represents a self-directed and resilient learning approach, in which students recognize their own learning needs, seek various learning resources, collaborate with peers, consult lecturers or mentors, try alternative strategies, reflect on their mistakes, and persist until they recover from difficulties. From Ivan Illich's perspective, the second pattern is more consistent with the idea of learning autonomy and learning beyond institutional dependence, while from the perspective of academic resilience, it demonstrates students' capacity to adapt, persist, reflect, and bounce back from academic challenges (Rukiyati & Purwastuti, 2018).

Within the context of PTKI, the accumulation of assignments resulting from a rigid curriculum can be seen as a concrete manifestation of what Illich described as the exploitation of students' autonomous time. Students lose the space to pursue the essence of beneficial knowledge (*ilmi nafi*) (Lahmi et al., 2025), that indicate the poor academic resilience. Resilient students can grow their mathematical understanding (Johnston-Wilder & Lee, 2024). Furthermore, academic resilience is found to be influenced by psychological factors (Xenofontos & Mouroutsou, 2023).

Previous studies have examined academic resilience, Outcome-Based Education (OBE), and Ivan Illich's educational thought from different perspectives, but these strands of research have largely developed separately. Research on academic resilience among university students has generally focused on individual, psychological, and demographic factors. Latif and Amirullah (2020), for example, examined differences in students' academic resilience based on gender and cohort, while Kumalasari and Akmal (2021) demonstrated the moderating role of academic resilience in the relationship between academic stress and satisfaction with online learning. More recent studies have extended this discussion to Islamic educational contexts. Julaihah et al. (2024) examined psychosocial and religious aspects of academic resilience among undergraduate students, while Ma'ruf and Juhaidi (2025) investigated resilience as a mediator of academic performance among students in Islamic and general higher education. In Mathematics Education, recent research has also examined mathematical resilience in relation to lecturer support, classroom environment, and students' psychological characteristics. These studies establish the importance of resilience in responding to academic challenges, but predominantly conceptualize resilience as an individual or psychosocial construct rather than examining how students interpret the institutional conditions in which such challenges emerge.

Research on OBE has likewise documented both its potential benefits and implementation challenges. Studies in Indonesian higher education have reported challenges related to lecturers' workload, understanding of OBE, curriculum design, assessment, and the development of measurable learning outcomes. Administrative burden in universities was identified by Woelert (2023). Other studies have examined students' perceptions of OBE, including a phenomenological study of Master's students in Arabic Language Education that identified positive learning experiences alongside students' needs for direct practice, interaction, feedback, learning resources, and more personalized support. Research on OBE has therefore begun to consider students' experiences; however, these studies have primarily evaluated the implementation, effectiveness, or perceptions of OBE rather than examining how students make sense of academic demands, the meaning of learning, and their responses to academic difficulties through a critical philosophical perspective.

Ivan Illich's critique provides another important strand of scholarship. Previous studies have discussed Illich's ideas in relation to Islamic education and Islamic higher education. Eviyana et al. (2020) use Ivan Illich's arguments about a good education system to improve the quality of Madrasah. Halidin (2023) used Ivan Illich's educational policy values to design critical learning at PTKI through differentiated learning and mobile learning resources to produce graduates in the form of driving teachers. Few have specifically addressed the commodification of learning among educational students in PTKI. Rabi et al. (2020) addressed de-commodification in preschool education. Akbari (2024) uses storytelling for conviviality in Islamic religious education. Abdushomad (2014) examined Illich's educational thought in considering the development of Islamic higher education, while Muthohar et al. (2021) discussed Illich's progressive educational ideas from the perspective of Islamic educational philosophy. More recent work has also examined the concept of deschooling in Islamic education by comparing Illich with Ki Hajar Dewantara. These studies demonstrate that Illich's critique is relevant to discussions of Islamic education; nevertheless, they are primarily philosophical, conceptual, or literature-based and do not empirically explore how students in a PTKI experience contemporary curriculum demands within an OBE-oriented learning environment.

A further relevant development is the emergence of research connecting Islamic educational approaches with academic resilience. For example, Harahap et al. (2025) developed an Islamic counseling model using bibliotherapy to improve academic resilience among Mathematics Education students at an Islamic university. This study is particularly relevant to the present research because it demonstrates the intersection between Islamic educational intervention, Mathematics Education, and academic resilience. However, its focus is on developing and testing an intervention, rather than exploring students' lived experiences of academic demands or critically examining the institutional organization of learning.

Taken together, the literature suggests a gap at the intersection of these perspectives. Existing studies have examined academic resilience as a psychological capacity, OBE as a curriculum and implementation framework, and Ivan Illich as a philosophical critic of institutionalized education. However, limited attention has been given to how students in an Islamic higher education institution, particularly Mathematics Education students in a PTKI, experience and interpret academic demands

within an OBE-oriented environment and how these experiences may be critically understood through Illich's perspective. The present study addresses this intersection through a qualitative case study of four Mathematics Education students. Rather than evaluating OBE as inherently harmful or determining students' level of academic resilience statistically, the study explores students' reported experiences of academic demands, the perceived meaning and value of mathematics, task and credential oriented learning, and responses to academic difficulties.

The novelty of the study therefore lies in its interpretive integration of four perspectives: student academic resilience, OBE-related academic experience, and Ivan Illich's critique of institutionalized learning within the specific context of Mathematics Education in a PTKI. The study further brings Islamic educational values such as *ilmi nafi*, *tafakkur*, and *tawazun* into the discussion as normative resources for reflecting on meaningful, reflective, autonomous, and balanced learning. These values are not treated as empirically measured variables, but as an Islamic philosophical orientation for interpreting the implications of the findings.

This study aims to explore the forms of academic workload and the dynamics of assignment completion time experienced by Mathematics Education students following the implementation of the new OBE curriculum, and to analyze how they maintain academic resilience amid the pressure of massive assignments. Furthermore, by employing Ivan Illich's critical framework, this study seeks to deconstruct how educational institutions may exploit students' autonomous time and shift the meaning of learning into mere commodification of formal grades. Therefore, this research is important as it provides empirical insights into students' subjective experiences and offers recommendations for creating a more humane learning environment in Islamic Higher Education Institutions (PTKI).

METHOD

This study employs a qualitative approach with a case study design to explore the subjective experiences of Mathematics Education students regarding the decline of academic resilience. A case study was chosen because it allows an in-depth investigation of a phenomenon within its real-life context, particularly how students respond to academic pressure resulting from curriculum changes. Participants were selected using purposive sampling based on several criteria. The criteria included active students of the Mathematics Education Study Program in one of the PTKI in their final years, specifically those in the 5th (P1, P2) and 7th (P3, P4) semesters, who had directly experienced the impact of the new curriculum transition. In addition, participants were required to show indications of academic burnout or decreased endurance resulting from heavy academic workloads, as identified through the researcher's initial observations. A total of 4 students were chosen to allow for in-depth exploration while maintaining manageability in qualitative data analysis. All selected participants were willing to take part in in-depth interviews and had given their informed consent prior to data collection.

This study uses Ivan Illich's (1971, 1973) critical framework to analyze educational practices. Illich argues that modern institutions tend to institutionalize learning, commodify knowledge, and exploit learners' time. According to Illich, when education becomes a formal institution, it transforms from a process of growth into a system of control that measures success through grades and credentials rather than meaningful understanding. This framework is used to deconstruct how curriculum policies and academic workload affect students' autonomy and resilience.

TABLE 1. Ivan Illich's Educational Critical Framework

Modern Educational System	
Institutionalization of Learning	Commodification Of Education
Learning only in formal institutions	Knowledge = Grades, Credits, Diploma
Student time controlled by institution	Focus on scores, not understanding
Dependence on teachers & curriculum	Hidden Curriculum: Obedience > Critical Thinking
Loss of learner autonomy	Learning becomes a product to consume

Data were collected through semi-structured in-depth interviews and field observations. The interview guide focused on four main themes: academic workload and time management, perceptions

of curriculum change, academic resilience strategies, and the meaning of learning in relation to Ivan Illich's critique. Each interview lasted approximately 30-45 minutes and was audio-recorded with participants' permission, then transcribed verbatim.

The data obtained from interviews and field observations were analyzed using thematic analysis. The analysis followed the six-stage framework by Braun and Clarke (2019), which involved data familiarization, initial code generation, searching for themes, reviewing themes, defining and naming themes, and producing the final report. The process began with transcribing all audio recordings of the interviews into written text to ensure accuracy. Next, the transcripts were read repeatedly to identify keywords and phrases that reflected students' experiences with academic workload and resilience, such as tight deadlines, constant curriculum change, and assignments causing stress. These initial codes were then grouped and categorized into broader themes, including Fragility of Academic Resilience and Time Exploitation by Curriculum. In the final stage, the emerging themes were interpreted theoretically by connecting them to Ivan Illich's critical concepts of institutional time exploitation and the commodification of education, as well as to the Islamic concept of beneficial knowledge (*ilmi nafi*). This analytical process aimed to provide a deeper understanding of how curriculum pressure affects students' resilience and the meaning of learning (Asbari & Nurhayati, 2024).

To ensure credibility, this study applied source triangulation by comparing data from interviews and observations, member checking by returning transcripts to participants for validation, and maintaining an audit trail of the coding process. This methodological design enables the study to present a critical and contextual understanding of how institutional pressure affects students' academic resilience and the meaning of learning.

RESULTS AND DISCUSSION

The study explores how heavy academic workload and tight deadlines contribute to the fragility of students' academic resilience. The data revealed students' perceived experiences of alienation, instrumental learning, and changing perceptions of the value of knowledge, which are summarized in Table 2:

TABLE 2. Students' Perceived Experiences Based on In-Depth Interview

Dimension	Student Experience	Emerging Interpretation
Ontological	Mathematics is perceived as losing its meaning and beauty	Feeling alienated from mathematics
Epistemological	Learning is perceived as focused on completing tasks and meeting academic requirements	Instrumental learning
Axiological	Knowledge is perceived as increasingly associated with grades and academic credentials	Credential-oriented values
Consequence	Students report exhaustion, frustration, and thoughts of quitting	Academic strain

These findings should be understood as students' subjective experiences rather than as evidence that OBE or institutional requirements inherently cause alienation. Taken together, these experiences suggest a form of academic strain, reflected in students' feelings of exhaustion, frustration, and disengagement, rather than constituting evidence of clinical or formally assessed burnout.

Classroom observations indicated a noticeable change in students' visible engagement as the instructional day progressed. At approximately 11:30 a.m., several students appeared less energetic, with some showing signs of fatigue, reduced attentiveness, and sleepiness. One student was observed consuming a snack during the class after reporting that they had not had sufficient time for breakfast. These observations occurred within a relatively intensive academic schedule: the students attended 10 credit hours across five courses in one day and continued their classes until approximately 4:30 p.m.

The observations therefore indicate that students experienced a combination of academic and physical demands during the instructional day. The observed signs such as reduced alertness, tired

appearance, and occasional eating during class represent observable conditions rather than evidence of students' academic resilience levels. In this study, these conditions are treated as contextual challenges that may require students to regulate their learning and engagement, rather than as direct indicators of low academic resilience.

The findings from classroom observations and interviews showed a convergence between students' observable learning conditions and their reported academic experiences. During the later part of the morning, several students displayed visible signs of fatigue, reduced energy, and sleepiness. This occurred in the context of an intensive academic schedule involving 10 credit hours across five courses, with classes continuing until the afternoon. The interview data extended these observations by revealing deeper dimensions of students' experiences. Students reported that mathematics was increasingly perceived as losing its meaning and beauty, accompanied by feelings of alienation. They further described learning as oriented toward completing tasks and fulfilling academic requirements, while knowledge was increasingly associated with grades and credentials. These perceptions were accompanied by exhaustion, frustration, and, for some students, thoughts of quitting. Thus, the observational and interview data jointly depict an academic context in which students experienced physical fatigue, reduced classroom engagement, instrumental orientations toward learning, and academic strain. Importantly, these findings describe students' experiences and the challenges they encountered; they do not, by themselves, establish the level or causes of students' academic resilience.

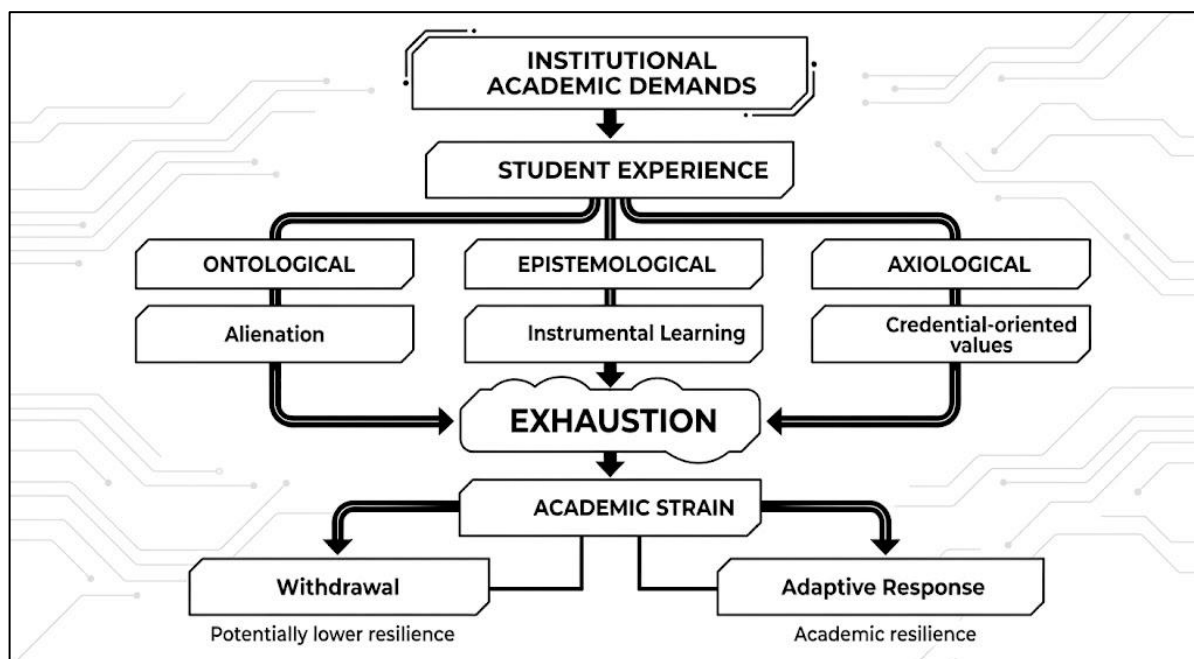


Figure 2. The Student's Academic Resilience Flowchart

The findings indicate that, ontologically, students feel alienated from the essence of mathematics itself, epistemologically turned learning into an instrumental task completion; and axiologically shifted the value of knowledge from *ilm nafi* to credential pursuit. Mathematics, which should be understood as a tool for thinking and understanding Allah's creation, has transformed into a set of formulas that must be memorized to fulfill the Course Learning Outcomes (CLOs). P2 students in the 5th semester said that: "I used to love mathematics because it was beautiful. Now it feels like my enemy. What matters is finishing the assignment quickly and getting an A". This condition aligns with Illich's critique of institutionalization, which separates humans from authentic learning experiences.

Epistemologically, the learning process has become instrumental. Students no longer ask "why" and "how," but only "what must be submitted this week." 24 hours of student time are commodified into portfolios, worksheets, and learning videos. P4 Students in the 7th Semester said that: "In one day we can have 3 deadlines. We don't study to understand; we study just to make sure all the OBE checklists

are ticked". Students' autonomous time is seized by the system, leaving no space for convivial learning or free communal study (Illich, 1973).

Axiologically, the value of knowledge has shifted. The main goal is no longer to seek beneficial knowledge *ilmi nafi* for the ummah, but to pursue GPA, certificates, and on-time graduation. P1 Students in the 5th semester said that: "If my grades aren't good, my scholarship can be revoked. So whether we like it or not, we chase grades, not the blessing of the knowledge". Unknowingly, the university has turned students into grade producers rather than seekers of wisdom (Illich, 1971).

These three experiences and conditions lead to aspects resembling academic burnout. The academic burnout symptoms appear as emotional exhaustion, cynicism toward lecturers and courses, and decreased self-efficacy in solving mathematics problems (Leiter & Maslach, 2024). P3 students in the 7th semester said that "I'm exhausted. I feel like quitting. The mathematics I once loved now makes me cry". Students themselves should build peer learning webs and reconstruct their learning intentions as *talab al- 'ilm* to strengthen resilience and restore the meaning of education (Kareem, 2026).

Discussion

Overall, the findings of this study indicate that academic workload and rapid curriculum changes have undermined students' resilience and shifted the meaning of learning. The pressure to meet institutional targets has led to time exploitation, emotional fatigue, and a loss of intrinsic motivation. Using Illich's critical framework, this study argues that education should return to its humanistic essence: a convivial tool that empowers learners, respects their autonomy, and values the learning process over the final product. Institutions need to be aware that excessive control over students' time and learning outcomes can lead to alienation from the true purpose of education. Therefore, it is important for Islamic Higher Education Institutions (PTKI) to redesign the curriculum by considering students' workload, providing adequate psychological support, and restoring the meaning of learning as a process of intellectual and spiritual growth rather than mere achievement. Martono et al. (2022) stated that optimism, self-efficacy, and motivation for goal achievement have a positive nexus with academic resilience in the students of higher education in Indonesia. Moreover, resilience is one dimension of the growth mindset scale (Saefudin et al. 2023). Therefore, every student should possess academic resilience to face the academic burden.

To gain the academic resilience of Mathematics education students, this study employs a philosophical analysis based on Ivan Illich's concept of institutionalization and conviviality for a deeper understanding of the commodification of learning experienced. We examine the commodification of learning, where the meaning of education shifts from understanding to merely fulfilling institutional requirements. The discussion integrates these findings with Illich's critique and Islamic educational values to reflect on how institutions can create a more humane learning environment. Through this analysis, the study aims to provide a critical understanding of how curriculum policy and academic pressure affect students' endurance and the essence of learning in Islamic Higher Education Institutions (PTKI).

The Fragility of Academic Resilience

The findings revealed that the implementation of the new OBE curriculum has created a significant academic burden for the Mathematics education students. Participants consistently reported that the number of assignments increased sharply and deadlines became increasingly tight. One student stated: "We have assignments from almost every course every week. It feels like we don't have time to rest." Another participant added: "The curriculum keeps changing, so we are always adjusting. It's exhausting." These statements indicate that students' academic resilience is fragile when confronted with continuous pressure. Although some students attempted to cope through time management and peer support, many admitted to experiencing burnout, anxiety, and a decline in motivation to learn. This finding supports previous research arguing that academic resilience is not a fixed trait, but a capacity that excessive institutional demands can weaken (Deci & Ryan, 2000; Leiter & Maslach, 2024). From Ivan Illich's perspective, this situation reflects the process of institutionalization of learning. Schools and universities, which should serve as spaces for autonomous learning, have instead become

systems that exploit students' time. Illich argued that modern education often turns learning into a commodity measured by grades and credits rather than meaningful understanding. In this context, students' time is no longer their own, but is colonized by institutional requirements (Carpenter, 2020).

The implementation of the new curriculum, such as Outcome-Based Education (OBE), in PTKI has triggered a surge in students' academic workload. Students are trapped in a cycle of many assignments and little time due to administrative demands for accreditation documentation (Spady, 1994). This condition is exacerbated by the overlap between abstract pure mathematics assignments and pedagogical as well as Islamic courses, without linear coordination among lecturers.

The findings of this study show that the institutionalization and commodification of education have direct consequences on students' well-being. When learning time is fully controlled by institutional demands and when the purpose of education is reduced to achieving grades, students lose both autonomy and meaning in their learning process. This condition creates academic fragility, emotional exhaustion, and a shift in motivation from intrinsic curiosity to mere compliance.

In response to these problems, Ivan Illich (1973) proposes the concept of convivial tools as an alternative direction for education. Conviviality refers to educational practices and institutional structures that empower individuals, respect learners' autonomy, and restore the humanistic purpose of education. Rather than controlling students, the institution should serve as a space that facilitates self-directed learning and genuine intellectual growth.

TABLE 3. Convivial Tools as The Solution

Autonomy in Learning	Education for Growth
Self-directed learning	Process > Product
Learning webs & communities	'Ilm Nafi': Beneficial Knowledge
Respect for learners' time	Humanistic & Liberating

This idea aligns with the Islamic concept of *ilmi nafi* or beneficial knowledge, which emphasizes that learning should not only produce academic outputs, but also nurture the intellect, character, and spiritual growth of students (Anggraini & Bakti, (2026). In the context of PTKI, education should therefore move beyond institutional targets and return to its essence as a process that benefits both the individual and society. Rather than controlling students, the institution should serve as a space that facilitates self-directed learning, critical reflection, and genuine intellectual growth grounded in Islamic values.

Commodification of Learning and Loss of Meaning

The second theme that emerged was the commodification of learning. Many participants felt that learning was reduced to completing tasks in order to obtain grades, rather than pursuing genuine understanding. "We study just to pass, not to understand. As long as we submit the assignment, it's fine," said one participant. This reflects what Illich called the hidden curriculum, where the goal of education shifts from cultivating critical thinking to producing measurable outputs (Husna & Mundiri, 2023).

In addition, frequent curriculum changes without adequate socialization increased students' uncertainty and anxiety. Students felt that they were treated as objects of policy rather than subjects of learning. This condition contradicts the Islamic concept of beneficial knowledge *ilmi nafi*, which emphasizes that learning should bring benefit to both the individual and society, not merely serve institutional targets (Zainal & Ansar, 2022).

The massive and rigid assignment pressure has significantly undermined students' academic resilience. Students experience burnout, math anxiety, and a loss of intrinsic motivation. Students' survival strategies have shifted into a pragmatic and mechanical approach: attending lectures and studying mathematics is no longer driven by the desire to understand knowledge, but merely to "fulfill assignment obligations" for formal graduation and GPA scores.

The commodification of learning occurs when education is reduced to measurable outputs such as grades and credits, causing students to lose the intrinsic meaning of learning. Table 3 presents the key

problems identified in this study along with alternative solutions based on Illich's concept of convivial tools and Islamic educational values. By shifting from product-oriented to process-oriented education, PTKI can restore the humanistic and spiritual essence of learning.

TABLE 4. Framework for De-commodifying Learning

Problem: Commodification of Learning	Student Manifestation	Convivial Solution	Islamic Value Integration
Learning for Grades	"We study just to pass, not to understand"	Assessment for Learning: Portfolio, reflection journal, project-based	<i>Tadabbur & Tafakkur</i> : Learning to understand and contemplate
Knowledge as Product	Assignments done only to meet deadlines	Learning Webs: Peer teaching, study community, open discussion	<i>Ta'awun</i> : Cooperation in seeking knowledge
Loss of Meaning	Motivation drops after submitting tasks	Restoring Purpose: Link content to real-life problems and community benefit	<i>Ilmi Nafi</i> : Knowledge beneficial for self and society
Time Exploitation	No time for deep learning due to excessive tasks	Autonomy in Time: Reduce redundant assignments, flexible deadlines	<i>Tawazun</i> : Balance between academic, spiritual, and personal life
Hidden Curriculum: Obedience	Students fear to ask questions or critique	Dialogue & Critique: Class as majelis ilmu, lecturer as facilitator	<i>Ukhuwah Ilmiah</i> : Academic brotherhood and mutual respect

Table 4 is the solution framework developed by the author based on interview data from the Mathematics education students and Ivan Illich's (1973) concept of convivial tools. Illich argues that "risk" has become a disembodied force because it is treated as a strictly mathematical concept. When risk is transformed into numbers, percentages, and curves, it erases the lived, embodied experiences of real people. Risk is no longer about a student's actual exhaustion, fear, or context, but about an abstract statistical projection (Cayley, 2020). Islamic character should be integrated into Islamic Higher Education Institutions in Indonesia (PTKI) (Hanif et al., 2024) to align with the vision and mission. Therefore, Islamic values, such as *ilmi nafi* and *tawazun*, were integrated into the framework for de-commodifying learning as a solution to research problems.

The findings of this study regarding commodification and loss of meaning are in line with previous research in the Indonesian context. Nugroho et al. (2025) found that academic exhaustion negatively correlates with students' writing performance at UIN Mataram, supporting the claim that burnout impairs learning quality. Furthermore, Muzakir (2023) highlighted that OBE implementation in PTKI faces challenges such as paradigm shifting and assessment restructuring, which may increase academic pressure on students. At the school level, research in Islamic Counseling (Malik, 2026) also reported that excessive workload and rigid teaching cause student boredom and burnout. However, this study contributes a new perspective by proposing convivial solutions integrated with Islamic values such as *Ilmi Nafi* and *Tawazun* to address these issues within the OBE framework in PTKI.

CONCLUSION

Conclusion

Based on the findings of this case study, four main aspects characterize the academic experiences of the participating Mathematics Education students in a PTKI context: (1) perceived academic demands associated with curriculum and course requirements, (2) challenges in responding to academic difficulties, (3) an increasingly instrumental orientation toward mathematical learning, and (4) concerns about the meaning and value of learning. From an ontological perspective, the participants described experiences

in which mathematics was sometimes perceived as losing its meaning and beauty, accompanied by feelings of distance or alienation from mathematics. Epistemologically, their accounts indicated that learning was often experienced as oriented toward completing assignments and meeting academic requirements. Axiologically, some participants associated knowledge increasingly with grades and academic credentials. These experiences were accompanied by feelings of tiredness, frustration, and, in some accounts, thoughts of discontinuing their studies.

The study contributes to the discussion of mathematics education in Islamic higher education by bringing together Illich's critique of institutionalized learning, students' academic experiences, academic resilience, and Islamic educational values. The findings suggest the importance of learning environments that balance curriculum and assessment requirements with opportunities for meaningful mathematical engagement, learner autonomy, reflection, social interaction, and students' well-being. Such an orientation is consistent with the values of *ilmi nafi*, *tafakkur*, and *tawazun*, while also responding to Illich's concern about excessive institutionalization of learning. However, these implications remain bounded by the scope of the present case study. The study involved only four Mathematics Education students in one PTKI and therefore does not aim to generalize their experiences to other students, programs, or institutions. Further research involving more diverse participants and perspectives, including lecturers and institutional policymakers, is needed to examine how curriculum implementation, learning environments, learner autonomy, and Islamic educational values may interact with students' academic experiences and resilience.

Suggestions

Based on the limitations of this study, several suggestions for future research can be proposed. First, subsequent studies should expand the scope by involving Mathematics education students from multiple PTKI across different regions in Indonesia to examine whether the phenomenon of commodification and loss of meaning occurs more broadly. Second, future research is encouraged to employ a mixed-methods approach to not only explore students' experiences in depth but also to quantify the relationship between OBE workload, academic burnout, and learning outcomes. Third, it is important to include the perspectives of lecturers, curriculum developers, and institutional leaders to understand how accreditation demands are negotiated and how policy can be reformed to support both academic quality and student well-being. Lastly, intervention studies could be conducted to test the effectiveness of convivial solutions, such as integrated assignment calendars and peer learning webs, in reducing academic pressure and restoring the value of *ilm nafi* within the OBE framework in PTKI.

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