Self-Regulated Learning in Flexible Learning Modalities: A Constructivist Analysis of Student Autonomy, Accountability, and Independent Learning Experiences

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Abstract

This study examines students' lived experiences in Flexible Learning Modalities (FLMs) through a constructivist lens, focusing on how learners negotiate autonomy, motivation, emotional well-being, and access to learning resources in digitally mediated environments. Grounded in Constructivist Theory, the research conceptualizes learning as an active process shaped by individual agency and socio-structural conditions. A qualitative research design was employed, utilizing focus group discussions and semi-structured interviews with higher education students who experienced flexible learning during pandemic and post-pandemic transitions. Data were analyzed using thematic analysis to identify recurring patterns in student experiences.

Findings reveal five interrelated themes: (1) autonomy and accountability in self-regulated learning, (2) transition challenges in adapting to digital learning environments, (3) motivation, engagement, and personal growth, (4) social isolation and emotional well-being, and (5) institutional strategy, accessibility, and policy support. Results indicate that FLMs fostered self-regulated learning, digital adaptability, and resilience; however, these gains were uneven due to persistent structural and digital inequities. Students reported difficulties in maintaining motivation, managing emotional strain, and sustaining engagement in the absence of stable institutional and technological support. Despite these challenges, learners demonstrated adaptive strategies such as goal-setting, peer collaboration, and self-directed problem-solving.

The study concludes that while FLMs enhance learner autonomy and flexibility, their effectiveness is contingent upon equitable access to digital infrastructure and robust institutional support systems. Strengthening policy frameworks is essential to mitigate disparities and ensure inclusive and sustainable flexible learning environments.

Keywords: Flexible Learning Modalities, self-regulated learning, constructivism, student experiences, digital divide, higher education, qualitative research, educational equity

1. Introduction

Flexible Learning Modalities (FLMs) have emerged as a major educational response to disruptions in traditional classroom instruction, particularly during the COVID-19 pandemic and subsequent shifts toward digital and blended education systems. These modalities require learners to assume greater responsibility for managing their learning processes, including time management, task completion, and engagement with digital platforms. In this context, students are expected to demonstrate autonomy, accountability, and self-regulated learning behaviors while navigating technology-mediated environments. This shift aligns with Sustainable Development Goal (SDG) 4: Quality Education, which emphasizes inclusive, equitable, and accessible learning opportunities for all learners regardless of socio-economic background or learning conditions.

However, while FLMs promote flexibility and continuity in education, they also introduce significant challenges related to students' readiness, access to learning resources, emotional well-being, and institutional support systems. Many students struggle with the transition from structured face-to-face instruction to self-directed learning environments, particularly in the absence of direct supervision and consistent academic scaffolding. These challenges raise critical concerns about how students develop autonomy and accountability, how they adjust to self-regulated learning demands, how motivation and engagement are sustained, how emotional and social well-being is affected, and how institutional systems support or hinder access to learning.

In response to these concerns, this study specifically investigates: how students develop autonomy and accountability in self-regulated learning within flexible learning modalities; what challenges they encounter in transitioning to self-regulated learning environments; how they maintain motivation, engagement, and personal growth; how flexible learning affects their social interaction and emotional well-being; and how institutional, technological, and policy-related factors influence their access to flexible learning. Despite the growing body of literature on online and flexible learning, there remains a gap in understanding the lived, experiential construction of self-regulated learning within contexts marked by inequality in access to technology, varying institutional readiness, and differing socio-economic conditions. This study addresses this gap by exploring students' lived experiences as they navigate autonomy, transition challenges, motivation, emotional strain, and structural barriers within FLMs.

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2. Methodology

2.1 Research Design

This study employed a qualitative research design grounded in a constructivist paradigm. This design was deemed appropriate as it allows for an in-depth exploration of students' lived experiences in Flexible Learning Modalities (FLMs), emphasizing how learners construct meaning from their academic, technological, and social realities. Constructivism posits that knowledge is actively built through interaction with one's environment and experiences, making it suitable for examining how students adapt to self-regulated and technology-mediated learning contexts.

2.2 Research Locale

The study was conducted in Region VIII (Eastern Visayas), Philippines, specifically within selected State Universities and Colleges (SUCs) and Private Higher Education Institutions (PHEIs). The region was selected due to its diverse educational landscape, including institutions with varying levels of digital infrastructure, socioeconomic student backgrounds, and institutional support systems. This allowed for a rich comparison of flexible learning experiences across different academic environments.

2.3 Research Participants

The study involved twenty (20) bona fide college students enrolled during the Academic Year 2023–2024. Participants consisted of ten (10) students from SUCs and ten (10) from PHEIs. Purposive sampling was used to ensure that participants had direct experience with FLMs and could provide information-rich insights. Inclusion criteria required participants to be third-year college students and have experienced flexible learning modalities. Ethical consent was obtained, and participation was voluntary.

2.4 Research Instrument

The primary data collection instrument was a semi-structured interview guide. The guide consisted of open-ended questions designed to explore students' experiences in flexible learning, focusing on autonomy, motivation, emotional well-being, digital adaptation, and institutional support. Follow-up probing questions were used to gain deeper insights and clarify responses. Interviews were conducted via Google Meet, Zoom, or face-to-face depending on participant availability.

2.5 Data Gathering Procedure

Data collection began with securing permission from relevant institutions and obtaining informed consent from participants. Interviews were scheduled based on participant availability and conducted in a flexible modality. Each interview lasted approximately 25 to 45 minutes and was audio-recorded with permission. Recordings were transcribed verbatim and organized for thematic analysis. Participants were assured of confidentiality and anonymity throughout the process.

2.6 Data Analysis

The study utilized thematic analysis following Braun and Clarke's approach. Transcripts were read repeatedly to ensure familiarity with the data. Initial codes were generated, grouped into categories, and then refined into broader themes. This process resulted in five major themes reflecting students' experiences in FLMs: autonomy and accountability, transition challenges, motivation and growth, social isolation and well-being, and institutional support and accessibility.

2.7 Ethical Considerations

Ethical standards were strictly observed throughout the study. Informed consent was obtained from all participants prior to data collection. Participants were informed of the purpose of the study, their rights, and the voluntary nature of participation. Confidentiality and anonymity were ensured by assigning codes instead of real names. Participants were also informed that they could withdraw at any time without penalty.

2.8 Trustworthiness

To ensure trustworthiness, the study applied credibility, transferability, dependability, and confirmability. Credibility was ensured through member checking and prolonged engagement with data. Transferability was addressed through thick description of contexts and participant experiences. Dependability was maintained through systematic documentation of the research process, while confirmability was ensured by minimizing researcher bias through reflexive practices.

2.9 Reflexivity

The researcher acknowledged their role as an instrument in qualitative inquiry and reflected continuously on personal assumptions and biases throughout the research process. Reflexive journaling was used to monitor how interpretations were shaped by the researcher's perspective. This helped maintain neutrality and ensure that findings were grounded in participants' authentic experiences rather than researcher presuppositions.

3. Results and Discussion

This section presents the findings of the study derived from the qualitative data gathered through interviews and focus group discussions with students who experienced Flexible Learning Modalities (FLMs). The analysis revealed patterns that reflect how learners navigated academic responsibilities, technological challenges, emotional experiences, and institutional support within flexible learning environments. Using thematic analysis, the data were organized into five interrelated themes that capture the complexity of students' lived experiences in self-regulated and technology-mediated learning contexts.

Theme 1: Autonomy and Accountability in Self-Regulated Learning

Findings show that Flexible Learning Modalities (FLMs) require students to exercise a high level of autonomy and accountability in managing their learning tasks, time, and academic responsibilities. Students emphasized the importance of self-organization to avoid procrastination and maintain academic balance. As one participant stated, "Students should organize tasks to avoid procrastination, balancing studies with personal activities" (FGD-11). This highlights how autonomy in FLMs is strongly linked with self-management behaviors expected from learners (Dziuban et al., 2018),

However, the data also reveal that autonomy was not easily achieved by all students. Several participants reported difficulty adjusting to the absence of structured classroom environments. One student shared, "Without the in-person guidance from instructors, I had to find ways to keep myself accountable… it was a struggle at first" (SUC4, SS13). Similarly, another participant noted, "The hardest part was deciding when to start studying. Without fixed class times, it was easy to procrastinate until deadlines were near" (PHEI2, SS15). These responses indicate that the lack of external structure significantly affected students' ability to sustain self-regulated learning behaviors.

Despite these challenges, some students demonstrated gradual development of accountability through adaptive strategies. For instance, one participant explained, "I realized that I needed to set goals, even small ones, to keep moving forward" (SUC7, SS14). This reflects the emergence of self-regulation skills such as goal-setting and self-monitoring, which are central to Constructivist Theory, where learners actively construct their own learning strategies through experience and reflection (Vygotsky, 1978 cited in Corbett & Spinello, 2020)

Furthermore, the findings suggest that institutional support plays a moderating role in strengthening student autonomy. Participants expressed that structured learning guides and checklists could significantly improve accountability. As one student noted, "Our instructors provided study guides and checklists, which helped me plan my learning better" (PHEI5, SS16). This implies that while autonomy is essential in FLMs, it is most effective when supported by scaffolding mechanisms.

Thus, this findings align with Bandura's Social Cognitive Theory (1986, as cited in Malibari & Bajaba, 2022), which underscores the role of guided learning resources in developing self-efficacy. While selfregulation is a key component of successful learning, students benefit from structured guidance, especially during the transition to flexible learning modalities.

Theme 2: Transition Challenges in Shifting to Self-Regulated Learning

The transition from traditional classroom instruction to flexible, technology-mediated learning environments emerged as a critical adjustment phase for students. This shift required learners to navigate virtual learning spaces with minimal guidance, reflecting a broader transformation in education where students are expected to become more self-sufficient in managing digital tools, platforms, and resources (Munoz-Najar, 2021). While some students demonstrated optimism about adapting to these changes, others experienced significant challenges in adjusting to the demands of online and blended learning environments.

Several participants expressed initial uncertainty but eventual confidence in adapting to digital learning environments. One student stated, "Yes, I believe that it's hard to navigate in these new learning modalities, but as Gen Z, I am confident that we will and can adapt eventually to this landscape of a new era of learning" (PHEI8, SS-4). This reflects an emerging sense of digital resilience among learners despite early difficulties. Similarly, another participant shared, "I struggled with online platforms at first, but over time, I learned to use them effectively, and they became an essential part of my learning routine" (PHEI4, SS-6), indicating gradual development of digital competence.

However, the transition was not seamless for all students. Many reported difficulties in navigating online platforms, submitting requirements, and participating in virtual classrooms. One participant described, "My experience in the online class… Google Meet or Zoom classes everyday…it was a hectic time for me because of all the things to accomplish" (SUC3, SS-32). Another added, "Online learning taught me to be independent in my learning, which is important in this digital age. It is just inevitable to experience some challenges, especially when it comes to resources" (SUC1, SS-22). These responses highlight the dual nature of flexible learning—offering independence while simultaneously increasing academic pressure and workload management demands.

A significant aspect of this transition involved students developing digital problem-solving skills and self-sufficiency. One participant explained, "I had to explore on my own, assess my own digital skills, and seek help from IT staff or faculty members to troubleshoot issues. This was how I built confidence in using digital tools for flexible learning" (PHEI59, SS-7). This reflects the gradual acquisition of digital literacy as part of self-regulated learning development.

Institutional structures also influenced the transition experience. For instance, the implementation of structured digital programs such as the Flexible Learning and Innovative Education System (FLIES) provided a hybrid framework for learning. A participant noted, “In our school, they implemented the FLIES program wherein there is the e-learning mode” (PHEI1, SS-31). However, blended learning arrangements were often perceived as demanding due to the simultaneous requirement of synchronous and asynchronous tasks. One student stated, “Blended learning experiences required attending scheduled online classes while completing modular activities independently. The structured schedules were challenging in an online setting” (SUC6, SS-33A).

These findings suggest that while structured digital learning systems provide essential guidance, they also require students to develop higher levels of self-discipline and time management. This aligns with Pei and Wu (2019) and Regoniel (2021), who emphasize that success in online learning depends heavily on students’ ability to self-regulate and manage learning demands independently.

Flexibility in learning delivery was also experienced differently among students. Some appreciated the autonomy provided by modular learning, as one participant shared, “I didn't need to go to school to attend the classes… I had more free time… I could study and do tasks at my own pace” (SUC9, SS-36). However, this flexibility also reduced external structure, which for some students led to difficulties in maintaining focus and discipline.

Moreover, technological limitations significantly shaped students’ transition experiences. One participant explained, “I faced challenges… my phone was not of good quality… I had trouble accessing the internet during online classes” (SUC9, SS-36). Others highlighted broader infrastructural barriers: “I lived in an area with no stable internet connection… poor signal” (SUC6-P192), “Primarily challenge was poor internet connection, affecting general learning process” (SUC8-P193), and “Lack of device and internet impacting performance” (PHEI15-P193). These accounts demonstrate how the digital divide continues to shape unequal learning experiences.

These findings are consistent with Van Dijk’s Digital Divide Theory in the study of Colom (2020), which argues that unequal access to technology and internet infrastructure creates disparities in learning opportunities. Students with limited access to stable connectivity and devices are placed at a disadvantage, particularly in self-regulated and technology-dependent learning environments.

Overall, the transition to self-regulated learning in flexible modalities is characterized by a complex interplay of adaptation, digital skill development, institutional structure, and infrastructural inequality. While students gradually develop competence and confidence in navigating digital learning environments, the process is uneven and heavily influenced by access to resources and the level of institutional support provided.

Theme 3: Motivation, Engagement, and Personal Growth in Flexible Learning

The transition to flexible learning required students to redefine their sources of motivation and engagement as the absence of face-to-face interaction reduced immediate social reinforcement from peers and instructors. Without the structured classroom environment, students were compelled to rely more heavily on intrinsic motivation and self-directed regulation to sustain academic focus. However, many participants reported fluctuations in motivation over time. One student reflected this shift, stating, “Initially, I enjoyed the freedom of studying on my own schedule, but over time, I started to feel less motivated without the in-person encouragement” (SUC1, SS-30), while another similarly shared that “I didn’t need allowances…could do activities anytime but sometimes lacked motivation due to lack of structures” (SUC8, SS-35), highlighting how flexibility alone was insufficient to sustain consistent engagement.

Despite these challenges, the flexible learning environment also contributed to significant personal and academic growth among students. Many participants described how managing their own learning schedules fostered resilience, independence, and self-efficacy. One participant shared, “Learning modality changed my career approach... proud of resilience” (PHEI4, SS-2), while another emphasized that “the pandemic forced me to grow personally and academically. I had to learn to motivate myself” (PHEI16, SS-27B). This developmental shift aligns with Winardi (2024), who emphasized that self-regulated learning environments strengthen students’ goal-setting abilities, self-monitoring skills, and persistence when learners actively engage in managing their own progress.

Interestingly, some students also experienced positive emotional and lifestyle changes as a result of flexible learning. One participant noted, “For me the flexible learning was 50-50. It helped with health but misses face-to-face” (SUC6, SS-6), suggesting that reduced commuting and flexible scheduling improved well-being, even though it came at the cost of reduced social interaction. Others viewed the transition as an opportunity for exploration and adaptation, with one stating, “As a diligent student, it was not hard for me to transition from face-to-face to doing online classes” (PHEI13, SS-25), while another added, “An opportunity for me... exploring different kinds of teaching methods” (PHEI16, SS-27A), reflecting how some learners embraced flexible learning as a space for growth and experimentation.

However, sustaining motivation remained a central challenge for many students, particularly in the absence of external accountability mechanisms. Pei and Wu (2019) argue that online learning environments often lead to engagement variability due to reduced external monitoring and feedback. This is reflected in one participant’s experience: “Flexible learning allowed for a relaxed pace, but limited device quality and lack of structure negatively impacted motivation” (SUC9, FM-36), showing how both technological and structural limitations influenced engagement levels.

To address these challenges, students developed various self-regulated strategies to maintain motivation and productivity. Some adopted structured time management techniques such as the Pomodoro method, as one participant explained, “I used the Pomodoro Technique... writing notes and doing active learning” (PHEI4-P211). Others set personal goals and connected learning to real-life applications, with one stating, “I set goals and relate what I learned to real life, which give me something to work towards” (PHEI3-P211). Lifestyle balancing also emerged as a motivational strategy, as reflected in the statement, “I keep myself motivated... balancing my studies and my workout. Keeping myself healthy and active is the best practice which I am truly proud of myself during the pandemic” (PHEI5-P211).

Some students also integrated leisure and recreation into their study routines as a form of reward system to sustain engagement, as one participant shared, “I did not study for 24 hours each day, I allotted time for drawing, painting, singing, dancing on TikTok, and playing games… I consider these recreational activities as a reward after finishing my tasks in the e-class” (SUC7-P210). These coping strategies demonstrate how learners actively negotiated between academic demands and personal well-being in flexible learning environments.

Overall, these findings suggest that motivation and engagement in flexible learning are dynamic and highly individualized, shaped by both internal drive and external structure. While some students thrived in autonomous settings, others required structured reinforcement and blended approaches. This supports Mulenga & Shilongo (2025) argument that blended learning models offer an optimal balance between flexibility and structured support, helping sustain motivation, engagement, and academic growth.

Theme 4: Social Isolation and Emotional Well-Being in Flexible Learning

Flexible learning during the pandemic exposed students to significant structural, environmental, and psychosocial challenges that directly affected their emotional well-being and sense of social connectedness. The absence of traditional classroom environments removed not only physical learning spaces but also the informal peer interactions and immediate social support systems that typically help students cope with academic stress. As students transitioned to remote learning, they were compelled to adapt to isolated and often unconducive home environments while simultaneously managing academic demands, household responsibilities, and limited social engagement. One participant described this difficulty, stating, “Studying at home was difficult. I didn’t have a quiet place, and it affected my focus” (PHEI12, SS-12), reflecting how environmental constraints contributed to emotional strain and reduced concentration. This aligns with Dayagbil et al. (2021) and Adedoyin and Soykan (2020), who emphasize that inadequate home learning environments intensify stress and negatively affect student engagement, while Onyema et al. (2020) further note that resource limitations disproportionately affect learners in disadvantaged settings, increasing emotional and academic vulnerability.

A major contributor to students’ emotional distress was the lack of dedicated learning spaces and the need to improvise within shared or distracting household environments. Many students developed coping strategies such as creating makeshift study areas to manage their learning conditions. One participant shared, “I had to study in a corner of my bedroom, but I made it work by organizing my space and using noise-canceling headphones” (PHEI17, SS-34), illustrating efforts to regain control over their learning environment despite limitations. Others experienced even more extreme conditions, such as seeking alternative physical spaces to maintain focus and connectivity, as reflected in the statement, “I remember climbing to the rooftop at times to get a better signal and focus away from household distractions” (PHEI15, SS-37). These experiences demonstrate how environmental barriers were not only physical but also emotionally taxing, requiring persistence and adaptability from students.

In addition to spatial limitations, technological constraints further intensified feelings of isolation and frustration. Limited access to devices and unstable internet connections disrupted participation in synchronous learning activities, contributing to emotional disengagement and academic stress. One participant expressed, “I had to ask my family to disconnect, or I had to wait until my siblings finished before I could use the laptop for my assignments” (SUC3, SS-60), highlighting the competition for shared resources within households. Another shared, “One specific challenge was accessing the internet… I do not own a phone” (PHEI16, SS-45), while another emphasized connectivity issues, stating, “Using mobile data without a Wi-Fi connection… the connection is unstable. Usually, the connection drops out” (SUC10, SS-38). Similarly, a participant noted, “As a student who lives far from the satellite and doesn’t have Wi-Fi, it is truly a struggle for me to access the e-class and check the announcements” (PHEI5, SS-39). These accounts reflect the digital divide, where unequal access to technology and infrastructure contributes to emotional strain and academic exclusion, consistent with Regoniel (2021), who notes that limited connectivity leads to disrupted learning experiences and heightened student stress.

Beyond environmental and technological challenges, students also experienced emotional strain due to the conflict between academic responsibilities and household obligations. The home environment, while serving as a learning space, also demanded students’ participation in family duties, further blurring boundaries between academic and personal life. One participant shared, “It was kind of hard, especially if there is an online class and I still have to do my own chores, to take care of my mother as well” (SUC2, SS-40), while another added, “There were times during online classes when I had to stop studying because of household responsibilities like taking care of my younger siblings” (SUC7, SS-41). These overlapping responsibilities contributed to emotional exhaustion, guilt, and difficulty maintaining academic focus, highlighting how flexible learning environments can unintentionally intensify stress when boundaries between home and school are absent.

Despite these challenges, students attempted to cope with emotional and academic stress through peer support and digital social networks, which became essential substitutes for face-to-face interaction. Online communication platforms provided emotional reassurance and academic assistance, helping students feel less isolated in their learning journey. One participant explained, “We have a group chat on Messenger where we ask questions and help each other understand the lessons” (SUC5, SS-41), while another shared, “I relied on my

classmates for support because sometimes it was hard to understand the modules on my own" (PHEI9, SS-42). These virtual interactions helped mitigate feelings of isolation by fostering a sense of community and shared responsibility, demonstrating the importance of social connectedness in maintaining emotional well-being during flexible learning.

Overall, the findings reveal that while flexible learning provided continuity in education, it simultaneously introduced emotional and psychological challenges rooted in isolation, environmental limitations, and weakened social interaction. Students were required to navigate learning in constrained and often stressful conditions, which impacted their motivation, focus, and emotional stability. However, the emergence of peer support systems and adaptive coping strategies highlights students' resilience in managing these challenges. These experiences underscore the need for flexible learning models to incorporate stronger social and emotional support mechanisms, ensuring that academic flexibility is balanced with meaningful human connection and well-being support.

Theme 5: Institutional Strategy, Accessibility, and Policy Support in Flexible Learning

The transition to flexible learning revealed profound disparities in students' access to essential educational resources, highlighting persistent inequities in financial capacity, technological readiness, institutional preparedness, and policy implementation. While flexible learning was designed to ensure educational continuity during disruptions, it inadvertently intensified pre-existing inequalities, particularly among students from marginalized and resource-constrained backgrounds. These disparities demonstrate that access to learning is not only an instructional issue but a structural and policy-driven concern, where socio-economic conditions and institutional readiness significantly shape students' learning experiences (Alam & Tiwari, 2021). As one participant expressed, "I didn't have a laptop or Wi-Fi at home, so I relied on borrowing my sibling's phone, which wasn't always available when I needed it for my classes" (SUC3, SS-45), illustrating how limited resources directly constrain participation in flexible learning environments.

A central issue under this theme is financial barriers, which significantly affected students' ability to access devices, internet connectivity, and conducive learning environments. Many students reported that the cost of mobile data and internet subscriptions created constant financial strain, forcing them to make difficult choices between education and household needs. One participant shared, "Mobile data was expensive, and sometimes I had to choose between buying data or saving for other family expenses" (PHEI7, SS-48), while another added, "Buying load was expensive. Sometimes I had to miss classes because I couldn't afford to buy data on time" (SUC4, SS-52). These financial limitations extended beyond connectivity to include inadequate study spaces and lack of learning equipment, as reflected in the statement, "Our house was too small for me to study quietly, and I couldn't afford noise-canceling headphones" (PHEI12, SS-12). Such findings reinforce Onyema et al. (2020), who argue that financial constraints in digital learning are structural barriers that require systemic intervention rather than individual coping alone.

Closely linked to financial barriers are technological gaps, which further deepen inequalities in flexible learning participation. Students frequently relied on outdated or shared devices that limited their ability to engage effectively in online learning platforms. One participant noted, "Old laptop was a hassle... affected my learning" (PHEI2-P173, SS-61), while another stated, "I struggled to switch between tabs during class because my laptop kept freezing" (PHEI6, SS-63). Device sharing within households also created competition for access, as expressed by a participant who said, "I had to wait until my siblings finished before I could use the laptop for my assignments" (SUC3, SS-60). These technological limitations were compounded by unstable internet access, resulting in fragmented participation and reduced engagement, consistent with Pei and Wu (2019), who emphasize that inadequate digital infrastructure negatively impacts learning outcomes and student engagement.

In addition to financial and technological constraints, limited institutional support emerged as a critical factor affecting student success. Many students reported insufficient guidance in navigating digital platforms and resolving technical issues, leading to increased stress and academic difficulty. One participant shared, "We experience difficulties in navigating our laptops and even the platforms used by our teachers, and we have no one to ask in terms of IT know-how" (PHEI14, SS-81), while another stated, "The school expected us to manage our tech problems, but we didn't even know where to start" (SUC3, SS-27). The lack of structured academic and technical support systems forced students to rely heavily on self-directed problem-solving, which intensified feelings of isolation and disengagement. This aligns with Adedoyin and Soykan (2020), who argue that many institutions were not fully prepared for large-scale digital transition, resulting in gaps in student support and learning continuity.

Another major concern under this theme is connectivity issues and infrastructural inequality, which significantly disrupted learning continuity, particularly among students in rural and geographically disadvantaged areas. Participants repeatedly emphasized unstable internet connections, frequent disconnections, and limited access to digital platforms. One student stated, "Internet signal was always an issue. I missed parts of the lecture because my connection dropped" (PHEI9, SS-70), while another shared, "Poor internet connection in remote area" (SUC8, SS-59). The reliance on mobile data further intensified this issue, as expressed in the statement, "Then it also connected to financial problem because the data needs to be easily used up" (SUC10, SS-49). These challenges reflect Onyema et al. (2020), who note that digital inequity is exacerbated in lower-income and rural contexts where infrastructure remains underdeveloped.

Overall, the findings under this theme highlight that flexible learning cannot be fully understood without addressing the structural conditions that enable or hinder access. Financial hardship, technological limitations, insufficient institutional support, and weak connectivity collectively shape students' capacity to engage meaningfully in learning. These issues reveal that flexible learning is not inherently equitable unless supported by strong policy frameworks and institutional interventions. As Dziuban et al. (2018) and Alam and Tiwari (2021) emphasize, sustainable digital learning requires investments in infrastructure, inclusive institutional policies, and

equitable access to resources. Without these, flexible learning risks reinforcing rather than reducing educational inequality.

4. Conclusion

This study examined students' experiences in Flexible Learning Modalities (FLMs) through a constructivist lens, revealing how learners actively navigate autonomy, motivation, emotional well-being, and structural constraints in technology-mediated education. The findings demonstrate that FLMs fundamentally reshape the learning process by shifting responsibility from instructors to students, requiring heightened levels of self-regulation, accountability, and adaptability.

While flexible learning promotes the development of autonomy, digital literacy, and problem-solving skills, these benefits are unevenly experienced due to persistent structural inequalities. Students who possess adequate technological resources and stable internet access were better able to adapt, while those from resource-constrained backgrounds experienced significant difficulties in participation, engagement, and performance. This disparity highlights that flexibility in learning does not automatically translate to equity in access or outcomes.

Moreover, the study underscores that emotional and psychological dimensions are deeply intertwined with academic experiences in FLMs. Students frequently encountered stress, isolation, and motivational challenges due to reduced social interaction, lack of structured support, and competing household responsibilities. Despite these challenges, learners demonstrated resilience through self-directed strategies, peer collaboration, and adaptive coping mechanisms.

Overall, the study concludes that FLMs represent both an opportunity and a challenge: they foster learner independence and lifelong learning skills, but simultaneously expose systemic gaps in digital infrastructure and institutional readiness. Thus, the effectiveness of flexible learning is highly dependent on equitable access to resources and strong institutional support systems.

5. Recommendations

Based on the findings of the study, the following recommendations are proposed to enhance the effectiveness and equity of Flexible Learning Modalities (FLMs):

1. **Strengthen digital infrastructure and technical support.**
   Higher education institutions should improve learning management systems, ensure stable online platforms, and provide responsive technical assistance to minimize disruptions in flexible learning.
2. **Enhance instructional scaffolding for self-regulated learning.**
   Faculty members should integrate structured learning guides, clear timelines, task breakdowns, and consistent feedback to support students' development of autonomy and accountability.
3. **Implement equity-focused resource support programs.**
   Institutions should consider device lending services, internet subsidies, and access to learning hubs to address disparities in access to technology and connectivity.
4. **Improve psychosocial and mental health support services.**
   Universities should strengthen counseling services, peer support systems, and wellness programs to address stress, isolation, and emotional challenges experienced in flexible learning environments.
5. **Promote inclusive and long-term digital education policies.**
   Policy makers should invest in sustainable digital infrastructure and inclusive educational policies to reduce the digital divide and ensure equitable access to quality education.
6. **Encourage blended and flexible support learning models.**
   A balanced integration of online, modular, and face-to-face support should be considered to enhance engagement, motivation, and learning effectiveness among diverse student populations.

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