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UNIVERSITY STUDENTS' ATTITUDE TO FLIPPED CLASSROOMS

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ABSTRACT

This study examines the intricate interplay of psychological and cognitive factors that influence student attitudes and engagement within the flipped classroom model, with a particular focus on the role of 'clipped thinking' – a digital cognitive barrier characterised by fragmented attention. Employing a survey-based methodology in an English for Academic Communication course, the research analysed students' perceptions regarding clarity, relevance, motivation, and learning priorities. The findings indicate that while the profoundly shaped by model's success is characteristics, such as psychological readiness and individual cognitive style, its initial implementation successfully mitigated potential resistance. Specifically, the study confirms that high perceived clarity and relevance of the course design significantly boost initial student acceptance and motivation. Moreover, students prioritise active oral and interactive

communication skills, validating the flipped structure's goal of dedicating face-to-face time to high-value application.

The theoretical value is provided by integrating emerging digital-cognitive barriers (clipped thinking) with established psychological factors (cognitive load), offering a novel, integrated model for understanding student resistance beyond simple success-or-failure dichotomies. The practical value lies in providing educators with actionable evidence that ensuring clear structure and high perceived relevance is the most efficient instructional strategy for promoting initial acceptance and justifying the pre-class workload across disciplines.

Keywords: clipped thinking; cognitive load; engagement; flipped classroom; student acceptance.

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INTRODUCTION

The global tendency toward educational reforms stimulates the emergence of pedagogical models that actively engage learners and maximise instructional time. Within the system of higher education, it is characterised by a shift from passive, lecture-based, instructor-centred sessions to student-centred, active learning methods, which aim at the development of critical thinking, problem-solving skills, and cooperation (Mospan & Sysoieva, 2022; Mospan, 2023). The need for flexible and effective teaching strategies intensifies with the proliferation of digital learning resources, suggesting the integration of technology while preserving the key role of in-person communication. Within the pedagogical context of continuous transformation technological integration, the flipped classroom model has arisen across various academic disciplines. This model, fundamentally reconfiguring the traditional sequence of instruction, promises a

more effective use of classroom time for dynamic learning activities. However, the successful realisation of this novel model depends on its acceptance by students and their active participation, which generates a complex set of challenges connected to students' readiness, motivation, and cognitive information processing styles.

FLIPPED CLASSROOM MODEL

The flipped classroom model represents a pedagogical shift that reorganises the traditional structure of teaching and learning. Instead of relying on classroom time for content delivery through lecturing, the model places the initial exposure to new material before class. Students instructional resources (e.g. texts, videos, or other multimedia materials) independently at home or outside scheduled class hours. The flipped classroom model is defined by two key phases: pre-class preparation and in-class active learning. The preparatory phase requires students to engage independently with the foundational content delivered through readings, videos, or multimedia materials. This prepares them for the inclass time, which is then dedicated to active learning activities such as guided discussions, case studies, problem-solving sessions, and collaborative projects led by instructors and peers.

The pre-class exposure to the study material allows learners to acquire necessary knowledge at their own pace, pausing or revisiting the content as needed (Abeysekera & Dawson, 2015;

Huang, Silitonga, & Wu, 2022; Kaplan et al., 2023). The time spent in the classroom is thus focused on active learning activities that promote deeper understanding and practical application of knowledge. Namely, brainstorming, problemsolving, group discussions, and simulations enable students to test and refine their comprehension, benefiting from peer collaboration and instructor guidance. In this way, the classroom becomes a space for interaction (debates, presentations, Q&A sessions), involving critical thinking and creativity, which refer to higher-order learning rather than passive reception of information (Khojasteh et al., 2021; Vitta & Al-Hoorie, 2020).

By redistributing learning activities — pre-class preparation, case studies or project work followed by in-class collaborative practice — the flipped classroom model fosters autonomy, increases student engagement, and makes more efficient use of instructional time. Recent evidence also highlights that this approach significantly improves learning performance (Gondal et al., 2024; Kuş, 2025), enhances student self-efficacy (Sun et al., 2023), and supports subject-specific learning outcomes, including language acquisition (Vitta & Al-Hoorie, 2020). At the same time, systematic reviews note that its effectiveness depends on the integration of technology, student preparedness, and specific types of inclass activities (Baig & Yadegaridehkordi, 2023).

THE GAP BETWEEN THE FLIPPED CLASSROOM POTENTIAL AND STUDENT RESISTANCE

The flipped classroom implies reorganisation of teaching and learning, yet its implementation does not always align with expectations. Recent research (e.g., Kus, 2025; Tsapro et al., 2025) demonstrates that the flipped classroom model can improve learning outcomes and foster deeper engagement. Studies report that flipped learning can enhance performance, engagement, and higher-order thinking skills. However, student acceptance varies. On the one hand, some students appreciate the flexibility and interactive nature of flipped instruction, while others perceive it as an increased workload or feel uncertain about new evaluation formats (Han, 2022), and, in many contexts, learners resist the additional responsibility of pre-class preparation or express scepticism about the value of in-class activities (Abeysekera & Dawson, 2015; Sun et al., 2023).

This gap between pedagogical potential and classroom reality underscores the importance of providing clear guidance to students and designing structured learning activities to ensure equitable participation and effective outcomes.

PSYCHOLOGICAL FACTORS

In addition to pedagogical and logistical challenges, the also classroom model clashes with students' experiences. Research indicates that flipped learning often requires higher cognitive effort, as learners must actively engage with pre-class materials and independently integrate

new knowledge (Agyeman & Aphane, 2024; Mazlan et al., 2024). This approach places higher demands on students' self-discipline, motivation, and time management skills, which can be challenging for those accustomed to more passive learning formats (Mardiha, 2023; Perta et al., 2024).

The model can also disrupt traditional expectations of teaching and learning. Students may feel uncomfortable when class time is no longer devoted to instructions and drills, particularly if they are used to familiar, teacher-centred scenarios (Mamun & Dippro, 2025). Furthermore, in-class activities typically involve group/team discussions, problemsolving, or peer feedback, which implies social interaction. This can increase anxiety, especially for students who are less confident or socially hesitant, affecting participation and engagement (Baig & Yadegaridehkordi, 2023; Gondal et al., 2024; Vitta & Al-Hoorie, 2020).

Taken together, these psychological factors highlight that the success of the flipped classroom is not solely determined by instructional design or technology. Equally important is attention to students' readiness, emotional responses, and capacity for autonomous learning. Addressing these factors through scaffolding, clear guidance, and a supportive classroom atmosphere can reduce resistance and maximise the benefits of flipped learning.

NEW DIMENSION: DIGITALISATION

Research suggests that digital media habits may introduce additional complexity to the flipped classroom model. The phenomenon of 'clipped thinking' – a form of fragmented attention and rapid task-switching shaped by frequent exposure to digital content – may exacerbate existing barriers to effective engagement (Cai et al., 2022; Feng et al., 2022; Galindo-Dominguez, 2021; Jia et al., 2023; Joy et al., 2023). Students accustomed to short, highly segmented interactions with their gadgets may struggle with sustained cognitive effort, deep processing of pre-class materials, and engagement during in-class activities. This digital attentional pattern can amplify challenges related to self-regulation, cognitive load, and anxiety about class participation, further contributing to resistance or uneven attitude to flipped learning practices.

Table 1 summarises the key factors, barriers, and influences, integrating pedagogical, psychological, and cognitive dimensions.

Table 1.

Key Factors Influencing Students' Resistance to Flipped

Classrooms

Dimension	Key Factors / Barriers	Impact on Student Engagement
Pedagogical	pre-class workload; active in-class participation; unfamiliar teaching structure	increased effort and potential resistance if expectations are unclear

Dimension	Key Factors / Barriers	Impact on Student Engagement
Psychological	higher cognitive load; self-regulation demands; social exposure/anxiety	can lead to reduced participation, stress, or avoidance
Digital / Cognitive	'clipped thinking' (fragmented attention; rapid task-switching)	difficulty sustaining focus on pre-class materials; shallow engagement
Perception / Acceptance	resistance to change; scepticism about the value of flipped activities	variable acceptance despite pedagogical benefits

Research also highlights positive attitudes (motivational factors) that boost student engagement within the flipped classroom model (Mardiha et al., 2023; Sun et al., 2023; Perta et al., 2024), categorised across four key dimensions reflected in Table 2.

Table 2.

Motivational Factors Related to the Flipped Classroom

Model and Their Impact on Student Engagement

Dimension	Key Factors / Positive Attitudes	Impact on Student Engagement
Pedagogical	clear expectations and instructions; relevance of pre-class material; meaningful in-class tasks (active learning)	increased motivation to complete pre-work; deeper processing of material in class; enhanced collaboration
Psychological	control over learning pace (self-paced pre-class); supportive classroom environment; growth mindset	reduced anxiety (less pressure to "get it" immediately); increased self-efficacy and academic persistence

Dimension	Key Factors / Positive Attitudes	Impact on Student Engagement
Digital / Cognitive	high-quality, engaging pre- class content (videos, interactive resources); digital literacy of students	improved retention of core concepts; efficient use of in-class time for complex problem- solving; increased focus
Perception / Acceptance	high perceived value of active learning; positive prior experience with the model; belief in the teacher's competence	acceptance and commitment to the model; higher satisfaction with the learning process; increased student responsibility

- 1. Pedagogical factors enhance engagement when the structure is well-executed. Clear instructions and expectations, with the relevant pre-class material and meaningful active learning tasks in class, lead to increased motivation to complete pre-work, deeper processing of concepts, and enhanced collaboration among students.
- 2. Psychological factors improve the learner's emotional state and belief in their abilities. When students can control their learning pace (self-paced pre-class) and are in a supportive classroom environment that encourages a growth mindset, they experience reduced anxiety and display increased self-efficacy and academic persistence.
- 3. The digital/cognitive dimension benefits from effective content. Utilising high-quality, engaging pre-class resources (like videos) and leveraging students' existing digital literacy results in

overall increased focus, improved retention of core concepts, and efficient use of in-class time for complex problem-solving.

4. Perception and acceptance foster commitment. Students demonstrate strong acceptance and enthusiasm when they have a high perceived value of active learning and have had positive prior experiences with the model. This leads to higher satisfaction with the learning process and increased student responsibility for their own success.

Based on the above literature review, students' resistance to the flipped classroom model is multifaceted, originating from the pedagogical factors (an unfamiliar workload), psychological pressures (higher cognitive load and anxiety from social exposure), and modern digital and cognitive factors ('clipped thinking' resulting in fragmented attention). Consequently, the effectiveness of the model is dependent on these challenges, requiring that instructional strategies proactively address the demands of cognitive effort, anxiety management, attention fragmentation, and resistance to change. This is done to foster higher student engagement and ensure acceptance and active learning within this structure. In other words, the current research exhibits a *critical gap* in understanding how the abovementioned factors shape learners' engagement within flipped classrooms.

Consequently, the *research aim* of the present study is to investigate the reasons behind students' attitudes to flipped classrooms, considering established psychological and cognitive explanations (e.g., disruption of traditional expectations, increased

cognitive demands, social exposure) and the role of clipped thinking. By integrating these perspectives, the research aims to provide a comprehensive understanding of the factors that influence students' engagement, acceptance, and learning outcomes in flipped learning environments.

RESEARCH HYPOTHESIS

In view of the fact that university students resist flipped classrooms due to cognitive effort, self-discipline, traditional expectations, social exposure, and clipped thinking. The effectiveness and students' acceptance of the flipped classroom model can be positively influenced by the following factors. Perceived control over learning pace, the implementation of clear learning objectives, and well-designed and engaging pre-class resources, opportunities for meaningful classroom collaboration, and the development of digital literacy skills.

A conceptual diagram summarising the interactions of the flipped classroom components, psychological factors, and clipped thinking is presented in Fig.1. The diagram visualises the dual influence on student outcomes in the flipped classroom, illustrating how negative factors (cognitive effort, self-regulation demands, traditional expectations, social exposure, and clipped thinking) lead to decreased acceptance and engagement ("Resistance Path," the downpointing arrow), while positive factors (including perceived control, clear learning objectives, pre-class resources, meaningful

collaboration, and digital literary skills) promote increased effectiveness and acceptance ('Success Path,' the up-pointing arrow).

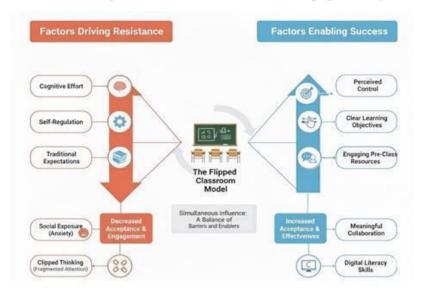


Figure 1. Interactions of the flipped classroom components.

Composed by the authors using Paint, the Microsoft digital graphical tool

Thus, students' success within the flipped classroom model is significantly influenced by underlying psychological factors, which include the cognitive demands of complex work, the necessary self-regulation requirements for independent learning, and the impact of interaction during active group work, all of which influence participation and engagement. Additionally, digital/cognitive factors (e.g., clipped thinking) can reduce focus, affecting the quality of both pre-class preparation and in-class engagement. The outcome of the flipped classroom – in terms of both engagement and learning outcomes – is therefore shaped by the pedagogical structure, the students' psychological readiness, and their individual cognitive style.

RESEARCH METHODOLOGY: STUDENTS' ATTITUDES IN A FLIPPED CLASSROOM: A CASE OF ACADEMIC **COMMUNICATION COURSE**

This study employed a survey-based, cross-sectional research design to assess Master students' initial attitudes toward the structure, content, and perceived utility of the English for Academic Communication course utilising a flipped classroom model.

PARTICIPANTS AND SETTING

The survey participants were university students enrolled in the mandatory course of English for Academic Communication. The survey took place during the second scheduled class meeting, ensuring the data were taken from all enrolled students present.

RESEARCH INSTRUMENT

The primary research instrument was designed as a structured questionnaire aimed to elicit initial student perceptions of the flipped class model across three main dimensions: clarity, relevance, and motivation (Table 3).

Table 3. Assessing Students' Acceptance of the Flipped Classroom

Survey Section	Sample Questions	Response Format
Course Clarity/ Expectations	"How clear and understandable is the course syllabus to you?"	4-point Likert scale (Likert, 1932); e.g., "Very clear" to "Not clear at all"
Relevance/Utility	"How relevant do you find the course content to your academic needs?"	4-point Likert scale; e.g., "Highly relevant" to "Not relevant"

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Survey Section	Sample Questions	Response Format
Flipped Activity Assessment	"How useful was the first homework assignment for understanding the course aims and expectations?"	4-point Likert scale: "Very useful" to "Not useful"
Motivation /Engagement	"How motivated do you feel to actively participate in this course after the first lesson?"	4-point Likert scale: "Very motivated" to "Not motivated"
Learning Priorities	"Which skills do you consider the most important to gain from this course?"	Multiple-choice selection (selecting one or more options)

DATA COLLECTION PROCEDURE

The data collection was integrated into the second class meeting, following this schedule:

- Class 1 (Introduction): The instructor introduces the course, including the syllabus and the expectations of the flipped model. Students are assigned their first independent homework (pre-class preparation) on the topic of formal vs. informal style, with clear instructions.
 - Class 2 (Conducting the survey):
- At the beginning of the second class, students are introduced to the survey's purpose (to improve the students' progression through the course) and instructed to complete it anonymously and independently.
- The Survey: Master Students' Attitude to the Course.
 This phase is performed in Google Forms before the main

academic discussion to capture attitudes based primarily on the first class and the assigned homework experience.

O Data use: Following the survey, the instructor reviews key findings (major attitudes derived from survey responses) alongside the assessed positive outcomes of the homework (checked on the course platform). This data can be used to build the rest of the course interaction.

DATA ANALYSIS

The analysis of the collected data involved:

- Assessing students' responses to quantify student perceptions of study material clarity, relevance, utility, and learners' motivation.
- Analysing which skills the students consider the most important to determine their learning priorities.

The findings provide immediate feedback to the instructor to adjust pedagogical strategies and form the basis for the flipped classroom structure.

SURVEY RESULTS

COURSE SYLLABUS ANALYSIS

The analysis of students' responses regarding the clarity of the course syllabus reveals a high degree of perceived clarity among the 60 respondents. A dominant majority of students (58.3%) rated the syllabus as "Very clear," and an additional 40.0% found it to be "Mostly clear." Cumulatively, 98.3% of the

students felt the syllabus was either "Very clear" or "Mostly clear," positively communicating the course structure and expectations from the outset. Crucially, no respondents rated the syllabus as "Not clear at all," with only a negligible fraction – one student (1.7%) – finding it "Somewhat unclear."

These results suggest that the foundational information required for student success in the flipped classroom (clear expectations) was effectively established, which aligns positively with the enabling factors described in the research hypotheses.

PERCEIVED RELEVANCE OF THE COURSE CONTENT

Assessing students' perception of the relevance of the course content to their academic needs demonstrates general approval and perceived value among the 60 Master students. The responses were split almost evenly between the two highest positive categories: 48.3% of students rated the content as "Highly relevant, and another 48.3% found the content "Relevant." Cumulatively, 96.6% of the participants consider the course content to be relevant or highly relevant to their academic success, suggesting that the course is well-aligned with the students' perceived professional or academic needs. Only two students (3.3%)considered the content to be "Somewhat relevant." No students reported the course content as "Not relevant." These results therefore indicate that the course is relevant, which is a key factor in establishing students' acceptance and motivation in the flipped classroom model.

PERCEIVED USEFULNESS OF THE FLIPPED CLASSROOM MODEL

The analysis of the first "flipped" homework's usefulness in clarifying the course aims and expectations shows its positive perception. A majority of the students found the independent, preclass task to be useful: 58.3% of students rated the assignment as "Useful," and 38.3% of students rated the assignment as "Very useful." Only two students (3.3%) found the assignment to be "Slightly useful," and no students rated it as "Not useful." Cumulatively, 96.6% of the students found the pre-class task to be useful or very useful. This high acceptance suggests that the first practical application of the flipped model was successful in bridging the gap between theoretical course aims and practical student expectations, which aligns with the hypothesis that clear learning objectives and effective pre-class resources enhance students' acceptance. This demonstrates that the initial exposure to the independent learning component of the flipped classroom was positive, mitigating potential resistance to the pre-class workload.

STUDENT MOTIVATION FOR ACTIVE PARTICIPATION

The analysis of students' motivation to actively participate after the first lesson further underscores the positive reception of the course and the flipped class activities. The data show strong initial motivation among the 60 Master students: 58.3% of students reported feeling "Motivated" to actively participate, and 30.0%

reported feeling "Very motivated." In total, 88.3% of the students expressed positive motivation ("Motivated" or "Very motivated"). This high level of motivation is a key indicator of increased acceptance and engagement, supporting the hypothesis that perceived relevance, clear objectives, and useful pre-class work successfully foster students' acceptance of the flipped class model.

A smaller segment of the students reported lower levels: 11.7% of students felt only "Slightly motivated," and no respondents reported feeling "Not motivated." Although the number is small, the "Slightly motivated" group identifies a segment of the class where instructors could focus pedagogical strategies (encouraging meaningful collaboration) to convert passive motivation into active engagement, thereby further boosting overall participation.

STUDENTS' PERCEIVED LEARNING PRIORITIES

The final stage of the analysis examined students' learning priorities by asking respondents to mark the most important skills they hoped to gain from the "English for Academic Communication" course, which revealed a preference for oral and interactive communication skills, academic discussions, and academic writing. In particular, presentation and public speaking skills were the top priority, selected by 36.7% of respondents, indicating a high need for developing confidence and competence in delivering formal talks. Next, the ability to participate in academic discussions and debates was the second priority, chosen by 21.7% of students. This underscores the value students place on

interactive, in-class communication, which aligns with and supports the active learning phase of the flipped classroom model.

The remaining skills garnered a smaller, but still significant, proportion of the votes. "Improved academic writing skills" and "Better understanding of formal vs. informal communication styles" were each selected by 15.0% of the students. "Expanded academic vocabulary and terminology" was the lowest priority, chosen by 11.7%.

IMPLICATIONS AND RECOMMENDATIONS

The findings offer a promising direction for instructional practice. The students' acceptance, motivation, and alignment with course objectives found here suggest that the instructor should use the initial ratings to proceed with the flipped model. The flipped model helps to reserve live interaction time for the very activities students prioritise. In the final account, students are more engaged when they perceive the flipped classroom to be helpful, well-run, supportive, and empowering.

The core takeaway from this study – that clear structure and perceived relevance promote strong initial students' acceptance and success in the flipped classroom—is highly applicable and can be extrapolated across other subjects and study areas.

In other words, for a flipped classroom model to succeed in any subject, Table 4 outlines four key principles. First, providing clear structure and expectations reduces student anxiety and confusion. Second, the course must establish perceived relevance by explicitly linking pre-class content to

valuable in-class activities. Third, instructional design must address cognitive barriers by breaking down complex pre-class material to prevent overload. Finally, the model develops active skills, using face-to-face time to practice the complex applications that students value most, thereby justifying the preparatory work.

 $\label{eq:Table 4.} Table\ 4.$ Key Principles for Application in Other Disciplines

Principle	Application in Other Disciplines
Clear Structure & Expectations	Mathematics and Coding: Providing explicit, sequenced instructions for pre-class problem sets and clear rubrics for in-class group work reduces anxiety and prevents students from feeling lost in complex material. Psychology/Sociology: Clear guidelines for pre-class readings on theoretical frameworks, paired with precise instructions for in-class group analysis of case studies or experimental data.
Perceived Relevance	History and Literature: Linking the pre-class reading/lecture (e.g., a historical event or literary theory) to an active in-class debate, simulation, or case study (e.g., analysing current events through a historical lens). This answers the student question, "Why do I need to learn this?" Nursing/Healthcare: Using pre-class modules to cover foundational anatomy, so in-class time can be used for hands-on clinical simulations or diagnosing complex patient scenarios, directly linking theory to practice.
Addressing Cognitive Barriers	Engineering and Science: Recognising that topics requiring significant synthesis (like circuit analysis or biological processes) impose a higher cognitive load. Instructional design must ensure pre-class materials are chunked and high-quality to prevent "clipped thinking" and allow students to arrive prepared for deeper, active learning.

Principle	Application in Other Disciplines	
	Philosophy: Acknowledging the density of philosophical texts. Pre-class work can involve guided reading questions or short videos explaining core concepts, so students aren't overwhelmed before the inclass Socratic discussion.	
Developing Active Skills	Business and Law: If students develop such skills as negotiation, legal writing, or complex modelling, the flipped model should be used to dedicate the live interaction time exclusively to practising these high-priority, complex application skills, justifying the preparatory work. Graphic Design/Architecture: Using pre-class time to learn software tutorials or design principles, freeing up in-class "studio" time for active creation, peer critique, and instructor feedback on their actual projects	

CONCLUSION

Based on a survey-based methodology, this study has investigated students' attitudes toward the flipped classroom model in an academic communication course, focusing on their engagement and perceived outcomes. The study proves that the foundation of the model rests on two interconnected phases: independent Pre-Class Preparation and In-Class Active Learning, but its success depends on intrinsic student characteristics, such as psychological factors (cognitive demands, self-discipline, and social exposure), as well as digital and cognitive factors ('clipped thinking' and fragmented attention). Overall, students' engagement and learning outcomes are shaped by the complex

interaction of the pedagogical methods, psychological readiness, and individual cognitive styles.

The survey results validate the English for Academic Communication course design and its implementation, mitigating potential negative factors outlined in the research hypothesis. Students' feedback indicates overall approval for the course structure, with a majority finding the syllabus clear and the content highly relevant, confirming that clear objectives and perceived value boost acceptance. This positive reception extends to the flipped component, as nearly all students found the initial homework manageable and useful, suggesting that the pre-class workload was seen as constructive. Furthermore, students' motivation for active participation proved high, with a large majority reporting feeling motivated after the first lesson, indicating strong initial acceptance. Finally, students' primary learning priorities are concentrated on active skills, particularly oral communication (presentations and public speaking), as well as interactive skills (academic discussions and debates).

The theoretical value of this study is that it contributes to the available literature by moving beyond a simple dichotomy of student success versus failure in flipped learning. Specifically, it provides an empirical link between emerging digital-cognitive barriers ("clipped thinking") and fundamental psychological factors (such as cognitive load), offering a more specific, integrated model for understanding students' resistance. Furthermore, by demonstrating that the successful

mitigation of these issues is directly measurable through positive indicators like perceived clarity and relevance, the study reinforces the importance of the Perception/Acceptance dimension as a critical, actionable component of the flipped model's theoretical framework.

The results offer immediate, actionable insights for educators and course designers across disciplines, testifying to the practical value of the study. The development of speaking skills provides a clear guideline for instructors to dedicate in-class time to high-value activities such as presentations and debates, thereby justifying the preclass workload. Furthermore, the findings highlight that ensuring high perceived clarity and relevance is the most efficient instructional tool for promoting initial students' acceptance, suggesting that the time invested in refining the syllabus and linking pre-work to tangible inclass application directly addresses key motivational factors.

However, despite positive initial findings, the long-term effectiveness of the flipped classroom demands further investigation. Instructional strategies must proactively address issues such as cognitive effort, anxiety management, attention fragmentation, and resistance to change to consistently foster students' engagement. This study demonstrates that the initial acceptance and engagement in any flipped learning environment are not subject-specific but are fundamentally connected to motivation and cognitive load management, confirming that effective instruction across all disciplines relies on establishing clear structure and perceived relevance.

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REFERENCES

- Abeysekera, L., & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom: Definition, rationale and a call for research. *Higher Education Research & Development*, *34*(1), 1–14. https://doi.org/10.1080/07294360.2014.934336
- Agyeman, N. Y. B., & Aphane, V. (2024). Implementing flipped classroom to enhance student engagement: An action research. *E-Journal of Humanities, Arts and Social Sciences (EHASS)*, *5*(11), 1860–1878. https://doi.org/10.38159/ehass.202451119
- Baig, M. I., & Yadegaridehkordi, E. (2023). Flipped classroom in higher education: A systematic literature review and research challenges. *International Journal of Educational Technology in Higher Education*, 20(61). https://doi.org/10.1186/s41239-023-00430-5
- Cai, L., Li, Y. L., Hu, X. Y., & Li, R. (2022). Implementation of flipped classroom combined with case-based learning: A promising and effective teaching modality in undergraduate pathology education. *Medicine* (*Baltimore*), 101(5), e28782. https://doi.org/10.1097/MD.000000000028782
- Feng, S., Fan, Y., Zhang, M., Zhai, X., & Liu, Y. (2022). Online flipped classroom with team-based learning promoted learning activity in a clinical laboratory immunology class: Response to the COVID-19 pandemic. *BMC Medical Education*, 22(1), 19. https://doi.org/10.1186/s12909-021-03063-8
- Galindo-Dominguez, H. (2021). Flipped Classroom in the Educational System: Trend or Effective Pedagogical Model Compared to Other Methodologies? *Educational Technology & Society*, 24(3), 44–60. https://www.jstor.org/stable/27032855
- Gondal, S. A., Khan, A. Q., Cheema, E. U., & Dehele, I. S. (2024). Impact of the flipped classroom on students' academic performance and satisfaction in Pharmacy education: A quasi-experimental study. *Cogent Education*, 11(1), 2378246. https://doi.org/10.1080/2331186X.2024.2378246
- Han, S. (2022). Flipped classroom: Challenges and benefits of using social media in English language teaching and learning. *Frontiers in Psychology*, 13, 996294. https://doi.org/10.3389/fpsyg.2022.996294

- Huang, Y.M., Silitonga, L. M., & Wu, T.T. (2022). Applying a business simulation game in a flipped classroom to enhance engagement, learning achievement, and higher-order thinking skills. *Computers & Education*, 183, 104494. https://doi.org/10.1016/j.compedu.2022.104494
- Irianti, L., Faridi, A., Pratama, H., & Suwandi. (2024). Flipped classroom and critical thinking on public speaking class. *Cogent Education*, 11(1), 2315815. https://doi.org/10.1080/2331186X.2024.2315815
- Jia, C., Hew, K. F., Dong, J., & Liu, L. (2023). Towards an entirely online flipped classroom model to support student learning outcomes and engagement: A two-year design-based study. *The Internet and Higher Education*, *57*, 100890. https://doi.org/10.1016/j.iheduc.2023.100890
- Joy, P., Panwar, R., Azhagiri, R., Krisnaurthy, A., & Adibatti, M. (2023). Flipped classroom: A student perspective of an innovative teaching method during the pandemic. *Education Medica*, 24, e022301. https://doi.org/10.51323/edumed.e022301
- Kaplan, A., Özdemir, C., & Kaplan, Ö. (2023). The effect of the flipped classroom model on teaching clinical practice skills. *Journal of Emergency Nursing*, 49(1), 124–133. https://doi.org/10.1016/j.jen.2022.09.006
- Khojasteh, L., Hosseini, S. A., & Nasiri, E. (2021). The impact of mediated learning on the academic writing performance of medical students in flipped and traditional classrooms: Scaffolding techniques. *Research and Practice in Technology Enhanced Learning*, *16*(1), 17. https://doi.org/10.1186/s41039-021-00165-9
- Kuş, M. (2025). Effectiveness of the flipped classroom model in higher education: A meta analysis study. *Journal of Computer and Education Research*, *13*(25), 628–653. https://doi.org/10.18009/jcer.1458237
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 22(140), 55.
- Mamun, M. A., & Dippro, A. W. (2025). Flipped classroom: Students and teachers' perceptions on the impact and challenges of implementation at tertiary level in Bangladesh. *International Education* Studies, 18(2), 26–40. https://doi.org/10.5539/ies.v18n2p26
- Mardiha, S.M., Alibakhshi, G., Mazloum, M., & Javaheri, R. (2023). Electronic flipped classrooms as a solution to educational problems caused by COVID-19: A case study of a research course in Iran higher education, *The Electronic Journal of e-Learning*, 21(1), 26–35. https://doi.org/10.34190/ejel.21.1.2440
- Mazlan, R., Mahamod, Z., & Jamaludin, K. A. (2024). Comprehensive structured review of implementing flipped classroom approaches

- in education. *Journal of Education and Learning (EduLearn)*, 19(3), 1651–1661. https://doi.org/10.11591/edulearn.v19i3.22655
- Mospan, N. V., & Sysoieva, S. O. (2022). Trends in digital adaptation of schools during the COVID-19 pandemic. *Information Technologies and Learning Tools*, 91(5), 21–35. https://doi.org/10.33407/itlt.v91i5.5063
- Mospan, N. (2023). Digitalisation of writing in higher education: the COVID-19 pandemic impact. *Journal of University Teaching & Learning Practice*, 20(2), 1-24. https://doi.org/10.53761/1.20.02.08
- Perta, H., Yulianti, E., & Huang, T.-C. (2024). Development of flipped classroom based interactive multimedia on biodiversity concept to increase students' learning motivation and critical thinking. *Jurnal Pendidikan Sains Indonesia (Indonesian Journal of Science Education)*, 12(3), 614–627. https://dx.doi.org/10.24815/jpsi.v12i3.38487
- Sun, Y., Zhao, X., Li, X., & Yu, F. (2023). Effectiveness of the flipped classroom on self-efficacy among students: A meta-analysis. *Cogent Education*, 10(2), 2287886. https://doi.org/10.1080/2331186X.2023.2287886
- Tsapro, G., Yakuba, V., & Gladush, N. (2025). From passive to active: Exploring the flipped classroom in MA English education. *Pedagogy of the formation of a creative person in higher and secondary schools*, 99, 187–192. https://doi.org/10.32782/1992-5786.2025.99.27
- Vitta, J. P., & Al-Hoorie, A. H. (2020). The flipped classroom in second language learning: A meta-analysis. *Language Teaching Research*, 136216882098140. https://doi.org/10.1177/1362168820981403

ДОСЛІДЖЕННЯ СТАВЛЕННЯ СТУДЕНТІВ ЗВО ДО МОДЕЛІ «ПЕРЕВЕРНУТОГО КЛАСУ»

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Це дослідження присвячене вивченню комплексної взаємодії психологічних і когнітивних факторів, які впливають на ставлення студентів та їх залученість навчальний процес при застосуванні моделі перевернутого класу (flipped classroom). Особливу увагу приділено ролі «кліпового мислення» — цифро-когнітивного бар'єра, що характеризується фрагментованою увагою.

Використовуючи методологію опитування на курсі «Академічна комунікація англійською мовою», було проаналізовано сприйняття релевантності, студентами ясності, мотивації та навчальних пріоритетів. Результати показують, що, хоча успіх моделі значною мірою залежить від внутрішніх характеристик, таких як психологічна індивідуальний когнітивний готовність ma стиль, початкова імплементація моделі успішно знизила потенційний опір. Зокрема, дослідження підтверджує, що висока сприйнята ясність та релевантність структури та змісту курсу суттєво підвищують початкове прийняття студентами та їхню мотивацію. Крім того, виявлено, що студенти надають пріоритет активним усним та інтерактивним комунікативним видам діяльності, що підтверджує доцільність структури перевернутого класу, спрямованої на ефективне використання аудиторного часу.

Теоретична цінність дослідження полягає в інтеграції новітніх знань щодо цифро-когнітивних бар'єрів («кліпове мислення»), усталених психологічних факторів (когнітивне навантаження), пропонуючи нову, інтегровану модель для розуміння неприйняття чи опору студентів моделі перевернутого класу поза межами простої дихотомії успіху чи невдачі. Практична цінність полягає в наданні викладачам доказової бази того, що забезпечення чіткої структури та високої релевантності є найбільш ефективною педагогічною стратегією для заохочення прийняття моделі та обґрунтування попереднього позааудиторного навантаження в усіх навчальних дисциплінах.

Ключові слова: залученість; кліпове мислення; когнітивне навантаження; перевернутий клас; прийняття студентами.

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