

ENHANCING STUDENT ENGAGEMENT AND AUTONOMY IN FLIPPED CLASSROOMS: FROM A SELF-DETERMINATION THEORY PERSPECTIVE

NÂNG CAO SỰ HỨNG THÚ VÀ TỰ HỌC CỦA NGƯỜI HỌC TRONG MÔ HÌNH LỚP HỌC ĐẢO NGƯỢC: TỪ GÓC ĐỘ HỌC THUYẾT TỰ QUYẾT

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Abstract - This article examines the impact of the flipped classroom (FC) model on student engagement and autonomy in a Research Methods course for second-year ELT students in Vietnam, framed by Self-Determination Theory (SDT). Findings reveal that, the FC approach enhances engagement through active participation, boosts autonomy by allowing students to control their learning pace and improves competence via personalized feedback. Challenges include adjusting to self-directed learning, maintaining discipline with pre-class materials, and accommodating diverse learning paces. Solutions like structured guidance, regular quizzes, and supplemental resources were effective. This research confirms and expands existing literature, offering practical strategies for optimizing FC implementation to foster a supportive and inclusive learning environment.

Key words - Flipped classroom (FC); student engagement; learner autonomy; self-directed learning; Self-Determination Theory (SDT)

1. Introduction

The field of education is constantly changing, introducing new ways to help students learn more effectively. One of these innovative methods is the flipped classroom (FC) model. This model flips the traditional way of teaching by giving students the materials to study at home, so that class time can be used for more interactive and engaging activities. This emphasizes a learner-centered approach, aiming to enhance both student engagement and autonomy, important aspects for fostering a conducive learning environment.

This research focuses on a specific course, Research Methods in English Language Teaching (ELT) which is part of the ELT program for second-year university students in Vietnam. The course uses the FC model and provides an opportunity to investigate how the FC model can improve student engagement and autonomy. The theoretical foundation of this research project is Self-Determination Theory (SDT), a known framework about human motivation which suggests that for an individual to feel motivated and happy, three basic needs must be satisfied: autonomy (feeling in control of their own actions), competence (feeling skilled and effective), and relatedness (feeling connected to others). In education, when these intrinsic needs are addressed, the learning environments are likely to be conducive to students being more engaged and taking charge of their own learning.

However, the implementation of FC strategies is not without challenges. Students accustomed to traditional

Tóm tắt - Nghiên cứu này nhằm tìm hiểu những ảnh hưởng của mô hình lớp học đảo ngược (FC) đối với sự hứng thú và tính tự chủ của sinh viên dưới góc độ của học thuyết tự quyết (SDT). Kết quả cho thấy, phương pháp FC tăng cường sự hứng thú của người học thông qua việc nâng cao khả năng tự chủ và làm chủ được tiến độ học của mình, đồng thời cải thiện năng lực học tập thông qua những phản hồi được cá nhân hóa. Một số khó khăn bao gồm việc tự điều chỉnh để làm quen với phương thức tự học, duy trì tính kỷ luật với việc nghiên cứu tài liệu trước khi đến lớp, và yêu cầu đáp ứng được các tiến độ học đa dạng của người học. Nghiên cứu còn chỉ ra một số các giải pháp như cần có những hướng dẫn cụ thể hơn, bổ sung các bài kiểm tra định kỳ và tài nguyên học tập để tăng tính hiệu quả của việc tự học qua phương pháp này.

Từ khóa - Lớp học đảo ngược (FC); sự hứng thú của người học; khả năng tự học; học thuyết tự quyết (SDT)

lecture-based instruction may struggle with the increased responsibility for their learning that the model demands. Furthermore, issues related to access to technology, student preparedness, and the effectiveness of in-class activities can impact the success of this pedagogical approach. Given the theoretical background of SDT, this study seeks to explore the relationship between the FC model and learner engagement and autonomy by addressing two critical research questions:

- RQ1: How do students perceive the impact of the FC approach on their engagement and autonomy?

- RQ2: What challenges do students encounter when engaging in FC, and how can they be addressed?

2. Literature Review

2.1. FC Model

2.1.1. An Overview

The FC model represents a significant shift from traditional teaching methods. In a FC, students are first introduced to new material outside of class, typically through video lectures or reading assignments. This innovative model is built on the premise that active learning during class time can enhance student engagement and learning outcomes. By engaging with the material at home, students come to class ready to apply what they have learned, discuss it with their peers, and ask questions. This shift not only encourages students to take more responsibility for their own learning but also allows teachers to use class time more effectively. Instead of

spending it on lecturing, teachers can facilitate discussions, provide personalized support, and guide students through complex problems that require critical thinking and collaboration [1], [2].

2.1.2. Benefits of FC Model

The FC approach has been underscored for its potential to significantly enhance learner autonomy among EFL students, as evidenced by a body of research across various educational contexts. Studies have shown that the FC model, by shifting direct instruction to individual learning spaces through digital means, actively promotes a more student-centered learning environment. This shift not only facilitates increased student engagement with the material prior to class but also encourages a deeper exploration of language skills within the classroom through collaborative and communicative activities [3], [4]. For instance, Wu et al. [5] demonstrated through a comparative study that EFL students exhibited notable improvements in oral proficiency, including aspects such as fluency, coherence, and grammatical accuracy, following FC instruction. This improvement was attributed to the enhanced opportunities for cooperative learning and in-class discussion provided by the FC model, underscoring the approach's effectiveness in fostering communicative competence and learner autonomy. In addition, this model of independent learning not only empowers students to assume responsibility for their learning journey but also cultivates critical thinking and reflection skills essential for language acquisition. The positive impacts of FC on learner autonomy are evident in the enhanced idiomatic knowledge and active learning behaviors observed among EFL students [6]. Furthermore, the integration of computer-assisted language learning (CALL) and technology-enhanced language learning (TELL) within the FC framework has been pivotal in offering flexible access to learning materials, thereby enabling students to tailor their learning experiences to their individual needs and preferences [7].

However, despite these promising insights, there remains a gap in the literature concerning the specific application and effectiveness of the FC approach in Research Methods courses for EFL learners. Such courses are critical for developing the skills necessary for conducting scholarly inquiry and contributing to academic discourse, yet little is known about how the FC model can best support learner autonomy and engagement in this context. Investigating how the FC model can be fostered to enhance autonomous learning behaviors and engagement in research-oriented tasks will provide valuable contributions to the field. By addressing this gap, educators can better understand the role of FCs in cultivating the skills necessary for EFL learners to navigate the complexities of academic research, ultimately enriching their educational experience, and preparing them for academic success.

2.1.3. Challenges of FC Model

Although implementing the FC approach has several advantages, specific challenges that can impact learner autonomy and engagement are evident. Missildine et al. [8] highlight that the requirement for extensive out-of-class preparation can undermine students' satisfaction, as the

heavy workload for pre-class activities may burden students' time outside the classroom. This was also claimed by [9], pointing out that students may have a feeling of discomfort and reluctance towards the increased pressures placed on them to adjust to their new roles in the FC.

Another major obstacle is resistance to the pedagogical model, as pointed out by [10] and [11]. Students accustomed to traditional teaching methods may struggle to adapt to the FC's new routines and expectations. Milman [12] adds that students might not fully engage with lesson videos or understand the material adequately, which could cause them to be unprepared for class activities and have difficulty keeping pace with their peers. Furthermore, the digital nature of pre-class activities introduces distractions that can reduce students' concentration, as mentioned by [13] and [14], who also highlight irregular attendance and a lack of responsible attitude towards learning as additional problems.

Operational issues also pose barriers to the success of the FC model, according to [8] citing infrastructure limitations, such as low-speed Internet connectivity and a lack of devices that would allow students to access digital content at home. These challenges, primarily found in contexts outside of foreign language education and particularly in the Vietnamese setting, highlight how challenging it is to apply the flipped model in a way that successfully increases learner autonomy and engagement. These difficulties must be resolved to optimize the potential of FCs to promote active, self-directed learning experiences.

2.2. SDT in Educational Contexts

SDT a foundational element of this study, posits that motivation, which significantly influences a student's effort and focus in learning, is driven by three psychological needs: autonomy, competence, and relatedness [15], [16]. These needs are crucial for stimulating engagement and enhancing intrinsic motivation among learners, leading to a more positive attitude towards learning and increased engagement [17]. The theory suggests that the extent to which these needs are supported or hindered is significantly influenced by external factors [18]. Aligning the FC environment with SDT's core components - autonomy, competence, and relatedness - provides an approach to improving student autonomy and engagement. This alignment underscores the importance of creating educational settings that fulfill these psychological needs, thereby fostering an atmosphere conducive to active and self-directed learning.

2.2.1. Autonomy

In the context of FCs, autonomy refers to students' sense of control over their learning process. This dimension of SDT is closely related to learner autonomy, as the flipped model allows students to interact with instructional materials at their own pace and time outside the classroom [19], [20]. Classroom activities which are designed to offer choice and relevance can encourage students to take ownership of their learning and thus, inspiring effective autonomous learning and engagement. It is, therefore, important that educators and teachers should aim to create a FC environment that offers flexibility in learning paths and acknowledges students' individual preferences and interests.

2.2.2. Competence

Competence in SDT emphasizes the significance of students feeling capable and effective in their learning pursuits [21]. In FCs, the active engagement with content and application of knowledge through problem-solving and collaborative projects can noticeably enhance students' sense of competence. This is because these activities provide immediate feedback and opportunities for mastery, essential for building confidence and fostering deep engagement with the material [22]. To maximize the impact of competence on learner autonomy and engagement, FC activities should be carefully scaffolded to challenge students appropriately and provide support where necessary, ensuring that all students can experience success and growth in their learning journey.

2.2.3. Relatedness

Relatedness emphasizes the significance of social connections and feeling a sense of belonging within the learning community. In FCs, this is achieved through collaborative learning activities that promote interaction among students and between students and teachers [23]. Facilitating a sense of relatedness can enhance engagement by creating a supportive and inclusive learning environment where students feel valued and understood. This sense of community encourages students to actively participate and take risks in their learning, further promoting autonomy [24]. Teachers can foster relatedness by incorporating group discussions, peer feedback sessions, and collaborative projects that require students to work together towards common goals.

SDT offers a robust framework for understanding and enhancing student engagement and autonomy within the FC environment. By focusing on the three fundamental psychological needs of autonomy, competence, and relatedness, teachers can create learning experiences that not only motivate students but also empower them to take an active role in their own education. The FC model, with its emphasis on student-centered learning, aligns well with SDT principles, providing a structured but flexible approach that supports learners' intrinsic motivation and engagement.

However, despite the theoretical alignment between SDT and the FC approach, there exists a gap in empirical research specifically examining how these SDT components are operationalized within FC settings across diverse educational contexts. Furthermore, there is a need for deeper investigation into the challenges students face in adapting to the FC model and how these challenges might affect their engagement and autonomy. Understanding these dynamics is crucial for refining FC practices to better meet students' needs and for leveraging the full potential of SDT to enhance educational outcomes. Such research will contribute significantly to the development of more effective and supportive FC environments, ultimately facilitating a more enriching and autonomous learning experience for students.

3. Research Methodology

This study adopts a qualitative research approach to explore the impact of the FC model on student engagement and autonomy from a SDT perspective. The qualitative methodology is chosen for its strength in capturing

complex experiences, perceptions, and challenges encountered by students in FC settings. Through in-depth analysis, this approach aims to provide rich, detailed insights into the complex ways in which the FC model influences learners' engagement and autonomy.

The research was conducted at a foreign language university located in Danang, Central Vietnam. This institution was selected due to its specialized focus on language education and the implementation of innovative teaching models, including FCs. Participants in this study were drawn from the second-year cohort of students majoring in ELT. These students were enrolled in a required Research Methods course, known for its challenging content, including complex terminology and the application of sophisticated research concepts. Traditionally, the course employed a lecture-based approach, which often resulted in student disengagement and a lack of motivation due to the dry delivery of content and the difficulty of the material.

To address these challenges, the Research Methods in ELT course was restructured based on the FC format for the duration of one semester. This pedagogical approach aimed to enhance student involvement and autonomy by requiring pre-class preparation through video lectures and readings, thereby allowing in-class time to be dedicated to active learning strategies such as discussions, practical exercises, and collaborative projects.

The participants were selected from a pool of students enrolled in the flipped version of the Research Methods in ELT course. Purposive sampling was employed to ensure a diverse representation of experiences and perspectives. Twenty-one students were recruited, with efforts made to include a mix of genders and academic levels to enrich the study's findings. Participants were selected based on their willingness to participate and their varied experiences with FC models prior to the study. Additionally, the selection aimed to include students with different academic performances and linguistic backgrounds to ensure a broad range of insights into the FC's impact on learner engagement and autonomy.

As for data collection methods, four focus group sessions were organized, each consisting of 5-7 students. These sessions aim to foster discussions that can reveal collective insights and shared experiences regarding the FC model. Focus groups help provide a platform for participants to express their thoughts on what facilitates or hinders their learning, engagement, and autonomy in a FC context. In order to collect that data, a set of 18 open-ended questions were designed based on the theoretical framework of SDT focusing on the three core components: autonomy, competence, relatedness and obstacles learners have to encounter in the FC and suggestions for improvement from the students' perspective.

Data analysis followed a thematic analysis approach, where the transcripts were carefully examined to identify recurring themes, patterns, and insights related to student engagement and autonomy in the FC model. The analysis was iterative, moving back and forth between the data and emerging themes to ensure a comprehensive understanding of the students' experiences within the FC context.

As regards reliability and validity of the study, they were ensured through meticulous methodological design and comprehensive data analysis. Reliability was addressed by the use of a consistent approach in conducting focus group sessions and maintaining a systematic procedure for data collection. Validity was achieved by using purposive sampling to obtain a diverse and representative sample of participants and by employing thematic analysis to accurately reflect the students' experiences and perceptions. This process involved an iterative examination of the data, allowing for a deep understanding of the impact of the FC model on student engagement and autonomy.

4. Findings and Discussion

4.1. Research Question 1: How do students perceive the impact of the FC approach on their engagement and autonomy?

Increased engagement through active participation: According to the data gathered, students reported a high level of engagement with the learning material through the FC approach, moving from passive absorption of knowledge to active participation. This transformation is facilitated by pre-class video lectures and dynamic in-class activities, leading to a more interactive learning experience. One student captured the essence of this shift by stating, *"It's different, you know? Before, I'd just sit there and listen. Now, I come in, ready to debate and share. Makes the class kinda exciting."* This opinion reflects how the FC could energize the learning environment by encouraging students to engage with the material and their peers directly. Similarly, another student remarked, *"Honestly, preparing before class has turned the boring part of the research course into something active. I actually look forward to seeing how and what I learned apply to the class discussions"*, which underscores the anticipation and eagerness that the flipped model fosters among students. Therefore, this approach not only increases students' interest and motivation towards the subject matter but also transforms their learning journey into a more engaging experience.

Enhanced autonomy in learning: Based on the participants' responses, the FC significantly enhanced their autonomy by giving them the control over their learning pace and style. This method facilitates approach to lecture materials outside the classroom, enabling students to interact with the content when and how they prefer, thus catering to their individual learning preferences. Such autonomy is important in promoting self-directed study habits and a profound sense of responsibility toward their learning outcomes. A student encapsulated the value of this autonomy by stating, *"Having the independence to manage my study time and how I access the material... it's just game-changing. I feel more in charge of my learning now."* This opinion emphasizes the FC's role in helping students take charge of their learning and become more independent learners. Additionally, the ability to personalize one's learning pace is another key benefit, as another participant pointed out: *"It's freeing, really. If I don't get something, I can just hit pause, no rush. I never got that sitting in a lecture class"*. These insights illustrate how the FC model fosters an

environment where students are not just passive recipients of information but active participants in their learning process, significantly benefiting from the autonomy and flexibility the FC model offers.

Improved competence through feedback: The responses from the students also indicated that the FC model notably gave a significant boost in competence through the integration of personalized feedback and collaborative problem-solving within in-class sessions. This approach allows students to actively clarify doubts, apply theoretical concepts in practical contexts, and benefit from immediate feedback, and thus, deepening their understanding of the subject and improving their sense of competence. The value of this immediate, in-class feedback is highlighted by a student who remarked, *"Getting feedback right when we're in the thick of it, in class, makes all the difference. I can see where I stand and what I need to work on immediately."* This real-time feedback is crucial for allowing students to identify their strengths and areas for improvement on the spot, significantly enhancing the learning process.

Strengthened relatedness within the learning community: The FC model significantly enhances the sense of relatedness and community during the learning process, bridging the gap between students and instructors and fostering deeper interpersonal connections. Through the incorporation of collaborative in-class activities, this approach not only emphasizes the academic objectives but also underscores the social aspect of learning, making the learning process more rewarding and connected. A student highlighted the value of such collaboration, stating, *"The group work isn't just about the tasks; it's about building connections, you know? I've gotten to know my peers on a different level"*, which underscores how collaborative learning in the FC goes beyond mere academic engagement to foster meaningful relationships among students.

Furthermore, there is a strong feeling of teamwork that includes not only among the students themselves but also with their teacher, forming a united learning group that overcomes obstacles together. *"Now, there's a real sense of teamwork, involving us students and our teacher. It feels like we're all in this together, facing the challenges as one"*, remarked another student, emphasizing the strong sense of belonging and mutual support that characterizes the FC setting. This joint effort and increased connection lead to a more supportive and interactive learning space, where students experience a sense of belonging to a dedicated educational community, actively engaging and helping each other in their learning journey.

The findings of this study, which explore the impact of the FC approach on student engagement and autonomy, align with as well as extend the existing literature. The transformation from passive to active participation, as highlighted in the findings, suggest that students not only absorb knowledge but also apply and question it in meaningful ways.

The positive shift towards more dynamic and interactive learning, as reported by students in this study, agrees with the benefits outlined by [3] and [4], where flipped learning

was shown to promote student-centered environments and encourage practical application of knowledge. However, this study goes further by detailing the ways in which students perceive their autonomy and engagement, particularly through the lens of immediate feedback and strengthened relatedness within the learning community, which are aspects less emphasized in previous research. Specifically, the current study's emphasis on the strengthened sense of relatedness and community within the FC setting adds depth to the literature. While previous studies like that of [5] noted improvements in specific skills like oral proficiency, this study highlights the broader social and emotional benefits of the FC model, demonstrating its capacity to build connections and foster a collaborative educational atmosphere. Moreover, this research uncovers a new dimension of the FC model's impact, regarding the personalized and dialogic nature of feedback in FC, which was considered as a significant factor in enhancing students' learning experiences. This aspect of the findings extends beyond the scope of previous research by offering a detailed exploration of how feedback in the FC contributes to a more interactive and engaging learning process.

In summary, this study shows that the FC really helps increase student involvement, control over their learning, and skill-building, consistent with and adding to what has been already known about the benefits of this model. It changes how students learn, making them more active, letting them learn in their own way, and helping everyone work together better. These results support using the FC as it makes learning more interactive and focused on the students, moving beyond old-style teaching.

4.2. What challenges do students encounter when engaging in FCs, and how can they be addressed?

One significant challenge highlighted by the participants was **the adjustment to self-directed learning**, a cornerstone of the FC model. A student described the initial difficulty, saying, *“At first, I felt overwhelmed by the expectation to manage my learning outside of class. It was a lot of responsibility.”* This was echoed across the study, underscoring the shift from a more structured classroom environment to one that demands a higher degree of self-regulation and autonomy. To address this challenge, the participants suggested providing structured guidance and resources to help them navigate this transition more effectively. *“Our teacher should give us templates and tips for organizing our study schedule, which really helped”*, shared another student.

Another key challenge identified was **ensuring students consistently engage with pre-class materials**. Unlike traditional settings where the lecture is the main content delivery method, FCs rely on students completing preparatory work. *“It was hard to stay disciplined and keep up with the videos and readings before class”*, admitted one student. This issue is critical because the effectiveness of in-class activities depends heavily on students arriving prepared. Some students supposed that this challenge could be addressed by incorporating regular, low-stakes quizzes and reflective questions based on pre-class materials. These assessments encouraged consistent engagement by

holding them accountable and provided immediate feedback, reinforcing the competence aspect of SDT. *“The quizzes made me keep up with the materials, and I actually felt more prepared for class discussions”*, a student shared.

One final main hurdle is related to **the adaptation to varied learning paces**. The FC model may assume that all students have similar abilities to learn and interact with materials before class, which is not always the case. Students have varied learning paces, and some may find it challenging to keep up with the pace set by the pre-class assignments. *“I sometimes felt rushed to complete the materials and didn't fully grasp some concepts before the class”*, shared a student. This discrepancy can lead to gaps in understanding and diminish the overall effectiveness of the FC approach. To overcome this challenge, the students suggested they should be provided with supplemental resources and optional review sessions for students who needed extra time or help with the materials. These resources were designed to cater to different learning styles and paces, ensuring that all students had the opportunity to fully grasp the content at their own speed. *“The extra review sessions were a lifeline for me, allowing me to ask questions and catch up at my own pace”*, a student expressed. By acknowledging and accommodating the diverse learning needs of students, teachers could foster a more inclusive and supportive learning environment, ensuring that no student was left behind.

The challenges faced by students in FCs, such as adjusting to self-directed learning and engaging consistently with pre-class materials, align with the difficulties highlighted in the literature. Missildine et al. [23] and Strayer [9] noted the burden of extensive out-of-class work and the discomfort with new learning roles, mirroring the sense of overwhelm and responsibility students in this study expressed. However, this study extends these insights by suggesting practical solutions like structured guidance and regular quizzes to ease the transition and maintain discipline in study habits. Furthermore, the adaptation to varied learning paces emerges as a significant concern in this study, proposing supplemental resources and review sessions as remedies. This approach to addressing diverse learning needs shows a progress from identifying challenges to actively seeking strategies that foster a supportive and inclusive learning environment, highlighting a deeper understanding of the FC's implementation.

Moreover, while some previous research has mentioned resistance to the FC model and operational issues like technology access, the current study sheds light on the importance of addressing diverse learning paces and styles, which is less featured in earlier literature. The introduction of supplemental resources and optional review sessions can help ensure all students engage with the materials fully, regardless of their initial level of understanding or learning pace.

5. Conclusion

This study confirms the FC's role in enhancing student engagement and autonomy in an ELT Research Methods course, reflecting the principles of SDT. While students

benefited from enhanced active participation and increased control over their learning, challenges such as adapting to self-directed learning, maintaining engagement with pre-class materials, and accommodating diverse learning speeds were evident. Addressing these challenges through structured guidance, regular quizzes, and additional resources has proven effective. This research also underscores the potential for FC strategies to significantly transform educational practices, especially in language learning contexts. It suggests that integrating technology and active learning could be pivotal in preparing students for more autonomous and engaged roles in their educational journeys, thereby influencing curriculum development and instructional methodologies. For further improvement, it is recommended that educators continuously refine and personalize the FC strategies to meet individual student needs effectively. Additionally, the study's limitation lies in its focus on a specific academic context and a small participant group, suggesting the need for broader research across various disciplines and larger populations to generalize the findings and enhance the understanding of the FC's impact on learner autonomy and engagement.

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