# Flipped Classroom: Shifting from Conventional Approach to Innovative Model

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#### **Abstract**

This study aims to deliver a detailed account of the prevailing literature while offering significant observations by accentuating the primary aspects of the flipped classroom and its benefits, factoring in the hurdles related to this teaching technique. The modern world is transforming into an environment where a wide range of technologies emerges, undergoes testing, and subsequently spreads swiftly. This significant transformation is evident in various fields, especially in education. This shift calls attention to the essential task of rethinking and rigorously scrutinizing the prevailing educational paradigm, the positions of instructors and students, and the teaching resources in practice. Additionally, the transition from traditional methods to innovative strategies is inevitable. The flipped classroom blends engaging learning experiences through collaborative and individual tasks in class, while lower-level tasks and self-study occur outside using digital resources. The researchers perform a theoretical review to thoroughly explore the incorporation of the flipped classroom model into our educational practices. The flipped classroom framework presents a promising strategy for boosting student learning and engagement. By thoughtfully addressing the related challenges and capitalizing on the potential advantages, educators can cultivate a more vibrant and effective learning atmosphere. Additional studies are required to evaluate the enduring consequences of the flipped classroom approach and to ascertain effective methods for its application.

Keywords: flipped classroom, blended learning, advantages, challenges, solutions

#### INTRODUCTION

The contemporary world is evolving into a space where a vast array of technologies appears, gets tested, and then disseminates rapidly. What once appeared to be astonishing is now a concrete fact. The present-day society operates as a blend of heritage and cutting-edge advancements. Occasionally, traditional approaches may clash with what seems like irrational innovations, while at other times, they embrace and welcome such changes with gratitude (Chilingaryan & Zvereva, (2017). The onset of the digital age is considered among the most pivotal shifts, leaving a notable impression on humanity, after the industrial advancements. This dramatic shift manifests across numerous domains, particularly in education, sociology, psychology, economics, and the cultural landscape of societies (Cevikbas, & Argün, 2017). This change highlights the importance of revising and critically examining the educational setting established, the functions of educators and learners, and the resources utilized for instruction (Kuhn, 2003). In addition, the shift from conventional techniques to progressive approaches is unavoidable (Chilingaryan & Zvereva, (2017).

It is important to elevate the productivity of educational efforts by maintaining the milestones of earlier times while embracing the shifts of our present-day society. A viable approach to accomplish this objective is by restructuring the teaching and learning settings

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(Cevikbas, & Argün, 2017). Furthermore, the educational landscape at the higher level has generally been characterized by a focus on the instructor, as lessons unfold within the classroom and students tackle additional work outside. In this customary structure, the educator remains the focal point in the learning environment, as students embrace a comparatively passive position. The flipped classroom approach prioritizes the student within the learning environment and promotes an active learning methodology (Fuchs, 2021).

Flipped learning improves educational resources both in and out of the classroom. A flipped classroom differs from traditional classrooms by changing the setting in which materials and homework are delivered. In this approach, students interact with learning resources at home using various formats. They can either study on their own or work together with classmates and finish assignments during class hours. This method seeks to make the most of class time for enhanced learning. It transforms standard teaching by transferring lessons online and concentrating classroom time on assignments, enabling more individualized support from educators (Nurfaiziyah and Aminin, 2021).

This study aims to deliver a detailed overview of the existing body of work while offering profound insights by underscoring the essential traits of the flipped classroom, as well as its benefits when considering the limitations of this teaching style.

#### **METHODS**

The researchers conduct a theoretical review to thoroughly investigate the integration of the flipped classroom approach in our teaching practices. A theoretical review constitutes a particular type of literature review that prioritizes the investigation and appraisal of established theories and ideas associated with a distinct research inquiry or subject matter (Paré & Kitsiou, 2017). It transcends the mere summarization of current theories; it engages in a critical analysis, juxtaposing various viewpoints, pinpointing strengths and weaknesses, and examining their relevance in diverse contexts (Paul & Rialp, 2020). The objective is to deliver a thorough understanding of the theoretical framework surrounding the subject and to highlight potential voids or areas that require further theoretical exploration.

#### **RESULTS**

## **Definition of Flipped Classroom**

Several studies were carried out, resulting in the emergence of multiple definitions. In a flipped classroom model, learners engage with instructional content prior to class (for instance, by viewing online lectures) and utilize that knowledge during class sessions (Van Alten, et al., 2019). The flipped classroom approach involves assigning learning materials, typically delivered through traditional lectures in a classroom setting, for students to study independently outside of school hours, while class time is dedicated to engaging in various additional learning activities related to the assigned materials (DeLozier and Rhodes, 2016; Long, Cummins, & Waugh, 2016). O'Flaherty and Phillips (2015) elaborated on the subsequent definition by highlighting that greater importance should be placed on students acquiring a fundamental grasp of the concept prior to attending class and utilizing it during class sessions.

Furthermore, the flipped classroom is an academic strategy that reshapes how time is managed within the classroom and in other environments, spotlighting dynamic learning that gives precedence to students (Caligaris, et al., 2016). Cevikbas, & Argün, (2017) define flipped classroom as a blended learning approach that incorporates significant and engaging learning experiences featuring metacognitive tasks, which are conducted as part of collaborative and

solitary efforts within classroom environments, while lower-level cognitive tasks and self-directed studies aligned with the learner's pace are performed outside of school environments, utilizing class videos, slides, articles, and course notes available on digital platforms. As a result, executing the flipped classroom framework encompasses two vital steps. These include: first, independent studies conducted through online platforms outside of the classroom, and second, inquiry-based activities that take place within the classroom. In this regard, the activities completed outside of class establish a groundwork for the in-class activities.

In short, the flipped classroom model inverts the traditional learning sequence. Students first engage with introductory materials before class, often through online resources like pre-recorded lectures, videos, readings, or other assignments. Class time is then repurposed for interactive activities, collaborative projects, problem-solving, discussions, and deeper engagement with the material, building upon the foundation established outside of class. This allows for a more active and student-centered learning environment where instructors can provide personalized guidance and support. The pre-class work may involve lower-level cognitive tasks and self-paced study, while in-class activities emphasize higher-level cognitive tasks, metacognitive reflection, and collaborative learning. The emphasis is on students gaining a basic understanding of the concepts before class so they can actively apply and expand upon that knowledge during class.

## The importance of Flipped Classroom

The ongoing advancement of technology over the past few decades has significantly influenced nearly every industry worldwide. Universities and colleges must seek out novel educational methods that equip their students to respond to labor market needs and adapt accordingly (O'Flaherty & Phillips, 2015). Among the many strategies proposed to meet this challenge was the shift from conventional pedagogical techniques to a contemporary framework that underscores the students' capability for deep and independent comprehension of concepts (Khan, 2015).

Indeed, the transition from a teacher-centered education model where educators prepare themselves and deliver instructions while students listen attentively to a student-centered approach, which encourages active participation and places students at the forefront during classes, has elicited mixed reactions from teachers, to say the least (Froyd & Simpson, 2008; Khan & Markauskaite, 2017). By supplying pupils with study materials before the lesson begins, instructors can pay greater attention to gauging the grasp of the students throughout the sessions while dealing with the applicable features of the content. Furthermore, this approach allows students to engage meaningfully in their learning, thereby fostering student-centered teaching (Law, Hafiz, Kwong, & Wong, 2020).

#### **Several Foundation Models**

Foundational models shape English teaching by facilitating textual analysis and encouraging student discussions. The flipped classroom improves learning outcomes by incorporating digital tools for interactive involvement. The foundation models are as follows:

#### The Grammar-Translation Method

This method from the 19th century highlights the importance of reading comprehension, grammar, and vocabulary. Students engage in translating texts from classical languages into their own language, thereby improving their grammatical abilities. Educators provide support through in-depth textual analysis and translation, emphasizing vocabulary and structure. Literature is analyzed for its grammatical aspects instead of its themes or interpretations. Although it is largely considered outdated, the grammar-translation method laid the groundwork for essential skills in

close reading and text analysis, which continue to be crucial in contemporary education (Richards and Rodgers, 2014).

#### The Direct Method

The Direct Method fully immerses learners in the target language. Literature is introduced in its authentic form to promote fluency. In literature classes, educators may read aloud, engage in discussions, and perform role-plays without using translation. This approach prioritizes immersion and the use of contextual vocabulary. Its emphasis on experiential learning influences both communicative language teaching and literature instruction. (Richards and Rodgers, 2014).

## Reader-Response Theory

Reading is crucial for students to evolve into engaged thinkers throughout their lives. Rosenblatt's reader response theory highlights the importance of the reader's involvement in interpreting texts. This theory posits that readers enhance texts through their own knowledge and experiences. Although educators may prefer to share their interpretations directly, students thrive best when prompted to think for themselves. Reader response theory nurtures the development of engaged and critical readers (Woodruff and Griffin, 2017).

# Project-Based Learning (PBL)

PBL is grounded in comprehensive "design principles" that often relate to the content being taught, instructional methods, and the assessment of students in a PBL framework. The design principles of PBL emphasize the importance of the project as the central means of instruction and highlight the role of students as active participants in their own learning journey (Condliffe, 2017).

## Blended Learning

Blended learning can be meticulously characterized as an innovative educational approach that arises from the integration and harmonious combination of traditional in-person classroom learning experiences, where students and instructors interact face-to-face, alongside the increasingly prevalent and transformative realm of online learning environments that utilize digital platforms for instructional delivery (Driscoll, 2002), as is vividly illustrated in the accompanying visual representation referred to as Figure 1.

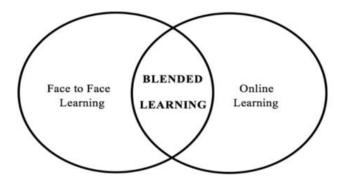


Figure 1: Blended Learning (Driscoll, 2002)

By integrating traditional classroom instruction with online educational resources and activities, blended learning notably increases the avenues for student socialization, eases the process of accessing a vast wealth of information, and ultimately contributes to a considerable reduction of invaluable time that can be allocated to engaging in interactive learning activities during class. This remarkable feature of blended learning not only allows learners to capitalize on the advantages of working individually but also encourages collaborative group work, thereby fostering an environment where both approaches can be employed in a highly effective manner to

optimize the overall educational experience (Cevikbas, & Argün, 2017). Staker and Horn (2012) categorize the flipped classroom model within the broader spectrum of blended learning models, as is clearly illustrated in Figure 2 that follows this statement.

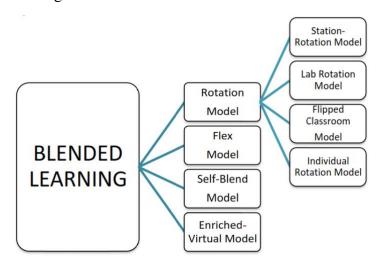


Figure 2: Flipped Classroom as a Blended Learning Model (Staker and Horn, 2012)

The flipped classroom model, which is meticulously constructed upon a robust and well-established foundation, has undeniably emerged as one of the most highly favored and widely adopted blended learning frameworks in the educational landscape over the past few years (Bergmann & Sams, 2012; Khan, 2011).

# **Essential Principles of The Flipped Classroom Model**

O'Flaherty and Phillips (2015) pointed out that the aims of educators who implement the flipped classroom model are to convert students from a passive learning state to an active learning one, while also generating further time and opportunities for students to engage with their recently obtained knowledge. Consequently, the flipped classroom comprises two learning environments (components): the first component is individual learning spaces (online), and the second component consists of interactive learning spaces, typically conducted in a face-to-face format. To integrate these two educational methods, the flipped classroom professional development series at the University of Hong Kong (HKU) proposed several steps (Source: HKU, February 2, 2018).

The primary approach of the flipped classroom revolves around arranging two activities sequentially (Figure 3).

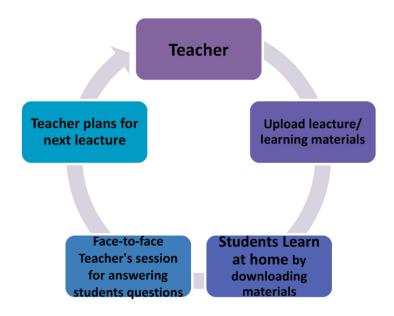


Figure 3: Flipped classroom activities (Source: HKU, February 2, 2018)

The purpose of creating an online platform is to offer students learning environments that lead to improved educational results through the flipped classroom model. To begin with, the flipped classroom approach requires an online platform. Numerous other online tools exist that greatly enhance the facilitation of student activities (Khan, Shamim, & Nambobi, 2018). An online platform allows for the arrangement of diverse activities focused on students. This platform enables teachers to upload their class lectures and any other necessary learning materials, which should be prepared according to the course content (curriculum). Also, to further collaborative learning, a discussion forum will be initiated to support the exchange of knowledge among teachers and students alike.

The intention behind having physical classes is to clarify challenging topics that students might encounter in their independent educational pursuits and to make use of the knowledge obtained from online learning. Instructors will facilitate regular in-person sessions not to deliver standard lectures but to provide students with the chance to pose questions and gain clarity on the materials uploaded. Thus, the primary responsibility of the teachers is to enhance students' comprehension by addressing their inquiries. This session fosters a high level of interaction between educators and students, aimed at deepening students' understanding of the lecture materials that were initially provided. For subjects that are more hands-on, the teacher guides students in effectively applying the newly acquired knowledge through diverse exercises and practical tasks.

## The Advantages of Flipped Classroom

The flipped classroom model offers numerous benefits for educators and learners alike, creating enhanced educational settings both within and beyond the classroom. Chilingaryan & Zvereva, (2017) pointed out several advantages of flipped classroom.

- 1. It enhances the interaction time between the teacher and the student; that is, it is virtually doubled. In the context of the conventional method, the student absorbs the theoretical material in the classroom and completes assignments at home, but the teacher often lacks the available time to review it during class. Alternatively, the flipped classroom strategy facilitates a joint effort between students and the teacher to tackle any questions and errors right there in the classroom setting.
- 2. It involves a personalized approach for each individual student.

- 3. It offers an opportunity for educators to develop authentic mini lectures. Most would likely concur that a flawless tutorial covering any language topic does not exist. Through mini lectures, the educator has the ability to produce a distinctive and authentic short film, wherein the information is curated and selected in the most ideal manner, considering the professional focus, age characteristics, and other significant elements within the learning cohort.
- 4. It enhances the learner's sense of responsibility and independence. The student recognizes the necessity of investing time in watching the training video, which is a more engaging, visually appealing, and familiar activity; it immerses the student in a computing environment that is more typical for most young people.
- 5. It encompasses the capability to reconnect with the group if they were unable to attend classes for various reasons. In an era where economic conditions and the fast pace of life compel numerous students to juggle their education alongside work, the flipped classroom model enables students to catch up on any missed classes. Concurrently, educators engaged in research will have the opportunity to participate more effectively in conferences, substituting their physical attendance in the classroom with a no less substantial virtual presence.
- 6. It optimizes time use. This is crucial given the limited hours for language training. This is particularly relevant for learning additional languages. It's illogical for a qualified teacher to repeat simple lessons for different groups. Recording these explanations on video is a smarter approach, allowing students to review them at home and address their questions. This transforms theoretical learning into a creative workshop, fostering collective knowledge sharing. Discussions take place, enabling students to engage actively. There's no time wasted when weaker students ask for clarity while stronger ones don't lose valuable time.
- 7. Every learner can advance according to their unique rhythm. Each individual has unique learning needs. Some may grasp concepts quickly, while others require repetition. This method allows for unlimited video access, pausing, re-listening, and using supplementary resources. For some, this approach feels more psychologically comfortable. Students do not have to interrupt the teacher to ask questions, alleviating any fear of ridicule.
- 8. It encompasses the capacity to focus. In a large gathering, educators often struggle to capture the complete attention of their audience. Young individuals are easily sidetracked by discussions and the myriad of devices that have woven themselves into the fabric of their daily lives.
- 9. It elevates the enthusiasm of learners.
- 10. It enhances the ambiance within the classroom, creating a more inviting and cozier environment. Since the content has been reviewed at home, it lessens the disparity between weaker and stronger students, thereby minimizing potential stress levels. It boosts the students' enthusiasm for the lesson. Engaging in debates is always more enjoyable than passively listening to theoretical concepts.
- 11. It enhances the imaginative abilities and analytical reasoning of learners.
- 12. There exists the potential for ongoing archiving of the content. For instance, when getting ready for assessments or examinations, the learner can revisit the gathered video content, doing so in a manner that suits their preferences. The current pace of life often makes it challenging to carve out time to read a textbook, whereas audio and video materials can be consumed while driving or on public transit.
- 13. It encompasses the constructive evolution of the relationship between the teacher and the student. The teacher evolves into a sort of mentor, supporter, and guide, assisting in navigating and discovering their path amidst an ocean of information.

When assessed holistically, the flipped classroom model connects real-world applications to educational practices, provides substantial benefits for lifelong learning, and introduces a fresh perspective to education through its innovative approaches.

# **Challenges and Proposed Solutions**

Beyond the merits of the flipped classroom technique elaborated in the learning environment, it encompasses multiple challenges that are intrinsic to its structure. Creating lesson videos, along with visual and written materials, stands out as the most significant challenge, as it is a demanding and time-intensive endeavor (Davies et al., 2013; Gannod et al., 2008; Hamdan et al., 2013; Herreid & Schiller, 2013). According to Bergmann and Sams (2012), readily accessible instructional materials can be employed without consuming too much time. Nevertheless, even if every educator aspires to create their own lesson videos and course content, this challenge will be particularly daunting in the initial year since previously prepared videos and documents can be readily utilized in subsequent years, along with essential updates and modifications reflecting the latest advancements in the field. Therefore, by collaborating with fellow educators or leveraging readily available resources, teachers can effectively navigate this challenge.

Strayer (2009) notes that when implementing the flipped classroom model, students might experience apprehension regarding the need to watch course videos and finish readings prior to attending class. Yet, this ought not to be perceived as a setback, for a certain level of anxiety can authentically boost the learning process. Conversely, in situations where the flipped classroom model is not utilized, completing assignments like homework and exercises can still pose a challenge that may also lead to increased anxiety.

Bland (2006) suggests that students might struggle to fulfill the new responsibilities and expectations introduced by the flipped classroom model, and they may face challenges in adapting to this novel approach. In such cases, a gradual shift to the flipped classroom model, sharing responsibilities in an engaging manner, clearly outlining expectations and tasks, and implementing a rewards system could ease this transition.

Dealing with the situation where students lack Internet technology access, evaluated from both technical and financial angles, stands out as a significant difficulty while applying flipped classroom strategies. However, the tools utilized in flipped classroom practices are compatible with various devices, including computers, tablets, and smartphones. This narrows the issue since nearly everyone, including children, possesses a smartphone today. Nonetheless, it is essential to verify that the group of students collaborating together has the required technical infrastructure for the applications used in the flipped classroom model.

The perceived implementation of the flipped classroom model can lead to varying advantages or disadvantages in the learning process, influenced by several factors such as the country, culture, subject matter, or specific classroom context in which it is utilized. As a result, analyzing the pertinence of the flipped classroom strategy across the academic realms of diverse countries, together with its gains in learning dynamics, and the hurdles and potential resolutions faced throughout its application, will substantially augment the area.

#### **DISCUSSION**

The flipped classroom model has emerged as an innovative pedagogical approach that restructures the traditional learning environment. Instead of introducing new material during class time, students engage with introductory content before class, freeing up class time for more interactive and engaging activities (Rotellar & Cain, 2016; Vahidi & Khosravi, 2021). This shift

allows for a more student-centered approach, where instructors can facilitate deeper learning experiences and provide personalized support (Van Alten, et al., 2019).

Several studies have highlighted the potential benefits of this model. By shifting the focus from passive listening to active participation, the flipped classroom can foster greater student engagement and motivation. Studies have shown that the flipped classroom can lead to improved student performance and deeper understanding of concepts (Talan & Gülseçen, 2019). The model allows instructors to tailor their instruction to individual student needs and provide more targeted support. The interactive nature of in-class activities promotes collaboration and peer learning. The use of online resources provides students with greater flexibility and accessibility to learning materials.

Despite its potential advantages, the flipped classroom model also presents some challenges. One of the most significant challenges is the creation of high-quality pre-class materials, which can be time-consuming and require specialized skills. Other challenges include ensuring student accountability for pre-class work, addressing technical issues, and adapting to different learning styles (Vahidi & Khosravi, 2021).

Proposed solutions to these challenges include providing clear instructions and expectations for pre-class work, offering a variety of pre-class materials to cater to different learning styles, incorporating interactive elements into pre-class materials to maintain student engagement, using technology to track student progress and provide feedback, creating a supportive classroom environment that encourages active participation.

It's important to distinguish between the flipped classroom and blended learning. While the flipped classroom can be a component of a blended learning approach, it's not synonymous with it. Blended learning refers to any combination of online and face-to-face instruction, whereas the flipped classroom specifically refers to the inversion of the traditional learning sequence.

# **CONCLUSION**

The flipped classroom model presents a significant shift from traditional teaching methodologies, offering a compelling approach to enhance student engagement and learning outcomes. By inverting the typical learning sequence, students engage with introductory material before class, allowing for more interactive and collaborative activities during class time. This model fosters a student-centered environment where instructors can facilitate deeper learning experiences, provide personalized support, and cater to diverse learning styles.

While the flipped classroom offers numerous benefits, including increased student engagement, improved learning outcomes, and enhanced flexibility, it also presents challenges. Creating high-quality pre-class materials, ensuring student accountability, and addressing technical issues require careful planning and execution. Furthermore, successful implementation necessitates a shift in mindset for both instructors and students, embracing active learning and collaborative engagement.

Despite these challenges, the potential of the flipped classroom to transform the learning experience is undeniable. By thoughtfully addressing the associated challenges and leveraging the inherent benefits, educators can create a more dynamic, engaging, and effective learning environment for students. Continued research and exploration of best practices will further refine this innovative pedagogical approach and maximize its impact on student success.

#### REFERENCES

- Bergmann, J., & Sams, A. (2012). Flip your classroom: Reach every student in every class every day. Washington, DC: International Society for Technology in Education.
- Bland, L. (2006). Applying flip/inverted classroom model in electrical engineering to establish life-long learning. In ASEE Annual Conference & Exposition. Chicago, IL.
- Caligaris, M., Rodríguez, G., & Laugero, L. (2016). A first experience of flipped classroom in numerical analysis. *Procedia-Social and Behavioral Sciences*, 217, 838-845.
- Cevikbas, M., & Argün, Z. (2017). An innovative learning model in digital age: Flipped classroom. *Journal of Education and Training Studies*, 5(11), 189-200.
- Chilingaryan, K., & Zvereva, E. (2017). Methodology of flipped classroom as a learning technology in foreign language teaching. *Procedia-Social and Behavioral Sciences*, 237, 1500-1504.
- Condliffe, B. (2017). Project-Based Learning: A Literature Review. Working Paper. MDRC.
- Davies, R. S., Dean, D. L., & Ball, N. (2013). Flipping the classroom and instructional technology integration in a college-level information systems spreadsheet course. *Educational Technology Research and Development*, 61(4), 563-580. https://doi.org/10.1007/s11423-013-9305-6
- DeLozier, S. J., & Rhodes, M. G. (2016). Flipped classrooms: A review of key ideas and recommendations for practice. *Educational Psychology Review*, *29*(1), 141–151. https://doi.org/10.1007/s10648-015-9356-9.
- Driscoll, M. (2002). Blended learning: Let's get beyond the hype. *E-Learning*, 3(3), 54.
- Fuchs, K. (2021). Innovative teaching: A qualitative review of flipped classrooms. *International Journal of Learning, Teaching and Educational Research*, 20(3), 18-32.
- Froyd, J., & Simpson, N. (2008). Student-centered learning addressing faculty questions about student centered learning (Paper presented at the Course, Curriculum, Labor, and Improvement Conference, Washington DC).
- Gannod, G. C., Burge, J. E., & Helmick, M. T. (2008). Proceedings of the 30th international conference on software engineering: Using the inverted classroom to teach software engineering. New York, NY: ACM.
- Hamdan, N., McKnight, P., McKnight, K., & Arfstrom, K. M. (2013). A Review of flipped learning. Retrieved from: http://www.flippedlearning.org/cms/lib07/VA01923112/Centricity/Domain/41/LitReview\_Flipped Learning.pdf
- Herreid, C. F., & Schiller, N. A. (2013). Case studies and the flipped classroom. *Journal of College Science Teaching*, 42(5), 62-66.
- O'Flaherty, J., & Phillips, C. (2015). The use of flipped classrooms in higher education: A scoping review. *The Internet and Higher Education*, *25*, 85–95. https://doi.org/10.1016/j.iheduc.2015.02.002.
- Khan, S. (2011). Let's use video to reinvent education, Speech presented at TED 2011. Retrieved from: https://www.ted.com/talks/salman khan let s use video to reinvent education
- Khan, M. S. H. (2015). Emerging conceptions of ICT-enhanced teaching: Australian TAFE context. *Instructional Science*, 1–26. https://doi.org/10.1007/s11251-015-9356-7.
- Khan, M. S. H., Shamim, M. R. H., & Nambobi, M. (2018). Learning styles and online tools: How to construct an effective online learning environment *Optimizing student engagement in online learning environments*. In *IGI global*.
- Khan, M. S. H., & Markauskaite, L. (2017). Approaches to ICT-enhanced teaching in technical and vocational education: A phenomenographic perspective. *Higher Education*, 73(5), 691–707. https://doi.org/10.1007/s10734-016-9990-2.
- Kuhn, D. (2003). Understanding and valuing knowing as developmental goals. *Liberal Education*, 89(3), 16-21.
- Long, T., Cummins, J., & Waugh, M. (2016). Use of the flipped classroom instructional model in higher education: Instructors' perspectives. *Journal of Computing in Higher Education*, 29(2), 179–200. https://doi.org/10.1007/s12528-016-9119-8.

- Nurfaiziyah, A., & Aminin, Z. (2021). Teachers' Perceptions on The Implementation of Flipped Classroom Model in Learning Writing. *PROJECT (Professional Journal of English Education)*, 4(5), 884-892.
- Paul, J., & Criado, A. R. (2020). The art of writing literature review: What do we know and what do we need to know? *International business review*, 29(4), 101717.
- Paré, G., & Kitsiou, S. (2017). Methods for literature reviews. In *Handbook of eHealth evaluation: An evidence-based approach [Internet]*. University of Victoria.
- Retrieved 15 May, 2020, from https://tl.hku.hk/2018/02/designing-your-own-flipp
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching*. Cambridge university press.
- Rotellar, C., & Cain, J. (2016). Research, perspectives, and recommendations on implementing the flipped classroom. *American journal of pharmaceutical education*, 80(2), 34.
- Source, & Hku. Designing your own flipped classroom: Online and pre-class elements.
- Staker, H., & Horn, M. B. (2012). *Classifying K–12 blended learning*. Mountain View, CA: Innosight Institute, Inc.
- Strayer, J. (2009). *Inverting the classroom: A study of the learning environment when an intelligent tutoring system is used to help students learn.* Saarbrücken, Germany: VDM.
- Talan, T., & Gulsecen, S. (2019). The effect of a flipped classroom on students' achievements, academic engagement and satisfaction levels. *Turkish Online Journal of Distance Education*, 20(4), 31-60.
- Vahidi, Z., & Khosravi, A. (2021). Representing the Lived Experience of High School Students in the Flipped Classroom: Benefits and Challenges. *Iranian Evolutionary Educational Psychology Journal*, 3(3), 345-356.
- Van Alten, D. C., Phielix, C., Janssen, J., & Kester, L. (2019). Effects of flipping the classroom on learning outcomes and satisfaction: A meta-analysis. *Educational Research Review*, 28, 100281.
- Woodruff, A. H., & Griffin, R. A. (2017). Reader Response in Secondary Settings: Increasing Comprehension through Meaningful Interactions with Literary Texts. *Texas Journal of Literacy Education*, *5*(2), 108-116.