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Flip On

Flipping the Classroom for Better Learning in Adult Education

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A1. Introduction to Flipped Learning

Guide for Trainers on Flipped Learning

Unit 2- Phases and Models of Flipped Learning



INTRODUCTION

Aim of the Unit

The aim of the second unit is to help learners understand the key phases of flipped learning, explore different models, and develop the ability to select and apply suitable approaches that foster inclusive and differentiated learning for adult learners.

Learning Objectives

By the end of this unit, adult educators will be able to:

- Outline the key phases involved in delivering a flipped learning lesson (pre-class, in-class, and post-class).
- Distinguish between different models of Flipped Learning (e.g., discussion-oriented, demonstration-focused, group-based, virtual, and faux-flipped).
- Select appropriate Flipped Learning models based on learner profiles, course objectives, and delivery contexts.
- Analyse how each model can support differentiated and inclusive learning experiences for adult learners.



1. Flipped Learning

There is a growing body of research and numerous experiments examining the effectiveness of flipped learning in enhancing student outcomes. Scholars have investigated its impact across different contexts, subject areas, and learner groups, consistently reporting positive results. In a notable study applying the flipped learning model, Chen Hsieh, Wu, and Marek (2017) investigated how flipped instruction in an EFL classroom in Central Taiwan influenced learners' acquisition of idioms compared to traditional teaching methods. The study also explored students' attitudes toward this instructional approach. Findings showed that flipped instruction significantly improved learners' oral proficiency and motivation. Students demonstrated higher engagement in learning activities and developed stronger skills in using English idioms for communication, storytelling, dialogue writing, discussions, and group presentations. Additionally, the study highlighted the potential of LINE as a technological tool for EFL learning, offering authentic opportunities for voice and text interaction. The researchers suggested that further studies on the effects of flipped learning approach on listening, speaking, and writing skills should be conducted.

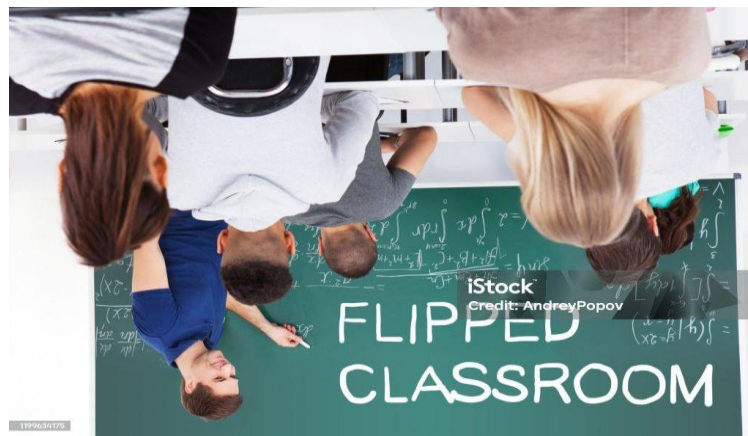


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Flipped Classroom and Adult Learning

This increased requirement for self-management forces the refinement of the claim of advocating for flipping adult education to be further classified to only include core specialization courses within undergraduate study. In her evaluation, Arnold-Garza (2014) also calls out that collegiate experience and maturity is a necessary consideration in the flipped classroom, “due to this increased responsibility, this model may be less useful for freshman students . . . students not yet advanced into their area of specialization may lack genuine interest in the material, making expectations of investment unrealistic” (pp. 10). Early undergraduate students, having just completed high school with courses often conforming to the traditional pedagogical approach with teacher-lecture-homework, are in a state of transition, often acclimating themselves to college and adulthood and taking general education and elective courses. It is because of transition period into adulthood and maturity that flipped classrooms may not be as effective for them, and why such courses are excluded from the argument, and whereas graduate courses, which are focused on the learner's specific field of professional interest, are included more wholly.



Considering adults' social needs, Wen noted that real-life communication generally occurs via productive activities (i.e. speaking) followed by receptive activities (i.e. listening). Thus, enhancing learners 'productive skills and receptive skills should remain as the goal of adult learning in English. While doing language output tasks, adults will become aware of the deficiency in their linguistic repertoire, which provokes adults to operate related input materials with more salient care so that learners can gain new information about the language, concerning language form and content. Therefore, the act of language production may improve learning and help adults notice what they are (or not) able to perform with the target language, which then causes adult learners to re-evaluate their FL capacity and to learn new information.

Flipped learning in higher education offers a cost-effective, student-centered approach to accommodate growing enrollments and can mitigate funding and structural issues that prioritize faculty research over student learning (Zou, 2020). Meanwhile, it equips students with 21st-century skills needed for global challenges.

In the sciences, flipped learning integrates activities such as worksheet exercises, discussions, debates, group work, multiple-choice questions, assignments, and focused explanations. These practices provide significant benefits for both students and educators. Since scientific learning often involves complex problem-solving and the application of abstract concepts, worksheets serve as valuable tools for practice, while discussions and debates foster critical thinking, communication, and multiple perspectives. Debates encourage research and persuasive argumentation, helping learners to engage more deeply with challenging scientific concepts. Similarly, multiple-choice questions allow immediate feedback and diagnostic insights, while focused explanations support individualized learning and the development of confidence in tackling difficult material (Karjanto & Acelajado, 2022).

In the arts and education domains, flipped classroom activities include discussions, quizzes, multiple-choice questions, fill-in-the-blank exercises, mind-mapping, online assignments, group work, and debates. Discussion remains central in both fields, facilitating the exchange of ideas and diverse perspectives. Quizzes and multiple-choice tasks, which require higher-order thinking, can be used to assess art history, artistic techniques, and conceptual understanding, or to gauge students' grasp of educational theories (Li & Li, 2022). Mind maps serve as flexible tools for analyzing artistic movements, brainstorming creative ideas, and organizing complex educational frameworks. Group discussions, debates, and collaborative projects encourage critical thinking, communication, and teamwork while supporting peer learning and the sharing of knowledge (Khan & Abdou, 2021).

Medical education, on the other hand, employs activities such as debates, problem-solving tasks, quizzes, literature analysis, and patient profile case discussions. Debates stimulate critical thinking and argumentation, quizzes provide immediate assessment and reinforce learning while literature analysis enhances writing, empathy, and analytical skills (McLean & Attardi, 2018). Patient profile debates help students develop clinical reasoning, communication abilities, ethical sensitivity, and collaborative competence. Likewise, engineering programs emphasize design projects, simulations, problem-solving, and feedback-based practice activities that foster innovation, reduce risk, and strengthen practical skills (Günbatır, 2021). These practices bridge the gap between theoretical knowledge and

real-world application, while also supporting long-term retention and professional networking opportunities.

Finally, the study identified several challenges to implementing flipped classrooms in higher education, including high time demands, limited motivation for pre-class preparation, insufficient out-of-class guidance, inconsistent quality of lecture recordings, restricted access to technological resources, and resistance to adopting the model. Nevertheless, the flipped classroom remains a highly effective pedagogical approach that promotes student engagement and learning. With deliberate planning, adequate institutional support, and continuous evaluation, these challenges can be reduced or successfully addressed.



Image source: <https://www.freepik.com/>

Educators should recognize that adult learners tend to emphasize practical application and self-directed learning. These qualities foster a level of independence that can be leveraged to create a more dynamic and engaging classroom environment. Knowles identified four key principles of adult learning— “involvement, active learning, immediate relevance, and problem-centered approaches”. Given these traits, incorporating opportunities for learner autonomy becomes a natural strategy for effective classroom management. The flipped classroom model can be particularly useful in this context, as it aligns with Knowles’ principles and supports the distinct characteristics of adult learners.



2. Tips for Educators



Educators should align the lesson with learning objectives and desired outcomes, when creating content for flipped learning for the classroom and professional development. Apart from this they should also ensure that the content is accessible to all viewers by providing closed captioning for videos or transcripts of audio recordings. Finally, educators should plan follow-up activities where viewers will apply what they learned while watching. Apart from these suggestions, they can see some suggestions on the process.



Decide how you will use your class time and design those activities. Again, if you do not have a reason to flip your course, you should consider other active learning strategies or wait until you have an idea for how you could better use your class time.



Find or create resources for students to use at home. These could be readings, audio files, websites, or videos. You do not need to create these sources, but you must make sure that all students have a way to access these materials. If you create the materials for students to use at home, use their feedback to revise it.



Teach students how to use the material at home. Unlike when they are in a lecture, students cannot ask questions as they arise, making notes especially important. Working on their own, students will likely have distractions. Although students engage with media all the time, they may not know how to use educational audio or video clips. Make sure students have an incentive to do the work on their own.



Flipped learning is all about student-centered instruction, so it's important to involve your students in the process. Have them give feedback on the materials you're using and the activities you're designing and ask for their input on how they prefer to learn.

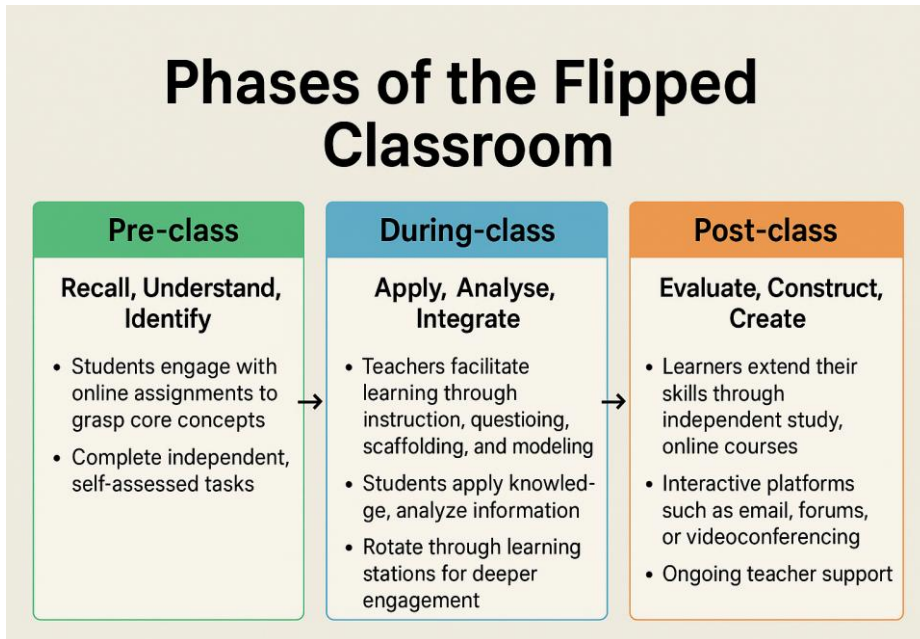


Flipped learning isn't a one-size-fits-all approach, and it's important to be open to adapting and adjusting your approach as you go. What works for one class may not work for another, so be willing to try new things and see what works best for you and your students.



3. Three Stages of Flipped Teaching Strategy

In the flipped classroom, learning is structured across three stages. Pre-class, students engage with online assignments to understand the lesson and complete independent, self-assessed activities. During class, teachers facilitate learning through instruction, questioning, scaffolding, and guided practice, while students apply concepts, analyze information, and rotate through learning stations. Post-class, learners continue developing their skills independently via online resources, self-directed courses, and interactive platforms such as email, forums, or videoconferencing, with ongoing teacher support to reinforce understanding and promote higher-order thinking.



<i>Recall Understand Identify</i>	<p style="color: #0070C0; margin: 0;"><i>Pre-Class</i></p> <ul style="list-style-type: none"> - Teacher gives online assignments for learning and understanding the main lesson. - Students are oriented to perform independent, self-assessed and self-determined experiences.
<i>Apply Analyse Integrate</i>	<p style="color: #0070C0; margin: 0;"><i>During-Class</i></p> <ul style="list-style-type: none"> - Teacher presents and teaches the lesson via instruction using various questioning and scaffolding strategies. - Teacher guides practice with teacher modelling applications. - Teacher coaches the students to move various learning stations in the classroom.
<i>Evaluate Construct Create</i>	<p style="color: #0070C0; margin: 0;"><i>Post-Class</i></p> <ul style="list-style-type: none"> - Teachers continue supporting student learning via different channels like email, forums or google doc. - Simultaneous environment such as chat, videoconferencing - Students register self-directed independent study courses or online courses.



To make it solid, here is the example;

Topic: Renewable Energy Sources

Pre-class (Recall, Understand, Identify):

- Teacher uploads a 10-minute video explaining types of renewable energy (solar, wind, hydro).



https://www.youtube.com/watch?v=44Wp3WE1AHs&ab_channel=EcoMasteryProject

- Students complete an online quiz (multiple choice & short-answer) to check understanding.
- Each student writes down one example of renewable energy use in their community.

During-class (Apply, Analyse, Integrate):

- Teacher briefly reviews key concepts, then organizes students into groups.
- Groups rotate through three stations:
 1. **Case Study Station** – Analyse a real-world renewable energy project.
 2. **Math/Science Station** – Calculate the potential energy output of a small solar panel.
 3. **Discussion Station** – Debate the benefits and challenges of different energy sources.
- Teacher circulates, scaffolds learning, and provides guidance.

Post-class (Evaluate, Construct, Create):

- Students choose one renewable energy source and create a short presentation or infographic.
- They upload their work to the class forum and give peer feedback.
- Teacher follows up via email or videoconference for students who need extra support.



4. Classroom Models

Flipped classrooms can be categorized into several types depending on how learning materials are provided, how classroom time is utilized, and the characteristics of the learners.

I. Standard Inverted Classroom

This is the traditional version of the flipped classroom. Students are required to review lecture videos and other preparatory materials before class. Typically, all aspects of the topic are transformed into video lectures. Class time is then dedicated to practicing these concepts and strengthening understanding through activities such as individualized teacher support.

It is recommended for higher education students in structured fields such as accounting, management, or sciences, where understanding theory before practice is essential.

II. Micro Flipped Classroom

In this model, students are given short video lectures along with brief assignments as preparatory work. The remaining instructional content and tasks are carried out during classroom sessions. Younger learners or students with shorter attention spans may struggle with long lectures.

Suitable for introductory-level university courses or general education subjects that benefit from chunked content delivery.

III. Discussion-Oriented Flipped Classroom

Students' complete homework in the form of video lectures or other online resources. Classroom time is primarily reserved for in-depth discussions, where learners, already familiar with the basics, can contribute more effectively and engage in critical exploration of topics. Teachers assign lecture videos, as well as any other video or reading related to the day's subject — think TED Talks, YouTube videos, and other resources. Class time is then devoted to discussion and exploration of the subject. This can be an especially useful approach in subjects where context is everything such as history, art, or English.

Best learners profile analytical and reflective learners who enjoy discussion, debate, and idea exchange. Particularly suited to arts, humanities, history, literature, and social sciences, where interpretation and dialogue are key.

IV. Demonstration-Based Flipped Classroom

This approach is particularly effective in subjects requiring precision and step-by-step instruction, such as mathematics, chemistry, or physics. Teachers use screen recording tools to create detailed instructional videos for homework. Students can revisit these videos as needed to master concepts and later use class time to clarify doubts with the teacher.

STEM learners in fields such as mathematics, physics, chemistry, and engineering, who require detailed demonstrations can be thought of as the best learner profiles. Students who learn best through visual repetition and procedural clarity.

V. Faux-Flipped Classroom

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Designed especially for younger learners, this model replaces traditional homework with instructional videos and related resources. In-class sessions with the materials then focus on personalized guidance and support from the teacher.

Primary or lower secondary students need structured learning and close teacher support. Suitable for learners who may not yet have strong self-regulation or time-management skills.

VI. Group-Based Flipped Classroom

Here, collaboration is emphasized. After reviewing the study material independently, students work together on classroom assignments. Peer-to-peer explanation not only reinforces learning but also enhances knowledge retention.

Collaborative learners who thrive in group settings. Ideal for social sciences, and creative arts, where teamwork and shared perspectives are important. Also beneficial for students preparing for professions requiring teamwork

VII. Virtual Flipped Classroom

In this fully online version, classroom tutoring is removed altogether. Instructors provide resources digitally and interact with students during scheduled office hours. Assignments are submitted through online learning platforms.

Best learner profile is adult learners, distance learners, or professionals in lifelong learning programs. Also effective for higher education and continuing education contexts, where flexibility is key.

VIII. Role-Reversal 2.0 (Flipping the Teacher)

While most flipped classrooms place students at the center of learning, this model takes it a step further by having students create their own videos to demonstrate understanding. They may record themselves individually or in groups, allowing teachers to evaluate their progress. A valuable byproduct of this approach is the creation of a video repository that can be used as a learning resource in future classes. Students too can make use of videos to better demonstrate proficiency. Assign students to their record practice role-play activities to show competency or ask each to film themselves presenting a new subject or skill to “teach the teacher”.

Ideal for arts, teacher education, communication studies, and project-based courses. Particularly effective for students developing presentation, reflection, and metacognitive skills.

For adult learners, flipped classroom models are most effective when they integrate flexibility, autonomy, and active engagement, aligning closely with principles of andragogy. The Standard Inverted Classroom is particularly suitable, as adult learners are typically self-directed and capable of completing preparatory work independently, allowing class time to focus on applying concepts, problem-solving, and addressing specific learning needs. The Virtual Flipped Classroom is especially valuable for working professionals and lifelong learners, offering the flexibility to access materials at their own pace while providing structured support through online consultations or office hours. Additionally, the Role-Reversal 2.0 model aligns with adult learning principles by encouraging learners to demonstrate understanding through creating videos or presentations, which reinforces knowledge, supports problem-centered learning, and develops reflection, communication, and



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professional skills. Overall, these models correspond with adults' need for self-directed, relevant, and practical learning experiences, thereby enhancing engagement and the transfer of knowledge to real-world contexts.



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