Flipped Instruction in the Online Synchronous and Asynchronous Environments

Nancy Uhl and Courtney Craig

Pace Online – Instructional Design Team

What is Flipped Learning?

The governing board and key leaders of the Flipped Learning Network (FLN) announced the formal definition of the term.

> "Flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter."

The Four Pillars of F-L-I-P

1. Flexible Environment
2. Learning Culture
3. Intentional Content
4. Professional Educator

Citation: Flipped Learning Network (FLN). (2014) The Four Pillars of F-L-I-P™ Reproducible PDF can be found at www.flippedlearning.org/definition.

Flexible Environment

F Flexible Environment

Flipped Learning allows for a variety of learning modes; educators often physically rearrange their learning spaces to accommodate a lesson or unit, to support either group work or independent study. They create flexible spaces in which students choose when and where they learn. Furthermore, educators who flip their classes are flexible in their expectations of student timelines for learning and in their assessments of student learning.

F.1	☐ I establish spaces and time frames that permit students to interact and reflect on their learning as needed.
F.2	☐ I continually observe and monitor students to make adjustments as appropriate.
F.3	☐ I provide students with different ways to learn content and demonstrate mastery.

Citation: Flipped Learning Network (FLN). (2014) The Four Pillars of F-L-I-P™ Reproducible PDF can be found at www.flippedlearning.org/definition.

Learning Culture

L Learning Culture

In the traditional teacher-centered model, the teacher is the primary source of information. By contrast, the Flipped Learning model deliberately shifts instruction to a learner-centered approach, where in-class time is dedicated to exploring topics in greater depth and creating rich learning opportunities. As a result, students are actively involved in knowledge construction as they participate in and evaluate their learning in a manner that is personally meaningful.

L.1	☐ I give students opportunities to engage in meaningful activities without the teacher being central.
L.2	☐ I scaffold these activities and make them accessible to all students through differentiation and feedback.

Citation: Flipped Learning Network (FLN). (2014) The Four Pillars of F-L-I-P™ Reproducible PDF can be found at www.flippedlearning.org/definition.

Intentional Content

I Intentional Content

Flipped Learning Educators continually think about how they can use the Flipped Learning model to help students develop conceptual understanding, as well as procedural fluency. They determine what they need to teach and what materials students should explore on their own. Educators use Intentional Content to maximize classroom time in order to adopt methods of student-centered, active learning strategies, depending on grade level and subject matter.

I.1	☐ I prioritize concepts used in direct instruction for learners to access on their own.
I.2	☐ I create and/or curate relevant content (typically videos) for my students.
I.3	☐ I differentiate to make content accessible and relevant to all students.

Citation: Flipped Learning Network (FLN). (2014) The Four Pillars of F-L-I-P™ Reproducible PDF can be found at www.flippedlearning.org/definition.

Professional Educator

P Professional Educator

The role of a Professional Educator is even more important, and often more demanding, in a Flipped Classroom than in a traditional one. During class time, they continually observe their students, providing them with feedback relevant in the moment, and assessing their work. Professional Educators are reflective in their practice, connect with each other to improve their instruction, accept constructive criticism, and tolerate controlled chaos in their classrooms. While Professional Educators take on less visibly prominent roles in a flipped classroom, they remain the essential ingredient that enables Flipped Learning to occur.

P.1	☐ I make myself available to all students for individual, small group, and class feedback in real time as needed.
P.2	☐ I conduct ongoing formative assessments during class time through observation and by recording data to inform future instruction.
P.3	☐ I collaborate and reflect with other educators and take responsibility for transforming my practice.

Citation: Flipped Learning Network (FLN). (2014) The Four Pillars of F-L-I-P™ Reproducible PDF can be found at www.flippedlearning.org/definition.

The Benefits of Flipped Learning

- Active participation rather than passive observation
- Differentiated learning preferences are accommodated
- Content is available to the students at any time, any place and at any pace
- The students have the ability to stop, pause, replay and review
- The current generation is used to accessing knowledge online
- Levels the playing field by personalizing learning

Benefits Continued

- Less lecturing more interaction
- Gets students engaged
- You can guide the students when they are going in the wrong direction
- Builds relationships between students, between students and the instructor and helps create a sense of community

Benefits Continued – the 4 “C’s”

Encourages:

- Collaboration
- Communication
- Critical thinking and problem solving
- Creativity

Benefits Continued

- Emphasizes higher order thinking

Citation: Image from https://sites.google.com/site/theamazingworldofteaching/topics-of-del-ii/bloom-s-taxonomy

The Challenges of Flipped Learning

- A LOT of work up front
- More self directed and requires more check ins with the students, especially the less engaged students
- It is new to students

How to Flip a Lesson

You don't have to flip everything try a lesson or two to start!

1. Define your learning objective
2. Develop assessments – how will you know your students have met your objective? Simple quizzes to prove they watched the videos/read the materials (in addition to Blackboard quizzes you can embed self-check quizzes in videos using Youtube or Kaltura.) The higher order thinking activities/projects that are "in class" are also used to assess the students' learning.
3. Content curation – articles, videos, textbooks, library resources etc.

How to Flip a Lesson continued

4. Content creation – create videos – be a bridge between the content and the students:
   - Have beginning middle and end
   - Short videos, you can have many videos but they should be no longer than 10 – 15 minutes
   - Be yourself, have fun, be engaging
   - Tell stories – stories make the materials more relatable and memorable
   - Don't worry about editing or equipment. You can make videos with just Kaltura and your webcam. You can also edit if need be (e.g. cut off extra time at the beginning or end) with Kaltura.

How to Flip a Lesson continued

5. Plan your "in-class" activities – these should include activities where students practice and apply concepts. Students use group work or partner work to develop a deeper understanding of the content.
6. Technology training
7. Classroom management
8. Create clear instructions – provide guidelines, checklists, rubrics etc. to help guide students

How to Flip a Lesson continued

9. Assign content for homework – independent learning
10. Group work/peer tutoring/students work on problems together. Teacher monitors and helps as needed.
11. Regroup – whole class back together report on work/progress and final presentations
12. Assess students understanding (see step 2)
13. Evaluate the success of the lesson and adjust as needed

Asynchronous Online Class Environment

- Consists of learning that does not occur at the same time or place. It uses resources to facilitate learning outside of the constraints of time and place.

Asynchronous Examples of a Flipped Lesson

- Reading Reflection
- Videos/Podcasts
- Math Review
- Introduce yourself

Asynchronous Reading Reflection

- Place 5-7 articles in the course
- Ask the students to choose 2 of the articles to discuss
- Randomly group the students in groups of 2
- In each group, have the students talk about the effects of the article(s) on their personal, professional and/or academic life.
- Why did they choose those articles?
- Have the students use a shared document such as Google Docs. They can put their responses in different colors to let their classmates know that they have answered the questions.

https://bbcontent.seidenberg.pace.edu/CBT/AsynchronousEnviromentexample.pdf

Learning Outcomes

Image retrieved: https://kingsandqueenswonderland.wordpress.com/

Learning Outcomes of Reading Reflection (Asynchronous)

- Collaboration
- Student Center learning
- Instructor interacts with the students
- Students get to interact with each other (helps to minimize the sense of isolation)

Asynchronous Videos/Podcasts

- Pair students with a classmate
- Students can set a time when they can meet to discuss the article(s) and/or podcast. They can use this same approach in solving math/chemistry problems.
- Students can use a shared document through platforms such as Google Docs, which can be easily shared with the instructor.

Learning Outcomes

Image retrieved: https://kingsandqueenswonderland.wordpress.com/

Learning Outcomes of Videos/Podcasts (Asynchronous)

- Students demonstrate group work
- Students demonstrate collaboration
- Students prepare to work with other classmates
- Students gain new insight into Video/Podcast

Asynchronous Math Review

- Assign problems.
- Students can work together to solve problems.
- Students show how they worked the problem on the course's main discussion board.
- If they have issues solving the problem, they can share their process for trying to solve the problem with their classmates.

Learning Outcomes

Image retrieved: https://kingsandqueenswonderland.wordpress.com/

Learning Outcomes of Math Review (Asynchronous)

- Students demonstrate group work
- Students demonstrate collaboration
- Students demonstrate the ability to problem solve
- Students are able to identify problem areas and work towards a resolution.

Asynchronous Introduce Yourself

Students will be asked to score themselves from 1 to 10 on the following items. A score of 1 indicates minimal knowledge or interest, and the top score of 10 signifies that you are very interest or ready to teach the subject. Enter your scores for each item on the discussion board or in the chat room as the question is presented.

Citation: https://www.wiley.com/en-us/Engaging+the+Online+Learner%3A+Activities+and+Resources+for+Creative+Instruction%2C+Updated+Edition-p-9781118018194

Asynchronous Introduce Yourself

- I consider myself a sports expert.
- Cooking is one of my hobbies
- I love to read
- I am interested in the subject matter of this course
- I feel comfortable with computers

Learning Outcomes

Image retrieved: https://kingsandqueenswonderland.wordpress.com/

Learning Outcomes of Introduce Yourself (Asynchronous)

- Students demonstrate group work
- Students demonstrate collaboration
- Students develop a sense of community
- Students develop an appreciation for diversity

Synchronous Online Class Environment

- Synchronous learning happens when the students are all engaged in learning from an instructor at the same time. Online this often takes place using communications software.

Synchronous Examples

- Reading Reflection
- Videos/Podcasts
- Math Review
- Syllabus Scavenger Hunt
- Introduce yourself

* Note that most examples can be done both synchronously and asynchronously.

Synchronous Reading Reflection

- Place 5-7 articles in the course (course related content)
- Ask the students to choose 2 of the articles to read before class
- Once the class starts, divide the students into a group (according to what article they are read).
- In each group, have the students to talk about the effects of the article(s) on their personal, professional and/or academic life.
- Why did they choose those articles?
- The instructor can join each of the groups, ask questions and provide feedback to the students.

Learning Outcomes

Image retrieved: https://kingsandqueenswonderland.wordpress.com/

Learning Outcomes of Reading Reflection (Synchronous)

- Collaboration
- Student Center learning
- Instructor gets to interact with the students
- Students illustrate their understanding of the articles
- Students identify various ways to look at the material.

Synchronous Videos/Podcasts

- Split students into groups (breakout rooms via Zoom or similar tool)
- They can have a session via Zoom and discuss the video/Podcast and how it is relevant to their lives, is applicable to the course and/or how it aligns with their program of study.
- The instructor can opt not to have group work and have one big class discussion.
- Have the students present questions and have classmates to respond to their questions.

Learning Outcomes

Image retrieved: https://kingsandqueenswonderland.wordpress.com/

Learning Outcomes of Video/Podcast (Synchronous)

- Maximize class time
- Provide an opportunity for students to learn from each other
- Get immediate feedback on their work and progress
- Higher order thinking

Synchronous Math Review

- Assign problems before the class.
- Students can work together to solve problems.
- Prepare the students to come to class and show how they worked the problem.
- If students have issues solving the problem, classmates can share their process for trying to solve the problem

Learning Outcomes

Image retrieved: https://kingsandqueenswonderland.wordpress.com/

Learning Outcomes Math Review (Synchronous)

- Maximize class time
- Provide an opportunity for students to learn from each other
- Get immediate feedback on their work and progress
- Students apply what they have learned to future lessons.
- Students demonstrate that they are able to work with peers to solve problems.

Synchronous Syllabus Scavenger Hunt

Prior to class ask the students to review the syllabus and be prepared to discuss the items on the syllabus.

Once class starts students can work with a partner or work by themselves. At the end of the class they will hand in their answers or have an open class discussion regarding their findings.

Write down the clues/answers (have the students to look for the below information)

- Due dates
- Instructors email address/Contact information
- Schools email address
- Final exam dates
- Proctor information
- Help desk
- Etc. …

Learning Outcomes

Image retrieved: https://kingsandqueenswonderland.wordpress.com/

Learning Outcomes of Syllabus Scavenger Hunt (Synchronous)

- Students demonstrate that they know how to locate information on the syllabus.
- Students are aware of what information is on the syllabus.
- Students practice their research skills
- Students build problem solving skills

Synchronous Introduce Yourself

Students will be asked to score themselves from 1 to 10 on the following items. A score of 1 indicates minimal knowledge or interest, and the top score of 10 signifies that you are very interest or ready to teach the subject. Enter your scores for each item on the discussion board or in the chat room as the question is presented.

Citation: https://www.wiley.com/en-us/Engaging+the+Online+Learner%3A+Activities+and+Resources+for+Creative+Instruction%2C+Updated+Edition-p-9781118018194

Synchronous Introduce Yourself

- I consider myself a sports expert.
- Cooking is one of my hobbies
- I love to read
- I am interested in the subject matter of this course
- I feel comfortable with computers

Learning Outcomes

Image retrieved: https://kingsandqueenswonderland.wordpress.com/

Learning Outcomes of Introduce Yourself (Synchronous)

- Students learn about their classmates.
- Students realize that they have things in common with some of their classmates
- Students distinguish differences and similarities with classmates
- Students summarize what they learned about their classmates and introduce them to the rest of the class.

Conclusions

- It can be done!
- It isn't easy
- One lesson at a time

Questions and Contact Information

Nancy Uhl – Nuhl@pace.edu

Courtney Craig – Ccraig3@pace.edu

Pace Online Instructional Design Website:

https://www.pace.edu/online-instructional-design