

## **Slide One**

### **Introduction (Treden):**

Why do we use the term “Flipped Learning?” We chose those words carefully.

This concept has been referred to by many names. We use Flipped Learning in order to communicate our focus on teaching and learning AND to differentiate from the approach popularized in the K-12 setting.

Flipped Learning is more than posting lecture videos online. It requires you to act with purpose and intention, whether you are developing a new course or converting an existing one.

Throughout this presentation we will refer to Flipped Learning courses, however, we recommend that you start small--with one activity or assignment before working on an entire course.

## **Slide Two**

### **CEHD Guide to Flipped Learning (Treden)**

We have developed a resource, to guide instructors through the process of developing a Flipped Learning course. In lieu of a handout for this presentation we ask that you to refer to the guide. It is available online from this URL. We have the link on a bookmark that we will pass around.

In the spirit of continuous improvement, our flipped learning guide is a living document. We refine our recommendations as our instructors move from theory into practice.

## **Slide Three**

### **CEHD’s Definition of Flipped Learning (Treden)**

We have defined what flipped learning means at CEHD. Here is our definition:

Flipped learning is a pedagogical model where traditional instructional goals for what happens inside and outside of class are reversed and student learning becomes increasingly active.

When flipped, students acquire knowledge, develop comprehension, and have opportunities to assess their understanding outside of, and typically prior to, in-class meetings. This acquisition occurs through carefully designed, typically independent, and self-directed activities.

During in-class meetings, instructors facilitate active learning, engage students, guide learning, and provide feedback as students work together to apply their new knowledge.

The flipped learning model can be used for a single session or an entire course.

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### Bloom's Taxonomy (Tom)

We can use "Bloom's Taxonomy of the Cognitive Learning Domain" to visualize the differences between the "traditional" and "flipped learning" approaches. As you move to the higher levels of Bloom's Taxonomy, learning activities become more complex, i.e., it starts with basic comprehension and moves up to evaluating and doing.

In the "traditional" approach to teaching we typically asks students to complete their most complex and challenging learning activities outside of the classroom ***when they don't have an instructor readily available to assist them if they have questions or problems***. One has to ask, from a student perspective, does it make sense to assign increasingly complex activities in an environment where the instructor's availability is decreased or non-existent?

By reversing, or FLIPPING, the traditional approach, students receive more face-time with their instructors during the complex learning activities, and spend time outside class completing the more basic ones.

## Slide Five

### Hybrid vs. Flipped (Tom)

Some people wonder how Flipped is different from hybrid/blended learning. The goals of each is what primarily sets them apart:

- The goal of a hybrid/blended approach is to replace in-person sessions with online sessions. In contrast, the goal of flipped learning is to move the students' initial exposure to course content ***outside*** of the classroom so that in-class meetings can be used for ***direct*** student engagement (with the instructor, with each other, and with course content).
- Additionally, a hybrid/blended course requires the use of a learning management system to track student completion or attendance, whereas a flipped approach does not (the activities completed outside of class time can utilize a variety of strategies and do not necessarily have to be technology-based).

The decision to create a hybrid/blended or a flipped course should be determined by first considering the course goals and learning objectives.

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### How Flipped courses are structured- Prior-to-class (Tom)

Each course that uses the flipped learning model will be different. There isn't a template to follow. However, here is a brief outline of a typical flipped learning course structure, each part will be described in more detail further in this presentation.

Prior to in-class meetings:

- Students watch videos, listen to podcasts, or complete assigned readings to gain exposure to course content.
- Students complete a check-for-understanding activity (e.g., auto-graded quiz).

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During in-class meetings:

- Instructor leads a check-for-understanding activity to assess student comprehension of the content reviewed prior to class.
- Students participate in active learning activities to deepen their understanding of the content.
- Students complete additional checks for understanding (e.g., quizzes).

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Occasionally (not optionally):

- Students should be asked to submit formative course feedback to the instructor (who responds accordingly).

Optionally:

- Students can work on/complete additional homework assignments (e.g., exercises, projects, papers). More about homework's place in a flipped approach will be discussed later in this presentation.

## Slide Nine

### Benefits (Mel)

When thoughtfully designed and implemented, a flipped approach sees benefits to content, instructor and student:

- In a flipped session we may be ***afforded the ability to use learning technologies*** to present course content in creative and engaging manners and maintain instructional effectiveness.

- The approach provides an opportunity to **redefine and expand the role of the instructor** (e.g., instructor as coach).
- Provides more and **different abilities for the instructors to assess student mastery** of course learning objectives.
- Allows more time for **instructors to interact with students**, and students to interact with each other.
- Promotes **“learning by doing” as students create solutions to challenges** presented by course content.

## Slide Ten

### Challenges (Mel)

This is not to say there are not challenges to the approach. There is a lot of **change taking place here, and shifting responsibilities**.

- Manage change proactively—Your **students may be encountering the flipped approach for the first time**, motivate and support them.
- This may be through supporting their exposure to new technologies; Provide technical support— **provide clear instructions on how to use the technologies and where they can get support**.
- **Stay in touch**
- Cultivate student responsibility—Students may need support to cultivate the **time and task management skills** necessary to complete prior-to-class activities.
- Stay student-centered—**Resist the conventions of the traditional lecture** course structure; be a “guide at their side” instead of a “sage on the stage.”
- Give yourself enough planning and development time—**Flipping a course takes time. Start with a course you are familiar with**. Give yourself at least two months to develop your first flipped course. Consider taking it slow when you start with this approach—**start by flipping only a session or two**.

## Slide Eleven

### Learning Objectives (Mel)

#### Learning Objectives

Some aspects of course development do not change with a flipped approach. As you develop a course using the flipped learning model, always begin with the **learning objectives**. As with any course, it is important that the **course’s activities and assessments align** with the learning objectives. Consider what the **students will be able to DO upon completing the activity** (or the course).

Different in a flipped session.. rather than organizing objectives chronologically across the course, the focus is to **organize according to cognitive complexity**.

**Bloom's Taxonomy is a good tool for organizing** your objectives. Here, basic learning objectives will be paired with more advanced learning objectives as you plan learning activities. For example:

**Lower-order objectives** (e.g., remembering and understanding on Bloom's taxonomy) are often those that students master prior to class.

**Higher-order objectives** (e.g., applying, analyzing, evaluating, creating on Bloom's taxonomy) are often mastered during in-class activities.

**Knowing where the objectives cross from being basic to complex is essential** to your course plan and can make it easier to decide what, exactly, should be covered prior to or during class meetings.

Note: How your objectives align with the taxonomy **may vary** from activity to activity. For example, students might have prior-to-class activities that require them to apply and analyze.

## **Slide Twelve**

### **Homework (Treden)**

Homework

In the flipped learning model we differentiate knowledge and comprehension learning activities from homework assignments. When planning homework assignments, capstone projects, or term papers, consider the overall workload required to complete the course. Keep in mind the amount of time students spend on activities that must be completed to prepare for each in-class meeting. Balance the workload to ensure that students have time to come to class prepared AND have their homework completed.

## **Slide Thirteen**

### **Instructional Strategies for Activities to Be Completed Prior to Class (Treden)**

Instructional Strategies for Activities to Be Completed Prior to Class

There is an often-repeated belief that flipped learning means simply recording your course lectures and putting them online. This approach, however, is just one instructional strategy that may be utilized for prior-to-class learning activities. There are many instructional strategies that can be incorporated in a flipped course or session. For example:

- Readings such as journal articles and news media.
- Reviewing a recorded course lecture.
- Video lectures such as TED Talks.
- Podcasts.
- Collaboratively annotating video or PDF documents.
- Online discussion forums.

## **Slide Fourteen**

### **Instructional Strategies for In-Class Activities (Treden)**

Here are some ideas to get you started for in-class activities

- Active learning -  
The University's Center for Education and Innovation has some great online resources for Active Learning. You'll find links in our guide.
- Experiential activities -  
immersive and hands--on such as service learning.
- Student-created course content -  
When students create content they take ownership over their own progress and learning.
- Group discussion -  
Develop discussion questions that encourage students to explore perspectives different from their own, test assumptions, and develop communication skills.
- Peer feedback -  
Learning takes place on both sides—the students being evaluated learn from the perspective of their peers and the evaluators learn from carefully examining the work of others.

## **Slide Fifteen**

### **Flipped Learning Essentials (Treden)**

Now that we have covered flipped learning basics and explored possible instructional strategies, let's review what you need for a successful flip. Provide students with:

- An opportunity to gain exposure to course content knowledge prior to class. This could be a video, podcast, or readings.
- Incentives to prepare for in-class meetings. Communicate clear expectations for completion of prior-to-class work and assign a significant value to these assignments in the students' grades.
- Guidance on how to manage time and tasks related to coursework.

## **Slide Sixteen**

### **Flipped Learning Essentials Continued (Treden)**

- A mechanism to check for understanding prior to in-class meetings. Consider using auto-graded quizzes configured to give immediate feedback.

- Multiple channels of communication. Communication with the instructor is key to student success.
- Real-time formative feedback throughout the course. Be prepared to address issues and make adjustments in a timely manner.

### **Slide Seventeen**

#### **Flipped Learning Essentials Continued (Treden)**

- Highly structured and carefully planned in-class activities that focus on deeper learning and direct engagement.
- Carefully aligned learning experiences. In-class activities should have a clear connection to those completed prior-to-class. Both should work towards achievement of course objectives

### **Slide Eighteen**

#### **Case Studies Flipped Learning @ CEHD (Mel and Tom)**

##### Professional Development (Tom) -

- Treks
  - “Treks” is Digital Education and Innovation’s bi-annual faculty development program. Covered over four days, faculty that attend the program learn about a specific topic like “flipped learning” or “academic technologies.”
  - In 2014 we created Treks Flipped to teach faculty how to flip a class/session. We decided to flip the program so instructors could participate in a flipped learning experience as students while at the same time observing how the flip worked as instructors.
  - Pre-session work included a video and a check for understanding. The in-person sessions consisted of more checks for understanding coupled with activities that reinforced the pre-session content followed by two days of hands-on workshops where the instructors worked on their own flipped lesson plans while the DEI staff were on-hand to offer individualized support and assistance.
  - Flipping the Treks program was a great way of focusing on direct one-on-one work with the faculty without needing to spend significant time teaching about the concepts of flipping. Most faculty completed the pre-session activities and check for understanding ahead of time and the program ended up running very smoothly with lots of positive feedback.

##### **Faculty (Mel)**

As we look to refine the Flipped concept and implementation in CEHD, our Treks program also gave us a great opportunity for follow up and evaluation as we had six instructors who used what they had learned in their own courses.

In one instance, we had been able to work directly with the instructor in an instructional design role to implement the flipping process... this instructor decided to insert the lesson to an **existing course** and planned to start small, flipping just one lesson. This instructor struggled first in **finding the 'right' flip**. Her particular 'aha' moment came actually when we took the focus off, when we put the concept of flipping aside and asked what she struggled with in teaching this class either because there was little time, or, because she found the students continued to struggle. In this frame, she became really excited and more confident in the general of concept of flipping overlaid with her lesson. The implementation of these lessons also proved positive, this particular instructor felt that **she learned more about her students engagement with the content** and each other, and felt overall they were **more engaged**. She too learned from the process and plans to flip these lessons again in the future with modifications to increase the student engagement.

### **Faculty Survey (Mel)**

More formally, in our evaluation of instructor Flipped teaching we also surveyed our attendees to determine who went on to Flip an aspect of their course and if so, how it went.

As it pertained to designing the lessons, instructors confirmed many of the ideas we had conveyed that they were:

"Not having enough time to think this through...need to start sooner when planning. It is time intensive."

"When they [the students] are used to a lecture format, it was sometimes challenging to figure out their role with these new expectations..."

"I think there was a positive change because there were more overt opportunities for scaffolding key ideas."

"finding that not all students had done the work before class (and were still expecting a lecture/re-cap) despite my attempts to explain the 'flipped' nature of class"

"[The flipped learning model provides] more overt opportunities for scaffolding key ideas."

and finding that their role of facilitator and guide needed to be strong and communicated well:

"I need to explain elements of the assignment better during our in class time. I found myself sending clarifying emails throughout the process."

“I think there was a positive change because there were more overt opportunities for scaffolding key ideas.”

“When they [the students] are used to a lecture format, it was sometimes challenging to figure out their role with these new expectations...”

And another instructor had noted, what we had heard anecdotally, that...

“Overall, I think students are more engaged when there are flipped activities built into the course”

In general, all instructors felt they had positive experiences that they would enhance and refine in the future. Our team too plans to integrate this feedback into our future professional development offering as well as our CEHD Guide to Flipped Learning.

When speaking to the student experience, one instructor noted:

“ I think that strategy worked because it allowed them to apply what we learned and to see what others were doing and to learn from their peers in a fairly open forum. Initially some students seemed intimidated, but they also got more accustomed with sharing their ideas and presenting, which made it easier for them to of the required final presentation of their work in front of the class. The activities that were less successful was when I tried to flip (group and case studies) without providing enough formal description of the key ideas beforehand or trying to have them be more independent in their application.”

## **Slide Nineteen**

### **CEHD Guide to Flipped Learning (Mel)**

We are also making this guide available to you, it is a living document representing the ***synthesis of our team’s research on the flipped learning approach***, the guide reviews the ***concept*** of flipping and outlines the ***processes*** to design a lesson or course as well as ***tips and tools*** that one might use while doing so.

Remember, our flipped learning guide is a living document. We are currently working on an update that will be available, from our website, this summer.

## **Slide Twenty**

### **Questions (all)**