



# TEACHING WITH THE FLIPPED CLASSROOM

**IS\_LT 9471: INSTRUCTIONAL SYSTEMS DESIGN**  
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## MEMBER RESPONSIBILITIES

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### **Teaching with the Flipped Classroom Two-Day Seminar**

This two-day, face-to-face, workshop is designed to provide classroom teachers, of all levels, with an understanding of flipped learning. The benefits of teaching objectives through flipped learning as well as how it can be successfully implemented with students will also be covered.

Teachers will receive instruction on best practices, but will also have the opportunity to plan a unit which involves instruction through videos that students watch outside of class, and ultimately create a video lesson. Upon exiting this seminar, teachers will have learned how to create a video lesson, explored methods of posting videos to the web in order for students to easily access the video lesson, and developed activities to check for students' understanding, as well as activities to reinforce the objectives.

## SECTION 1: DESIRED RESULTS

### BROAD GOALS AND BIG IDEAS

An almost universal frustration of educators is the difficult balance between giving students effective and engaging instruction while covering all of the curriculum required by their district and state. Education researchers, such as Robert Marzano, argue the amount of state-directed learning objectives teachers are expected to cover is often overwhelming, (even with the streamlining efforts of Common Core) many educators are facing an issue of quality versus quantity in their instructional methods.(1) Flipped classroom, an instructional strategy focused on delivering web-based lessons for students, is rapidly becoming an accessible and effective solution for teachers eager to cover a large amount of content while also having the freedom to differentiate and scaffold learning for each student in their classroom.(2)

The evolution of the flipped classroom nearly parallels the development of computing and the Internet. In the late 1980's Eric Mazur, a professor of physics at Harvard University, took advantage of burgeoning personal computer trend and implemented computer-guided lessons into his larger peer-instruction teaching model. His innovations led to great success in terms of student engagement and achievement, and his methods were developed further and customized for a variety of classroom settings throughout the 1990s and early 2000s.(3)

Flipped learning received mainstream attention in 2004, when Salman Khan launched his website, [www.khanacademy.org](http://www.khanacademy.org), after creating a series of math tutorials for his cousin which allowed her to review or skip lessons based on her own prior knowledge and learning needs. Educators took notice of how learner-friendly flipped strategies such as Khan's, or the constructivist philosophies and strategies featured in Alison King's "From Sage on the Stage to Guide on the Side" were, and sought out ways to implement those principles in their own classrooms.

In 2007, high school science instructors, Jonathan Bergmann and Aaron Sams, experimented with putting their classroom lectures online through YouTube. This made direct instruction accessible from home for their students and provided them with more time for guided practice and projects during school hours. Bergmann and Sams discovered that as their students were given more time to directly apply and practice the instruction they were viewing at home, their content knowledge and test scores improved as well.(4) The duo are considered the pioneers of flipped instruction as it is practiced in most public schools today, and currently run [www.flippedclassroom.org](http://www.flippedclassroom.org), an online professional learning network for educators interested in collaborating on flipped classroom topics.(5)

As school districts around the United States began to adopt digital transformation initiatives and classrooms quickly became technology-rich with 1:1 laptop to student ratio or Bring Your Own Device programs, the possibility of efficiently delivering flipped content to students for use on a consistent basis is becoming increasingly easy. The challenge now is to create systematic instruction based on the successes of pioneering flipped teachers and districts. Educators unfamiliar with the software, hardware, and style of teaching specific to a good flipped video can easily become overwhelmed and intimidated when they see an experienced flipped teacher at work. A well-organized and tested course of instruction for educators new to flipped teaching will hopefully mitigate their

concerns and inspire them to embrace and fully explore how engaging and effective flipped teaching can be.

In a flipped classroom or course, students receive lessons from the teacher--usually in web-based video form--and use those lessons along with supplementary activities or real-world applications to master the content knowledge. The role of the teacher changes in this situation from the primary source of knowledge and assessment to that of a tutor; the teacher will coach a student through a problem or difficult concept if they are stuck, but otherwise acts as a guide or mentor through the learning process. This concept obviously is a marked shift away from traditional classroom methods, where the teacher assumed the role of chief lecturer and the final determiner of mastery, and where students received content through lectures or books and reviewed their skills or knowledge through homework or outside practice. Flipped learning also eliminates the need for a rigid classroom scope and sequence. In a traditional classroom, students are often assessed for mastery at an arbitrary time in the content unit, given a grade for their performance, and move on to the next unit regardless of whether or not they mastered their learning objectives. In a flipped classroom, students ideally have access to every lesson all year long, and can review content and re-assess as necessary.

There are several notable advantages to using a flipped-classroom approach to complement traditional instruction. First, flipping lessons allows a teacher to teach additional content more effectively. A teacher utilizing flipped instruction must through a great deal of preparation and frontloading to deliver the lessons to his or her students. Once done, however, the videos are usable for years at a time, and require very little effort to post or tweak online. Flipping lessons that lend themselves to being flipped will ultimately allow the teacher to then focus on making less independently learned content more engaging in his or her classroom and relieve the stress of trying to cover a huge amount of material in a short amount of time.

Second, consistent use of flipped learning allows the teacher to restructure his or her classroom schedule and overall teaching style to engage with smaller groups of students. Classroom learning can begin to shift from a teacher-led, large group format to a workshop model classroom, where students follow a rotation of different centers or practice stations while the teacher meets with smaller groups to guide them through new content or review old objectives. Workshop style teaching aligns nicely with flipped learning, as the constructivist notion of the teacher as guide is reinforced in both individual practice and personal instruction.

Finally, flipped learning is developmentally a better practice for all students, regardless of age. Students simply do not all learn the same way, in the same time, or with the same strategies across the board. In a traditional classroom model, there is very little opportunity to effectively differentiate for student needs due to rigid unit schedules or a dearth of choice in resources or assessments to monitor learning. With a flipped classroom, the students are empowered to direct their own learning based on their personal learning styles and individual needs, and teachers have the opportunity to be more flexible and innovative in their role as a learning coach.

## **Broad Goals**

- Teachers will learn about various web hosting options
- Teachers will investigate different screen recording options and record a video lesson
- Teachers will plan a learning unit and determine which objectives should be taught via video outside of the classroom
- Teachers will plan a video lesson
- Teachers will determine best practices for requiring students to watch the video lessons and to take notes
- Teachers will learn about options for checking students' understanding of the material through the web, as well as in the classroom
- Teachers will learn about different reinforcement activities that can be implemented during class time

# LEARNING OBJECTIVES

**Goal 1:** Teachers will plan a learning unit and determine which objectives should be taught via video outside of the classroom

**1.1** Following a presentation on the fundamentals of a flipped classroom and the benefits of flipped teaching, the learner will create a learning unit which lists objectives that meet the criteria outlined in the presentation with 80% accuracy.

**Goal 2:** Teachers will plan a video lesson

**2.1** After participating in instructional activities about flipped classroom practices, the learner will create a plan for a video lesson that incorporates the aforementioned practices.

**Goal 3:** Teachers will investigate different screen recording options and record a video lesson

**3.1** After watching a demonstration of screen recording options, the learner will record a short demo video using one of the options and successfully upload it to Blackboard for others to view with 100% accuracy.

**3.2** After watching a peer's uploaded recording, the learner will analyze the pros and cons of 80% of the videos.

**Goal 4:** Teachers will learn about various web hosting options

**4.1** After watching a demonstration about web hosting options, the learner will successfully embed a link to a video onto Schoology or Edmodo with 100% accuracy.

**Goal 5:** Teachers will determine best practices for requiring students to watch the video lessons and to take notes

**5.1** After watching a video about the basics behind flipped classroom design, the learner will be able to complete a note-style worksheet describing the principles of flipped classrooms with 80% accuracy.

**Goal 6:** Teachers will learn about options for checking students' understanding of the material through the web, as well as in the classroom

**6.1** During a group discussion about methods of checking students' understanding of the material through the web, the learner will demonstrate their knowledge by adding least three comments to the discussion.

**Goal 7:** Teachers will learn about different reinforcement activities that can be implemented during class time

**7.1** Following a presentation about different reinforcement activities, the learner will complete a Blackboard quiz on the subject matter with 80% accuracy.

# NEEDS ASSESSMENT

## **Target Audience**

This training is targeted to teachers with no experience and with previous experience creating flipped classrooms as a pedagogical teaching tool. We divided the training into two days designed to allow learners both didactic and hands-on learning experiences.

## **Strategy**

By conducting a needs assessment using the Rossett's framework, we will gather information to help design a two-day workshop for teachers that will enable each participant to gain practical knowledge to be able to set up their own flipped classroom.

## **Participants**

Teachers, administrators, and team specialists.

## **Data Collection**

*Sample Size:* For interviews we will start with small groups of about 4-5 participants. This will allow us to fully capture the needs, feelings and depth of understanding about flipped classrooms from the participants. For the interviews, we will keep in mind that the interviewees need to meet the selection criteria. A structured interview format will allow us to ask all participants the same series of questions. For the online surveys, we will send the survey link to all who participated in the workshop.

*Scheduling:* Interviews - we will make appointments with participants selected.

*Tools:* We decided to use surveys and interviews to collect our data. A teacher's online survey is an efficient way to get information from a large number of teachers. The questions for this survey came from combinations of the actuals, feelings and causes in our needs assessment chart. Additionally, we conducted interviews to students, administrators and specialists. Each group of interviewees will be asked the same questions.

See Appendix A.1, A.2 and A.3 for Needs Assessment Instruments

Rossett's Framework

Types of Information	What do you need to know?	Why do you need to know this?	Information Sources	Types of Procedures (Instruments)
<b>Optimals</b>	What is the desired knowledge about "teaching with a flipped classroom" that needs to be taught and that the faculty members want to learn from the training?	To identify what needs to be included in training about teaching with flipped classrooms.	Field expert - SME April Burton & fellow trainers.	Interviews.
	Is there an understanding of the benefits of a flipped classroom?	To identify if teachers know why flipping a class is a good idea.	SME April Burton and fellow trainers.	Interviews.
	What technical skills do teachers need to gain from the workshop to learn how to create and edit a teaching video?	To identify what items need to be included in the training.	Faculty	Questionnaires.
<b>Actuals</b>	What do the faculty members currently know about teaching with a flipped classroom?	To tailor and structure the 2-Day course outline for training.	Faculty.	Questionnaires.
	Do faculty realize the benefits that flipped classroom has to offer?	For faculty "buy-in" and acceptance of the 2-Day course training.	Faculty.	Questionnaires.
	What is the current level of expertise of the faculty in creating teaching videos?	We need to determine whether or not amount of training offered is appropriate for	Faculty.	Questionnaires.

		the needs of the trainees.		
<b>Determining Causes</b>	What is causing a need for the training on “teaching with a flipped classroom?”	What kind of difficulties are faculty members currently facing with providing traditional classroom instruction?	Faculty.	Interviews.
	What is causing the need to understand the benefits of a flipped classroom?	What roadblocks are getting in the way of faculty understanding the benefits of a flipped classroom?	Faculty.	Questionnaires, interviews.
	Is the availability of equipment or lack thereof keeping the faculty from learning how to create teaching videos?	To determine if accessibility to required equipment is an issue.	Faculty.	Questionnaires, interviews.
<b>Feelings</b>	Do the faculty members like this choice: Flipped Classrooms as a means of delivering instruction?	To find out the real feelings among the faculty members about the coming training for teaching with flipped classrooms.	Faculty members, trainers.	Questionnaires.
	Do faculty members like the benefits of creating flipped classrooms?	To find out if the benefits outweigh the perceived extra work that has to be done in creating a flipped classroom.	Faculty	Interviews, Questionnaires.

	Does faculty feel that creating a video can improve student achievement?	To understand if faculty accepts the notion of doing all this extra up-front work in creating the video is worth the extra time and effort.	Faculty	Surveys, Interviews.
<b>Possible Solutions</b>	What are the best ways to teach and then encourage the faculty to start using flipped classrooms?	To improve the current situation & enhance the learning experience of the students.	April Burton (SME) and fellow trainers.	Questionnaires, interviews.
	What are the best ways to get faculty to accept the benefits of creating a flipped classroom?	To get the faculty to “buy in” and accept new ways of doing things.	April Burton (SME) and fellow trainers.	Interviews.
	Is a two-day workshop the best method to train faculty to create and edit a video and use it as a teaching tool?	To determine if the two-day training will be the most efficient way to train the teachers.	April Burton(SME) and fellow trainers	Online survey. Exit interviews.

# TASK ANALYSIS

## **Topic Analysis for Flipped Classrooms**

Teachers will need to determine which hosting site to use as well as which recording options work best for their situation. Teachers will need to plan one instructional unit that will include at least one video lesson that they have recorded themselves. After recording video, they will need to determine how to ensure that students comprehended the presented material. Reinforcement activities will then need to be determined and planned.

For the Topic Analysis outline, see Appendix A.4.1.

## **Procedural Analysis for Flipped Classrooms**

Teachers will learn about various web hosting options and then determine which is best for their district and course material. Recording methods will be investigated and analyzed. This will assist in determining which method is best for the web host and type of presentation. After objectives are planned, the teacher will determine which are best taught in the classroom setting and which are best taught by video lesson. A video lesson will then be prepared and recorded. After recording the lesson, a decision will need to be made on how to determine a student's comprehension level of the lesson. Reinforcement activities will then be decided on, created and implemented.

For the Procedural Analysis outline, see Appendix A.4.2.

## SECTION 2: EVIDENCE OF ACCEPTABLE RESULTS

### FORMATIVE ASSESSMENT

This assessment is meant to determine the effectiveness of the “Teaching with the Flipped Classroom’ training as determined by the attendees. This assessment is meant to be used during development of the training on teaching in a flipped classroom. It will also determine effectiveness of materials presented.

#### Key Questions

- Does the training site meet the big goals and objectives that were to be covered?
- Is the information engaging?
- Will educators be able to easily follow the flow of the training?
- Are there areas that could be improved?
- Is the time line set up for the training going to adequate in all areas?

Approaches to gain information will include a questionnaire given to the Subject Matter Expert for their input. This short questionnaire is comprised of open-ended questions to help determine that the information covered in the training presentation is accurate and presented effectively. Secondly, a trial training will be completed by a small group of educators (no more than 10) who will receive a survey upon completion. This survey will help trainers to determine the effectiveness of the training and whether or not changes need to be made in order to improve the training.

For the Subject Matter Expert Questionnaire, see Appendix A.5.1.

For the Trial Training Survey, see Appendix A.5.2.

# SUMMATIVE ASSESSMENT

Summative evaluations will be conducted to determine the overall effectiveness of the workshop. Overall effectiveness will be determined by how well we meet our goals and objectives. Two evaluation approaches will be used, which will occur immediately following and six months after completion of the workshop. The following is a list of key questions that will guide the evaluation.

## Key Questions

1. Did participants leave the workshop with a feeling that information gained could be immediately implemented in a class they teach?
2. Was there enough time during the workshop devoted to participant technology exploration and lesson development?
3. After completion, do participants feel they are proficient in technologies used in a flipped classroom?
4. After completion, do participants feel they have a greater understanding of the concepts and implementation of a flipped classroom?
5. What percentage of participants incorporate techniques or knowledge learned from the workshop into their classrooms?
6. Do participants feel that their time was well spent?
7. Of the teachers that implemented some or all of the techniques discussed, what percentage feel it had a positive impact on their teaching or student achievement?
8. What changes do participants feel should be made to the workshop?

See Summative Evaluation Instruments: Appendix A.6.1

## Data Gathering

### Approach #1:

The first approach used will consist of a survey completed by participants at the conclusion of the workshop, as well as six months later. The initial survey will focus on overall satisfaction and effectiveness of the workshop. The second survey will include some of the same questions as the initial survey, in addition to new questions involving how the workshop techniques were implemented into their class. Both surveys will be administered using an online survey platform. Participants will receive an email six months after the workshop with instructions on how to complete the survey. As an added incentive to drive participation, particularly in the second survey, all who complete the survey will be entered into a drawing for a screen capture/presentation software package. Hard copies of what will be included in the online survey can be found in Appendix A.

### Approach #2:

The second approach will consist of focus groups made up of 3-5 teachers who participated in the workshop. The focus groups will take place shortly after the second survey and will consist of teachers

that have implemented many of the techniques discussed and/or have completely flipped their classroom. These individuals will be able to give us great insight into what was effective and what needs to be added or replaced in the workshop. Guiding questions for the groups will be based on the key questions listed above.

## SECTION 3: LEARNING EXPERIENCES AND INSTRUCTION

### LEARNER ANALYSIS

The *Teaching with a Flipped Classroom* teacher in-service training is constructed for K-12 teachers. Participants will come from different backgrounds, teaching disciplines, and levels of knowledge on flipped learning. They will have different reasons and needs from the training session. It is assumed they are familiar with the basics of using a computer and accessing and using the internet. The teachers will be given an online questionnaire at least one day before training. The training facilitator will look at the results before the training begins. Immediately after the training, the teachers will be given a post-training questionnaire as well.

Learner Variables to consider prior to training:

- Grade level taught
- Discipline taught
- Prior experience with flipped classrooms
- Comfort level with new technology
- Desire to teach a flipped classroom
- Ability to do a flipped classroom
- Motivation for attending training
- Learner training goals

Learner Variables to consider after training:

- Learner confidence in abilities to do flipped classroom
- Training benefit to learner
- Learner understanding of what flipped learning is
- Learner views on flipped learning now
- Learner desire to try flipped classroom

Both questionnaires can be found in Appendix A.7.

<b>Learner Factors</b>	<b>Data Collection</b>
<p><b>Orienting Context</b></p> <ol style="list-style-type: none"> <li>1. What do the teachers hope to get out of the training?</li> <li>2. How familiar are the participants in screen capturing software and video hosting options on the internet?</li> <li>3. Do the teachers have flipped learning experience?</li> <li>4. Do the learners hope to create a flipped classroom of their own?</li> <li>5. What are the teaching backgrounds of the learners (including grade and subject)?</li> <li>6. Why are the teachers at the training?</li> <li>7. What are the teachers' attitudes towards a flipped classroom? Do the teachers know what a flipped classroom is?</li> </ol>	<p>Questionnaire given prior to training</p>
<p><b>Instructional Context</b></p> <ol style="list-style-type: none"> <li>1. Did the teachers want to attend the flipped classroom training?</li> <li>2. Do the teachers feel they needed this training session?</li> <li>3. Are the teachers prepared for the training (computer skills, video skills, etc)?</li> <li>4. What is the one thing the teachers most want to get out of this training?</li> <li>5. What are the learner's feelings on flipped classrooms? Do the learnings want to create a flipped classroom</li> </ol>	<p>Questionnaire given prior to training</p>
<p><b>Transfer Context</b></p> <ol style="list-style-type: none"> <li>1. Do the teachers feel confident in their ability to create a flipped classroom after the training?</li> <li>2. Do the teachers think they can manage a flipped classroom after the training?</li> <li>3. Do the teachers feel the training was beneficial?</li> <li>4. Do the teachers now understand what a flipped classroom is?</li> <li>5. Do the teachers see the benefit of flipped learning?</li> <li>6. Do the teachers want to try flipped learning now?</li> <li>7. Do the teachers feel flipped learning will improve student outcomes?</li> </ol>	<p>Post-Training Questionnaire</p>

# CONTEXTUAL ANALYSIS

## **Data Collection Procedures**

This assessment is designed to determine the prior knowledge of flipped classroom technology, the general attitude towards receiving training in flipped classroom, and the district resources, budget, and support available to buildings who wish to implement flipped classroom. The data will be collected through a panel style interview with district-level administrators and technology integration specialists, network administrators, and information technology staff members. Principals will be interviewed individually to determine their unique building needs and expectations. Additionally, trainers will complete a site visit and walkthrough of each school building to determine available resources and technology challenges to implementing flipped classroom building-wide.

Immediate Environment Factors	Data Collection
<p><b>Orienting Context</b></p> <ol style="list-style-type: none"> <li>1. Are there multiple teachers in the participants' school that want to use flipped learning as to create peer support?</li> <li>2. Will teachers have time to implement flipped learning?</li> </ol>	<ul style="list-style-type: none"> <li>- Interview/discussion with school administration</li> <li>- Interview with participant before the workshop</li> </ul>
<p><b>Instructional Context</b></p> <ol style="list-style-type: none"> <li>1. Is there adequate seating in the workshop space?</li> <li>2. Does each participant have a computer to use?</li> <li>3. Is the spacing for seats and computer stations appropriate to allow for effective video recording of each participant without interference from other participants?</li> <li>4. Is necessary software installed on the participants' computers as to minimize startup and setup times?</li> </ol>	<ul style="list-style-type: none"> <li>- Instruction space walk-through prior to workshop</li> <li>- Possible discussion with building administration and IT staff if software needs to be installed</li> </ul>
<p><b>Transfer Context</b></p> <ol style="list-style-type: none"> <li>1. Is the necessary flipped learning technology available at the participant's school?</li> <li>2. Will flipped learning be incorporated into meetings, professional development, etc.?</li> <li>3. Is there any incentive for teachers to implement the flipped classroom?</li> </ol>	<ul style="list-style-type: none"> <li>- Interview/discussion with school or district administration</li> </ul>

Organizational Factors	Data Collection
<p><b>Orienting Context</b></p> <ol style="list-style-type: none"> <li>1. Does the participant’s school encourage innovation and experimentation?</li> <li>2. What is the goal of the participant’s school? To receive information, or to fully implement the flipped classroom?</li> <li>3. Is there any incentive from the school encouraging the participants to attend the workshop?</li> </ol>	<p>- Interview/discussion with school or district administration</p>
<p><b>Instructional Context</b></p> <ol style="list-style-type: none"> <li>1. Is the participant’s school providing the technology needed to implement a flipped classroom?</li> <li>2. Will the participants’ school provide ongoing training and assistance for flipping their classrooms?</li> <li>3. Does the participants’ school district value flipped learning?</li> <li>4. Will the participants’ school offer extra time during the school day to implement flipped learning?</li> </ol>	<p>- Interview/discussion with school and district administration</p>
<p><b>Transfer Context</b></p> <ol style="list-style-type: none"> <li>1. Is there a budget for continued flipped learning education at the participant’s school?</li> <li>2. Do administrators support the implementation of flipped learning?</li> <li>3. Will technology upgrades be available as to keep up with trends?</li> </ol>	<p>- Interview with school and district administration</p>

**Design Assumptions**

Because the in-service workshop was commissioned, we assume that the participant’s school or district is interested in implementing flipped learning at some level. We also assume that the school district has allotted resources for implementation of the flipped classroom. Based on the data collection in the contextual analysis we will gain a better understanding of the level of commitment and resources for implementation.

See Appendix A.8 for Contextual Analysis instruments.

## TYPES OF LEARNING EXPERIENCES /INSTRUCTION

The purpose of “Teaching with the Flipped Classroom” is to provide teachers with the knowledge and understanding of the necessary tools, implementation procedures and reinforcement activities required for a successful flipped classroom. This two-day workshop will be delivered using face-to-face instruction over two consecutive days.

Instruction will be guided through a PowerPoint that will provide explanations of various methods that teachers have found to be successful practices for the flipped classroom. Participants will have access to this PowerPoint, as well as additional resources such as example links, planning worksheets and example documents through a Schoology Learning Management Tool. Participants will join the Schoology group in order to access these materials, but will also share ideas on the Schoology discussion board.

Instruction will include the fundamental methods of beginning a successful flipped classroom, the “how-to” of creating videos for instruction, as well as follow-up activities to insure that student learning is taking place. Through PowerPoint, video examples, a planning worksheet and example documents, teachers will leave the workshop with the tools to create a unit where instruction is delivered through flipped videos. Because work-time is built into the instructional schedule, ideally teachers will leave with a plan for a unit and possibly even an instructional video that they created at the workshop.

Learning will take place with a blend of instruction and demonstration paired with investigation. Participants will be given time to investigate different methods of instruction through videos in order to determine which delivery method best fits their needs. Then, the instructors of the course will demonstrate the most common screen-recording solutions. Teachers will have the time to practice with these solutions and possibly even record an instructional video. Likewise when addressing different options for assessing and reinforcing students’ understanding, the instructors will explain some of the best practices, but give teachers time to determine the best method for their needs, and ultimately use the available time to create their own assessment materials.

See Appendix B.1 for the Table of Learning Experiences and Instructional Strategies.

# MATERIALS

The information presented during this two day workshop will be presented through a PowerPoint. Participants will have access to this PowerPoint, as well as other materials through a Schoology Course. To access the materials, participants will join the “Teaching with the Flipped Classroom” Schoology Course.

The PowerPoint will discuss the fundamentals of a flipped classroom, and the benefits of flipped teaching. The slideshow will walk participants through the best practices for creating and recording video lessons, making videos accessible to students in a variety of ways, assessing students’ understanding, as well as providing opportunities to reinforce the learning objectives.

Getting a flipped classroom started requires buy-in from students and parents. Because flipped teaching is a non-traditional method for presenting learning objectives, it is important that teachers inform students and parents. Within the materials in the Schoology Course, there will be an example of a letter to parents that explains what a Flipped Classroom is, as well as the benefits of teaching objectives through videos at home. Additional resources that help to inform teachers and parents of the fundamentals of flipped learning are links to two videos. One video, created by MediaCore explains the basics behind the Flipped Classroom. Another video, is an example of a video message created for my students to explain why I chose to teach objectives in this manner. Since the idea behind flipped learning is that students watch videos at home to learn the objectives, it is logical that teachers use a video to explain the flipped concept to both teachers and parents.

Other materials that will be provided for participants:

A Unit Planning Guide is included in the Schoology materials to help participants to determine what learning objectives in a learning unit will be taught through video lessons.

Links to flipped lessons created by other teachers in a variety of subject areas and levels. When planning for a video lesson there are a variety of formats that teachers can use. The links provided in the presentation introduce teachers to these different formats so that teachers can choose which one works best for their individual learning objectives.

An example of Cornell Style notes used in April Burton’s French classroom is provided in the Schoology materials. Cornell Style notes are a popular choice for teachers who use video lessons. This style of note-taking allows students the opportunity to take notes in the method that they choose, but also allows for students to reflect on what they have written by writing a summary of the notes, and questions about the material.

See Appendix B.6 for the PowerPoint presentation which includes links to flipped lessons

See Appendix B.3 for the Unit Planning Guide

See Appendix B.4 for an example of a Parent letter which introduces and explains the flipped classroom.

See Appendix B.5 for Cornell Style Notes example

# IMPLEMENTATION PLAN

Teaching with the Flipped Classroom will consist of a two day teacher in-service training. Each day the lessons will run from 8:00am to 3:00pm with an hour lunch break from 11:00am-12:00pm. The training is designed for teachers new to flipped learning, or those who know about flipped learning but would like more information on it. The training can accommodate up to 30 teachers.

The training sessions will need to be in a computer lab where each teacher has his/her own computer. The computers need to be setup so each teacher attending the training session can use the computer and save files. There will need to be an instructor computer as well with a projector hooked up so the instructor's screen is viewable to all in the room. The instructor's computer will need to have a sound system working with it so the students can hear the videos played. Every computer in the room should have high-speed internet access. The attendees will need to access various online sites including Schoology.

All materials will be provided in both electronic and paper hard copy. The electronic versions will be posted online for future reference after the training session as well. The training will take place using direct instruction, demonstrations, and learner hands-on time to do tasks.

The computer lab/room will need to be inspected to ensure the temperature controls work and the room can be adequately climate controlled. If there are problems, the building's custodial staff will need to be contacted to fix the problems. It will need to be established that the instructor and learner computers are setup properly to do all the tasks required. A check of the projector and sound system on the instructor's computer will need to be done. If computer problems of any kind are found, the building's IT department will need to be contacted to fix the problems before the training.

There will be a pre-training questionnaire given to assess the learners' preparedness, need, and desire for the training, as well as what they hope to get out of the training. After the training, a post-training survey will also be given to assess what the learners feel they got out of the training, and how they will proceed going forward.

See Appendix B.2 for Implementation Schedule

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# APPENDIX

## Appendix A: Needs Assessment Instruments and Evaluation Materials

### A.1 TEACHERS SURVEY FOR NEEDS ASSESSMENT #1

#### Understanding how to “flip” a classroom.

Thank you for taking time taking to complete our survey. Your input will help us determine your level of expertise in “flipping a classroom” for classroom teaching.

1. Have you ever heard of the term “flipped class?”

Yes/No

2. What do you want to learn from this workshop?

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3. What is it about flipping a classroom that intrigues you the most?

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4. What sort of feelings do you have about trying something new for your classes?

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5. Have you had any contact with other teachers who have “flipped” their classrooms?

Yes/No

6. Have you had any previous experience in creating videos for any type of teaching at all?

Yes/ No (If yes, please describe what you have tried)

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7. Would you consider yourself a “technical” person who is at ease using computers and video hardware and software?

Yes/No

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8. What is it about your current classroom teaching experience that makes you want to learn about “flipping” a classroom?

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9. How do you like to learn – what type of “learner” are you?

- Visual – a picture is worth a thousand words
- Hands on – love to work with my hands
- Vicarious – voracious reader
- Aural – let’s talk about it
- A combination of these

10. How supportive is your administration about utilizing “flipped” classrooms?

- Very
- Somewhat
- Don’t know

A.2 TEACHERS SURVEY FOR NEEDS ASSESSMENT #2

**Understanding the benefits of a “flipped” classroom.”**

Thank you for taking time to complete our survey. Your input will help us determine how well you understand the benefits in “flipping a classroom” for classroom teaching.

1. In what ways will flipping your classroom benefit the students and improve student achievement?

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2. What has led you to seek alternative ways to teach your classes?

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3. How do you think your students will react to participating in a flipped classroom?

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4. How are you at trying something new?

- Usually apprehensive
- Cautious, but have a positive attitude about it
- Gung Ho! Seize the Day!

5. What outcome measures would you consider as important in determining that flipping a classroom has improved student achievement?

- Higher course grades
- Better achievement test scores
- Increased Morale
- Higher level of engagement
- Reaching more students
- All the above

6. How important is it that student’s “buy into” a new teaching strategy?

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7. Is it important that students understand the benefits of a flipped classroom also?

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8. What would keep you from actually implementing a flipped classroom?

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### A.3 TEACHER SURVEY FOR NEEDS ASSESSMENT #3

#### **Creating and Editing Videos as a Teaching Tool for Flipped Classrooms**

Thank you for taking time taking to complete our survey. Your input will help us determine your level of expertise in creating and editing videos for classroom teaching, which can be utilized in creating a flipped classroom.

1. How would you describe yourself?

- I am a teacher with a lot of video experience and have used videos in teaching some of my classes.
- I am a teacher with some video experience and have tried to use videos as a teaching tool before this workshop, but would like to learn more.
- I am a teacher with little or experience using video as a teaching tool in a flipped classroom.

2. Have you received any previous training on how to create, edit and upload a video?

- Yes
- No

3. What level of expertise would you say you have in creating, editing and uploading a video?

- Advanced
- Intermediate
- Beginner

4. If you have some level of expertise and have used video for classroom teaching before, how much time class is devoted to lecturing using a video?

- 0 – 25%
- 26 – 50%
- 50 – 75%
- 76 - 100%

5. How often do you use a video as a teaching tool in your classroom?

- Never
- Rarely
- Occasionally
- Very frequently

6. Before this workshop have you ever done the following?

Select all that apply:

- Know what type of camera to use
- know how to use the camera (Basic Functions)
- Know how to use using a camera to take a video
- Upload the video from camera to the computer
- Edit the video using Movie Maker or similar software
- Combine videos to create a production
- Upload the video to the web
- None of the above

7. What application do you use to edit a video?

- Windows Movie Make
- iMovie
- Other
- They have an app for that?

8. What difficulties have you experienced in attempting to integrate a video for flipping a classroom?

Select all that apply:

- I'm just not that technical
- lack of time to figure it all out
- lack of equipment, software, computer resources
- lack of funding to buy necessary equipment

9. What do you want to learn from this workshop?

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10. Which of the many benefits of using video in a flipped classroom do you feel is most important?

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11. What courses have you used video to teach more effectively?

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## A.4 TASK ANALYSIS FOR FLIPPED CLASSROOM

### A.4.1 Topic Analysis

- 1) Teachers need to determine which hosting site is best for their district
  - a. Which host does school recommend
- 2) Teachers will investigate recording methods
  - a. Investigate different recording options
- 3) Teacher will plan objectives for a learning unit
  - a. What are the important things for students to learn from this unit
    - i. Which objectives are better taught face to face
    - ii. Which objectives are better taught via video and reinforced face to face
- 4) Teachers will plan the video lesson
  - a. What objectives should be covered in the video
  - b. What order should these objectives be shown on video
- 5) Teachers will determine the best practice for ensuring students comprehension of the information in the video
  - a. Should points be given
  - b. Should an outline of the notes be given for the students to fill in as watching the video
  - c. Should students be solely responsible for taking notes from the video without any assistance from the teacher
  - d. Should different methods be utilized based on students' needs and ability levels
- 6) Teachers will learn about options for checking students' understanding of the video material
  - a. How can understanding be checked via the web
    - i. Could use a survey based service to record students answers
    - ii. Does hosting service allowing for questions to be answered and sent to teachers via web
    - iii. Put questions on a server like Google Docs and have students submit answers this way.
  - b. How can understand be checked in classroom
    - i. Possible paper and pencil options
      1. Pop quiz
      2. Questions to answer
      3. Written Summary of material viewed
    - ii. Possible verbal comprehension check
      1. Class discussion (ensuring everyone is participating)
      2. One on one questions and answers with teacher
      3. Having students discuss what they watched in small groups
- 7) Teachers will learn different reinforcement activities to be implemented during class time
  - a. Hands on Activities
  - b. Class room debates
  - c. Class discussions

#### A.4.2 Procedural Analysis

- 1) Teachers will learn about various web hosting options
  - a. Which hosting options does their school support
  - b. Does your school already have a host server that they use
  - c. Which web host works best with the typical internet speed in your district
- 2) Teachers will investigate recording methods
  - a. Teachers will locate recording methods that they would have access to at school and/or at home
  - b. Teachers should try a few of these methods to see which works best for them.
    - i. Would these methods work well in all situations
    - ii. Would different methods work better for different types of video
      1. Teacher lecture only
      2. Teacher lecture with slide presentation
      3. Teacher lecture with demonstration
- 3) Plan unit objectives based on what is most important to ensure that the students grasp the concept(s) you are trying to teach
  - a. Look over objectives and decide which ones would be better taught in the traditional face to face classroom setting
    - i. These objectives will be ones that are more challenging to convey meaning via video
  - b. Look over objectives and determine which ones would be better taught through video lessons.
    - i. These objectives may be ones that are generally less challenging and or confusing for students.
    - ii. These objectives may be ones that are more easily retained through a lab or hands on activities
- 4) Teachers will plan video lesson
  - a. Which objectives should be taught by video
  - b. In what order should these objectives be presented
  - c. What method of video would most effectively get the information across to students
    - i. Teacher lecture
    - ii. Teacher lecture with slide presentation
    - iii. Teacher lecture with demonstration
- 5) Teachers will determine the best practice for ensuring students comprehend information on the video
  - a. Should be points be given for notes taken
    - i. How many points
    - ii. What percentage of grade should points total
  - b. Should an outline of notes be given for students to fill in missing information while watching the video
    - i. Should they be collected
    - ii. Should they be looked at by teacher to ensure their completion
  - c. Should students be solely responsible for taking notes from the video without teacher assistance

- i. Should they be collected
    - ii. Should they be looked at by teacher to ensure their completion
  - d. Should different methods be utilized based on the individual students' need and/or ability level
    - i. Under what circumstances should different methods be utilized
    - ii. When should the teacher allow for alterations of methods
- 6) Teachers will learn about options for checking students' understanding of the video material
  - a. How can understanding be checked via the web
    - i. Survey methods (i.e. survey monkey)
    - ii. Does chosen hosting site allowing for questions to be answered and sent to teacher via web and/or email
    - iii. Place questions on site (i.e. Google Docs) and have students submit answers through that site
  - b. How can understanding be assessed in the classroom
    - i. Possible paper and pencil options
      - 1. Quizzes both scheduled and unscheduled
      - 2. Questions given in class to be answered in class
      - 3. Have students write a summary of the material they viewed
    - ii. Possible verbal comprehension checks
      - 1. Class discussions (ensuring everyone is participating)
      - 2. One on one question/answer session with teacher
      - 3. Having students discuss in small groups while the teacher walks around and listens and/or participates in discussions
- 7) Teacher will learn different reinforcement activities to be implemented during class time
  - a. Hands on activities
    - i. Consider available time
    - ii. Consider expense
  - b. Classroom debates
    - i. Set parameters for being respectful and courteous
  - c. Class discussions led by teacher
    - i. Set parameters of not interrupting other students or talking over them

A.5 FORMATIVE ASSESSMENT FOR FLIPPED CLASSROOM

**A.5.1 Subject Matter Expert Questionnaire**

1. Was all information presented done so accurately?  
Yes/No (If not, what needs to be altered?)

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2. Is the order of presentation effective? (If not, what should be switched and to where?)

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3. Do you feel all material can effectively be completed in the time allowed? (If not, what parts should be lengthened or shortened?)

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4. Do you have any other suggestions that the instructional design team should consider?

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### A.5.2 Trial Training Survey

(Please choose appropriate response)

	<b>Completely Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Completely Agree</b>
<b>Was all material presented clearly and effectively?</b>					
<b>Was material presented in a logical order?</b>					
<b>Was material presented easily understood?</b>					
<b>This training was an effective use of my time.</b>					

1. If you selected 'Somewhat Disagree' or 'Completely Disagree', please explain how we can improve the training for others.

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2. What did you like about the training?

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3. What is something that you learned at the training?

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4. How will you use what you learned through the training?

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### A.6 SUMMATIVE EVALUATION

## A.6.1 SUMMATIVE EVALUATION INSTRUMENTS

### Survey #1 (At conclusion of workshop):

Thank you for taking part in “Teaching with the Flipped Classroom.” We hope you found the workshop informative and pertinent to your classroom. Please take a few moments to fill out the survey below to help us better meet your needs.

**Directions:** Please rate statements #1-6 on a scale of 1-5, 1 being highly disagree and 5 being highly agree. Then answer questions #7-9 in the boxes provided.

1. Enough time was provided for individual exploration of technologies and techniques.
2. I feel that the instruction provided was useful and practical.
3. Based on the instruction provided, I feel I am proficient in the technologies associated with the flipped classroom.
4. The workshop provided me a greater understanding of the concepts of the flipped classroom.
5. Time was utilized efficiently.
6. I feel I could immediately implement some of the techniques discussed.
7. If you could change something about the workshop, what would it be?

8. What was your favorite part of the workshop?

9. Is there anything else you could tell us to help us improve the workshop?

**Survey #2 (6 months after conclusion of workshop):**

Thank you again for taking part in “Teaching with the Flipped Classroom.” After having some time to digest the information provided and to implement techniques into your classroom, we would appreciate it if you would take some time to fill out the following survey. We value your time and opinion; the survey will only take five to ten minutes to complete. At the end of the survey, you will have the option to enter into a drawing for a free screen capture/presentation software package. Thank you again for your time and interest in the flipped classroom.

**Directions:** Please rate statements #1-4 on a scale of 1-5, 1 being highly disagree and 5 being highly agree. Next, answer yes or no to #5-6. Finally, answer questions #7-9 in the boxes provided.

1. The instruction at the workshop provided me with the base knowledge to flip my classroom.
2. I feel that the instruction was practical.
3. There are techniques or concepts that I feel were left out of the workshop.
4. I feel the techniques and concepts discussed have benefited my students.
5. I have implemented techniques discussed at the workshop.
6. I feel that the flipped classroom is not effective for my class.
7. How have you implemented the techniques and concepts discussed at the workshop?

8. If you have flipped your classroom, briefly explain how it has impacted your students.

9. Is there anything else you could tell us to help us improve the workshop?

## A.7 LEARNER ANALYSIS

### A.7.1 Pre-Training Questionnaire

1. Are you familiar with what a flipped classroom is?  
 Yes       No
2. Do you have personal experience with flipped learning?  
 Yes       No
3. Which best describes your current feelings toward flipped learning.  
 negative       no feeling positive or negative       positive
4. After the training session, do you hope to create a flipped classroom?  
 Yes       No       I already do a flipped classroom
5. Do you feel you need this training?  
 Yes       No
6. After this training do you feel you will be able to create a flipped classroom?  
 Yes       No
7. List at least one item you **hope** to get out of the flipped classroom training sessions.
  
  
  
  
  
  
  
  
  
  
8. How familiar are you with using screen capturing software?  
 Very familiar     Somewhat familiar     Not Very Familiar     Never Used
9. Are you familiar with video hosting options on the internet?  
 Yes       No
10. Why are you attending this training? Check all that apply.  
 Required by administration  
 Want to learn more about flipped learning  
 Other \_\_\_\_\_
11. Rate your computer skills.  
 Poor       Fair       Excellent

12. Have you ever created your own teaching videos?

- Yes       No

13. Do you feel comfortable using the internet?

- Yes       No

14. Have you ever used Schoology (in your class or in training)?

- Yes       No

15. What grade do you teach? \_\_\_\_\_

16. What subject do you teach? \_\_\_\_\_

### A.7.2 Post-Training Questionnaire

1. Do you feel the flipped classroom training was beneficial to you? Select an answer, then please include any comments.

- Yes       No

Comments:

2. Do you now understand what a flipped classroom is?

- Yes       No

3. Do you now see benefit in a flipped classroom? Select an answer, then please include any comments.

- Yes       No

Comments:

4. Do you feel flipped learning can improve student outcomes and learning? Select an answer, then please include any comments.

- Yes       No

Comments:

5. Would you like to now try flipped learning?

- Yes       No       Already do flipped learning

6. Do you feel you can manage your own flipped classroom after receiving this training? Select an answer, then please include any comments.

- Yes       No

Comments:

**A.8 CONTEXTUAL ANALYSIS INSTRUMENTS**  
**A.8.1 Contextual Analysis Site Visit Inventory**

**General Info:**

Building Name: \_\_\_\_\_

Principal: \_\_\_\_\_

Number of Students: \_\_\_\_\_

Number of Classrooms/Grade Level \_\_\_\_\_

**Building Resources:**

Computer Lab: Yes/No If yes, how many workstations: \_\_\_\_\_

PCs per classroom: \_\_\_\_\_

Laptops per classroom: \_\_\_\_\_ What type? \_\_\_\_\_

Mobiles Devices per classroom: \_\_\_\_\_ Android \_\_\_\_\_ iPad

How many classrooms 1:1 or BYOD: \_\_\_\_\_

Microphones in building: \_\_\_\_\_

Digital tablets in building: \_\_\_\_\_

**Infrastructure:**

Modem capability: \_\_\_\_\_

Routers per building: \_\_\_\_\_

Outlets per classroom: \_\_\_\_\_

Is every classroom wireless? Yes/No

## **A.8.2 Contextual Analysis Building Administration Interview**

(To be conducted panel-style with all district administrators, with interviewer recording answers)

- 1) What is the level of experience among your buildings with flipped classroom?
  
- 2) What are your attitudes toward flipped classroom throughout the district?
  
- 3) What grade bands do you believe would be most successful in using flipped classroom? Are there any grade bands or schools you would prefer to leave out of training or implementation?
  
- 3) What is the overall attitude of your building administrators regarding flipped classroom?
  
- 4) What do you think will cause the greatest difficulty in implementing flipped classroom in your district?
  
- 5) What is the community's overall attitude to technology initiatives in the district?
  
- 6) What would help motivate parents and stakeholders to embrace a flipped learning initiative in buildings?
  
- 7) Does your district participate in a 1:1 or BYOD program?
  
- 8) Does your district already have access to resources such as microphones and digital tablets for flipped learning?
  
- 9) Does the district have the technology budget for such purchases if you do not already have those devices?
  
- 10) How do you see flipped classroom ideally working in your district? Does it differ between grade bands or buildings?

### **A.8.3 Contextual Analysis Building Administration Interview**

(To be conducted in person, with interviewer recording answers)

- 1) What is the level of experience among your staff with flipped classroom?
  
- 2) If a teacher or group of teachers in your building has tried flipped classroom, what grade level do they teach and how did they implement it?
  
- 3) What is the overall attitude of your staff toward implementing flipped classroom?
  
- 4) What do you think will cause the greatest difficulty in implementing flipped classroom in your building?
  
- 5) Does your technology/blended learning teacher have experience with using flipped classroom?
  
- 6) Does your technology/blended learning teacher have experience offering training or support in flipped classroom?
  
- 7) Does your building participate in a 1:1 or BYOD program?
  
- 8) Does your building already have devices such as microphones, digital tablets, or laptops for screen-casting available to teachers?
  
- 9) Do you have the budget for such purchases if you do not already have those devices?
  
- 10) In your parent community, what is the level of support for students working on lessons at home?
  
- 11) Have your parents and students experienced any kind of flipped lesson, school announcement, or training?
  
- 12) How many of your households have access to Internet (either through desktop, laptop, tablets, or phones?)

13) Are there nearby resources in your building area for accessing Wi-Fi (such as libraries, community centers, McDonald's, or Starbucks) if students are unable to get Internet at home?

14) How do you see flipped classroom ideally working for your school?

15) Would you be willing to devote professional development time and budget for building training on flipped classroom?

#### **A.8.4 Contextual Analysis Building Information Technology Department Interview**

(To be conducted panel-style with IT director, network administrators, digital learning/blended teachers, and IT support staff with interviewer recording answers)

- 1) What is the experience level of your department with flipped classroom?
  
- 2) What are your attitudes toward flipped classroom throughout the district?
  
- 3) What potential challenges do you anticipate in implementing flipped classroom?
  
- 4) Has your network handled large numbers of students accessing streaming video in the past? If not, do you see this as a potential concern?
  
- 5) Does your SEP or firewall/filtering service block YouTube, Vimeo, or Schooltube at this time? What are your feelings towards opening those for students to utilize flipped classroom?
  
- 6) Do teachers have Google Apps for Education accounts through the district, or would they be responsible for creating their own streaming video accounts? Likewise, do students have those accounts available?
  
- 7) What are your feelings about providing training, support, and troubleshooting for teachers implementing flipped classroom? Do you feel like you will require further training to be able to help them effectively?
  
- 8) Does the IT department have a separate budget for purchasing district-level resources, such as digital tablets, microphones, and peripherals to help implement flipped classroom?
  
- 9) What are your feelings toward writing grants or looking for donations for those supplies?
  
- 10) How do you see a flipped classroom initiative ideally being rolled out to the district?

## Appendix B: Materials, Schedules and Outlines

### B.1. TABLE OF LEARNING EXPERIENCES AND INSTRUCTIONAL STRATEGIES

Behavioral Objectives for Learners	Type of Learning	Instructional Strategy	Rationale
1.1 Following a presentation on the fundamentals of a flipped classroom and the benefits of flipped teaching, the learner will create a learning unit which lists objectives that meet the criteria outlined in the presentation.	Procedure-application	Demonstration, recall, and practice	The learner will be able to create a learning unit that works effectively in a flipped classroom setting.
2.1 After participating in instructional activities about flipped classroom best practices, the learner will create a plan for a video lesson that incorporates the best practices.	Procedure-application	Demonstration, recall, and practice	The learner will be able to create lessons that use the best practices of flipped learning.
3.1 After watching a demonstration of screen recording options, the learner will record a short demo video using one of the options and successfully upload it to Blackboard for others to view.	Procedure-application	Demonstration, recall, and practice	The learner will be able to use screen recording software.
3.2 After watching a peer's uploaded recording, the learner will analyze the pros and cons of the option used and share their thoughts in a comment on Blackboard.	Concept-application	Explanation	The learner will understand the value of available screen recording software.
4.1 After watching a demonstration about web hosting options, the learner will successfully embed a link to a video onto Schoology or Edmodo.	Procedure-application	Demonstration, recall, and practice	The learner will be able to share their videos with others.
5.1 After watching a video about the basics behind flipped classroom design, the learner will be able to complete a note-style worksheet describing the principles of flipped classrooms.	Concept-application	Demonstration and recall	The learner will learn the principles of flipped learning while actively participating in flipped learning.

<p>6.1 During a group discussion about methods of checking students' understanding of the material through the web, the learner will demonstrate their knowledge by adding at least three comments to the discussion.</p>	<p>Concept-application</p>	<p>Explanation and elaboration</p>	<p>The learner will understand the best methods of checking for student's understanding in flipped settings.</p>
<p>7.1 Following a presentation about different reinforcement activities, the learner will complete a Blackboard quiz on the subject matter with 80% accuracy.</p>	<p>Concept-application</p>	<p>Demonstration and recall</p>	<p>The learner will be able to recall different reinforcement activities.</p>

## **B. 2 IMPLEMENTAION SCHEDULE**

### **Day 1**

8am-11pm

1. Introduction / Teachers should join Schoology group to access materials
2. Examine statistics
  - a. Stats of successful schools/teachers
  - b. Benefits of flipped learning
3. Look at best practices
  - a. How to start a flipped classroom
    - i. Getting students ready
    - ii. Getting parents on board
  - b. How to plan a unit that includes flipped teaching
  - c. Best practices with video creation
  - d. Provide time to explore flipped videos that other teachers have been created
    - i. Have links posted to flipped lessons in a variety of content areas
    - ii. Use Discussion Board area for teachers post links that they have found and to post comments about videos that they find

12pm-3pm

1. Provide time for teachers to work in outlining a lesson (or the lesson in a unit) to be presented via flipped video
  - a. Teachers can create PowerPoints to be used in video
  - b. Teachers can work with job-alikes to write a script or plan out a video

### **Day 2**

8am-11am

1. Examine different Screen Recording software
  - a. Demonstrate three different software applications
  - b. Explore the strengths and weaknesses of all three
  - c. Provide time for teachers to play around with recording software  
-teachers should create a short demo video
2. Examine different video hosting options
  - a. Explain different options for making videos accessible
  - b. Demonstrate how to upload videos to a hosting site
    - i. TeacherTube
    - ii. YouTube
    - iii. SchoolTube
    - iv. Wistia
  - c. Demonstrate how to use embed code to upload a video to LMS(Schoology or Edmodo) and/or website

12pm-3pm

1. Explore options for checking for understanding and reinforcement
  - a. Checking for understanding
    - i. Post a discussion question and response on discussion board
    - ii. Online Quiz
    - iii. In-Class Quiz
  - b. Reinforcement Activities – Discuss activities that would engage students in practicing the objective
    - i. Cooperative Learning options
    - ii. Games
    - iii. Other activities

## Flipped Unit Planning Guide

Learning Unit:		
Learning Objectives of the Unit:	Presentation Method of objectives (Slide Show presentation, white board, PaperSlide, etc)	To be taught through video?

**\*\*Tips for Video Lessons**

- Keep videos 5-8 minutes
- Include an opportunity to practice and to check for answers
- Videos can be an introduction of a lesson that will be taught in class

# MRS. BURTON

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August 6, 2015

Dear French 1 and 2 Students and Parents,

I am excited to welcome you to French. Learning a foreign language has numerous benefits that range from improving your understanding of your own language to advancing your competitive edge when applying for scholarships, colleges and ultimately jobs. Before we embark on our journey for this school year, I want to explain the format with which I teach French 1. French 1 will be taught using a blended “Flipped Classroom” format. You may or may not be familiar with this teaching style. It is not my own idea, but it is a unique format and one that has been met with success in classrooms worldwide. Since this is not the traditional class format, I want to explain how I have worked to tailor this teaching method to best meet the needs of my students.

## WHAT IS A FLIPPED CLASSROOM?

A Flipped Classroom is a “flip” from the traditional routine of a high school classroom. In a flipped classroom students learn the curriculum objectives at home by reading the textbook or watching videos and taking notes on their own, then students do practice activities (what would have traditionally been done for homework) in the classroom with the teacher and classmates present. In French 1, as the year progresses, students will be required to watch more lessons at home, however here at the beginning of the year, I will “blend” the traditional format with the Flipped format. This means that there will be some lessons watched at home, and some lessons which I will teach within the class period.

## WHY DO I TEACH WITH THIS METHOD?

The face to face time that I have with my students is very important. A few years ago, I took some time to evaluate how well I am using that face time. I came to realize that my students were spending far too much class time just sitting and listening, and not communicating in the language. After investigating the Flipped method, I realized that by having my students watch lessons at home, we can spend our valuable 50 minutes doing more exciting and beneficial activities that better prepare my students for communicating in the language.

## WHAT ARE THE BENEFITS OF A FLIPPED CLASSROOM?

- Since “lectures” are watched at home, class time is open for many more different types of activities.
- I am available during class time to help students when they have questions about directions or need reassurance that they are doing an assignment correctly. (This is something they often can’t get at home.)
- I can work with more students individually. Since I am no longer standing in front of the classroom the entire class period, I am able to walk around, constantly monitoring students’ progress.
- Because lessons are watched outside of class, students can pause, rewind or repeat lessons so that they fully understand the information. (Parents can watch, too.) Students learn at their pace.
- Lessons are available at all times. Students don’t miss valuable lessons due to absences. Also, students can re-watch lessons at any time, especially before an exam.

## Here are some Frequently Asked Questions:

### ***What if a student doesn't have a computer at home?***

For each lesson, I will offer textbook page numbers where students can read the necessary information. While the textbook explanations will not be as detailed as my video explanations, there will be enough information for students to complete notes. Also, there are computers available in the library or in my classroom. Students can watch the videos before or after school or during lunch.

### ***What if there isn't reliable internet at home?***

I can easily save videos to a flash drive. If a student knows that he/she will not be able to connect to the internet to watch a video at home, he/she just simply needs to give me a USB flash drive in class, and I can save the video in order for it to be watched at home. I can also save videos to a DVD, if necessary. Again, before or after school, or during lunch, students can watch videos at the library or in my classroom.

### ***What if questions occur about the subject matter covered in the video?***

If a student is confused about something that is covered in the video, he/she is encouraged to write down the question and to visit me before school the next day. Students will always have several days to watch the videos. **I encourage students not to procrastinate.** That way there is plenty of time to ask me if there are questions. I am always available before school. Questions can always be asked via email, as well, but there may be evenings that I cannot answer an email immediately.

### ***How often are students required to watch videos?***

This varies by level. There are very few video lessons at the beginning of the year, but as the year progresses students may be required to watch one to two 5-10 minute videos a week. Students will typically have two days' notice, and all video due dates will be posted on my website and Schoology.

### ***What happens if a student doesn't watch the video for homework?***

As with any type of homework, there are consequences to not completing the assignment. Each video will have some type of follow-up assignment. That assignment might be an electronic activity to be submitted through the web immediately after viewing the lesson, or it might be a notes quiz to be completed in class the following day. If a student doesn't watch the video, not only will he or she be confused about the topic covered in the video, he/she will not earn points for the follow-up assignment, and points will also be deducted if the notes are not included in the student's binder during quarterly notebook checks. It is extremely important that students watch the lessons when they are assigned. Watching the video assignments takes less time than traditional homework assignments, so it is a very small time commitment.

*I am thrilled to be starting the year off using this teaching method. I have spent hours working on making this class a rewarding experience. I am continuously working hard to provide the highest level of success for my students. I am excited about teaching French as a Flipped Classroom. If you should have any questions, please feel free to contact me.*

Thank you,

April Burton  
French Teacher  
School Website: [WWW.MRSBURTON.COM](http://WWW.MRSBURTON.COM)



## B.6 POWERPOINT PRESENTATION



## WORKSHOP OBJECTIVES

### WE WILL:

- Learn the benefits of flipped learning
- Explore Different Practices with Flipped Classrooms, including how to get buy-in from parents and students
- Learn to use video creation software
- Learn about video hosting sites in order to make videos accessible by students

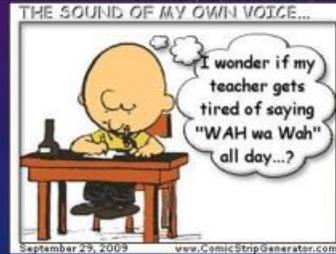
## TODAY'S OBJECTIVES:

### WE WILL:

- Learn about flipped teaching by exploring successes of flipped schools and teachers.
- Explore different practices for getting buy-in from students and their parents.
- Learn best practices for video content by watching flipped lessons.
- Plan a unit that includes flipped videos

## WHAT IS A FLIPPED CLASSROOM

- A “flip” of the “traditional” classroom



- Students learn the objectives at home, and do practice in the classroom.

## A GREAT EXPLANATION:



Video by MediaCore, December 2012

## THE BENEFITS OF THE FLIPPED CLASSROOM

- an opportunity to personalize learning for different student needs
- more of an opportunity for student collaboration.
- more meaningful practice
- a chance for teachers touch base with each student.
- an increase in student engagement.
- a decrease in Ds and Fs

Photo provided by April  
Burton

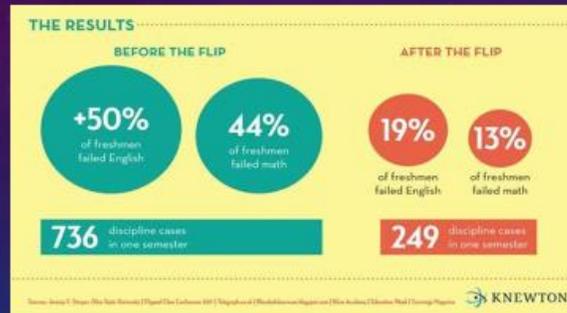


## THE FLIPPED CLASSROOM WORKS

"Technology gives teachers the opportunity to provide lesson content in a variety of formats and enables students to control both the time and the speed at which they get the information--and rewind and review the lessons as often as necessary"

- --Time for Learning. Top 10 Reasons Why Flipping the Classroom Can Change Education

## WHAT CAN WE LEARN FROM OTHER SCHOOLS:



Clintondale High School, 2011

## FRANKLIN ELEMENTARY SCHOOL CENTENNIAL, CO, 2012

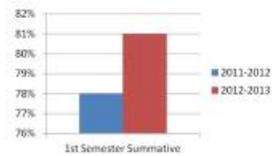
- Fourth grade students had a 5% increase in students receiving a proficient or advanced proficient score in math after learning through math videos
- Writing proficiency scores improved by 10%.
  - Teachers attribute the writing improvement to the note-taking process that took place with the math videos.

Data from: Time for Learning, Kathleen Fulton

## FRENCH CLASSES AT FRANCIS HOWELL CENTRAL H.S. COTTLEVILLE, MO

### After 1<sup>st</sup> Semester:

- **2011-2012** - 22% of Level 2 students had a D or F
- **2012-2013** - 17% of Level 2 students had a D or F
- Summative Scores improved:



## GETTING STARTED: COMMUNICATION IS KEY

- Communicate with parents
  - Provide a **video** explanation
  - Personalize your message in a **parent letter**
  - Create your own **Welcome Video**
  - Use [Remind.com](http://Remind.com) to alert parents when videos are due

## GET STUDENTS READY

- **Explain the benefits of learning at home**
  - students can learn when and where they are comfortable
  - fewer interruptions
  - students can pause and rewind
- **Demonstrate how to take notes while watching an instructional video together**
  - Explain [Cornell Note-taking](#)
  - Watch video as a class, have students raise their hands when they need to pause
  - Compare notes at the end

## HOW TO OTHER TEACHERS FLIP?

- Elementary Math using a document camera: <http://bit.ly/UIAorp>
- High School Math using Screen Recording software: <https://youtu.be/pE22i7DhRgE>
- 10th grade Math using VoiceThread: <http://learnmathclassblogs.blogspot.com/p/tech-sci-math-grade-10-11.html>
- Paperslide method: <https://youtu.be/QLcDQOOqj4o>
- French lesson using PowerPoint and Screen-Casting: <https://youtu.be/giXHUNG55Mk>
- Position v. Time, screen casting with embedded camera: <https://youtu.be/x2ve5yucNPO>
- FIZZ Method: <https://youtu.be/GuA8fPCHu9c>

Explore <http://flippedclassroom.org/forum> (You must create an account) ↓  
<http://www.flippedhighschool.com/>  
<http://flippedclassroom.org/forum> (You must create an account)

## SHARE YOUR THOUGHTS

Use the Discussion Area on Schoology to post links or comments about what you have found.

Break for lunch at 11:00.

## CREATE YOUR OWN VIDEO OR USE SOMEONE ELSE'S?

- **Benefits of using your own:**
  - Fosters stronger buy-in
  - Builds better teacher-student relationship
  - Videos are customized to exactly what the teacher needs
- **Benefits of using another teacher's videos:**
  - Use the strengths of those who are "gifted" video creators
  - Saves time
  - Avoid re-inventing the wheel

**Our Take-Away: It's best for teachers to create their own videos and supplement with other videos.**

## THE FIVE STEP PROCESS FOR CREATING A FLIPPED LESSON

1. Choose a Topic and Delivery Method
2. Find or Create the Video  
(Optional - Edit the Video)
3. Post the Video
4. Assign to Students as Homework
5. Prepare Engaging & Collaborative Activities for Class Time



Creative Commons: The Getty  
Collection: flickr.com

## PLANNING FOR FLIPPED LEARNING

1. Determine Learning Unit
2. Map out objectives
3. Establish which objectives could be taught through video  
(Keep your video lessons 5-8 minutes)
4. Decide on presentation method
  1. Screen-Recording of PowerPoint
  2. Recorded lecture in front of white board
  3. Paper-Slide Method
  4. FIZZ Method

## YOUR TIME TO CREATE

Follow the Planning Guide to develop your learning unit and to plan for flipped videos

## DAY 2: TIME TO CREATE

Today's Objectives:

WE WILL

- Learn to use different Screen-Recording software
- Explore different options for making videos available for students
- Develop activities to check for understanding
- Examine different options for reinforcement activities

## OUR PICKS FOR SCREEN-RECORDING



Image from [videoproductiontips.com](http://videoproductiontips.com)

## SCREENCAST-O-MATIC

### Benefits:

- Free download: <http://www.screencast-o-matic.com/>
- Offers web-cam option (so that web cam video can be simultaneously seen with screencast)
- User can download video in a variety of formats
- \$15/year subscription extends 15 minute limit and provides editing features

## CAMTASIA STUDIO

### **Benefits:**

- offers advanced editing options
- high quality videos in a variety of formats

### **Con:**

\$179.00 teacher license

## SMART NOTEBOOK

### **Benefits**

- Screen recorder is built into the software
- Offers easy annotation
- can download the video as .avi or .wmv

### **Cons**

- Lower quality video
- not as "Seamless"-video icon remains on the screen

## FOR THE IPAD

### **Explain Everything**

- \$2.99 app
- provides a whiteboard. Add images, text or annotations
- save video in mp4 format

### **Educreations**

- Free
- Offers the same video creation features as Explain Everything
- Videos cannot be downloaded, but can be accessed through a link

## PUBLISH/POST THE VIDEOS STEP 1: VIDEO HOSTING



Image from  
[btcomputersystems.wiki.com](http://btcomputersystems.wiki.com)

## YOUTUBE

- Create a Channel and use it as a back-up
- Easy to upload
- Easy to access
- Share options such as embedding and sharing a link
- Students can't access at school because it's blocked by schools

## SCHOOLTUBE AND TEACHERTUBE

- Create a Channel
- As easy to upload as YouTube and easy to access
- Safe environment
- Embed code available
- Link sharing also available

## WISTIA

- dependable video hosting site
- limit of 30 videos
- sharing options such as embed, video link and thumbnail embed

<http://wistia.com/>

## PUBLISH/POST THE VIDEOS STEP 2: STUDENT ACCESS



Ideally students should be able to access via mobile devices.  
Avoid forcing students to download videos

## POST LINKS ON LMS

- Edmodo
- Schoology
- Blackboard

## EMBED OR POST LINK TO TEACHER WEBSITE

- Weebly
- School-hosted site
- Wix

## CRAZY FOR EDUCATION

- free site that hosts videos
- students login to access videos (helps to monitor who is doing their homework)
- offers pre and post video assessments

<http://www.crazyforeducation.com/#!teachers/c10l0>

## TIPS FOR SUCCESS

- Allow think time within the video lesson
- Provide an opportunity for practice and to check answers in the video
- Have videos hosted in at least two different places
- Allow several evenings between when the videos are assigned and when they are due
- Communicate!! Use Remind.com or Social Media to communicate deadlines.
- Offer PDF or text alternative

## TAKE TIME TO PLAY

Break for lunch at 11:00, use this time to practice creating videos and finding the best solution for hosting them.

## CHECK FOR UNDERSTANDING

- Online Quiz (Edmodo, Google Form)
- Online Discussion (Students post question/response on LMS - Edmodo, Schoology, Blackboard)
- In-class Quiz (students use notes to complete assessment)

## REINFORCE LEARNING

What are ways to reinforce learning?

- Cooperative Learning activities
- Study Island / Quia or other computer games
- Produce / Publish a problem or video using the objective
- Games

Post your ideas to the Schoology Discussion Board for  
**Reinforcement Activities**

## LET'S GET FLIPPING

**Use our time to set up your flipped classroom**

- Create videos
- Set up LMS or SchoolTube/YouTube Channels
- Create Assessments
- Research reinforcement activities

