# IDE 632 Final Exam Product Design Specifications

### Instructional Designer(s): David Pax Kokesha Buatshia and Prabesh Devkota

### Client:

Department Chair, Environment Engineer Department is the client.

The client does have the power to decide weather we are doing the job. He has indicated that undertaking this was his decision, and within the department he does have this decision making power.

The client expects to conduct some sort of in person interaction with the faculty and teaching assistants (likely in sessions of a workshop format). Some online portion might follow this up. The client was expecting us- the instructional designers solely to be able to conduct this entire instruction process. However, we see the need to subject matter expert's role at some stages of the process and hence we will make this known to the client. We would take the lead role in this entire process

### Audience(s):

The primary audience for this would be the 7 faculty members, adjunct faculty members and 4 or 5 teaching assistants (TA's) who will undertake this process.

The secondary audiences would include the students who are taught by the faculty and TA's. The department chair would also be a secondary audience along with other administrators in the department.

### Project Goal:

By next spring semester, at least 3-faculty members use flipped class model in the classrooms for at least 30 percentage of their instruction.

### Objectives

- Make all faculty and TA's aware of the flipped class model
- Make all faculty and TA's be able to use the flipped class model for instruction
- Select faculty willing to undertake flipped class model for their instruction next spring semester
- Identify the instructions that can be incorporated into the flipped class model
- Create instruction using the flipped class model

### Your Project/Product

### • Two-session workshop spread over two days

The two days session will provide knowledge about the concept of flipped class method and allow the faculty and TA's to be a part of a flipped class instruction.

• Online survey for students concerning their instructional requirements and expectations (in line with our objective)

It is important to understand the needs of the ultimate beneficiaries of the instruction in order to built good instruction based on the flipped class method.

• Online forum for faculty and TA's to develop better understanding on flipped class model

The online forum is created post workshop for the learners to interact, have peer sharing of knowledge, to identify faculty willing to undertake this model next spring, and to identify instructions best suited to this model.

• Specifications for creating flipped class instructions (based on results of survey, online discussions and the workshop)

The specifications will help the faculty and TA's designing flipped class instruction next semester to guide the process, which they need to undertake to create their flipped class content.

• Instructions for flipped class method to be used in the classroom next spring This would be our ultimate goal, which is to have flipped class instruction used in class to deliver the content

### Means

- Two-workshop sessions spread over two consecutive days
- Online survey to get students perspective
- Online forum for the learners to share and, to identify faculty-TAs and their content to be used in this model
- Interaction between faculty creating flipped class content and subject matter experts in the field of this model

## **Project Plan Details**

Project Tasks



This is an input-process-output model that has been expanded over stages to reach the ultimate goal. Select an ISD model to organize your project task list. This approach to creating a model is that it is simple. This kind of model is easy to communicate to the shareholders and can serve as a living document for similar interventions.

The tasks necessary to complete the project are:

- *Two-workshop sessions spread over two consecutive days:* The first session would build knowledge on the flipped classroom model. The second session is when the participants would take part in a model flipped classroom activity. For this second session, participants would require to go though videos and articles relating to content to be delivered during the demo session. Subject matter expert would participate and co-facilitate both sessions.
- Online survey to get students perspective: Improving student involvement in learning through flipped class is what we are going to do. It makes this even more effective when we can incorporate the student's specific learning requirements into this model. Hence we plan to conduct a quick online survey to gauge student's perception and feelings on this approach.
- Online forum for the learners to share and, to identify faculty-TAs and their content to be used in this model: The online forum will be conducted for the participants to actively exchange ideas on flipped class model as they go through the process of understanding the specific implications of the model to their subject area. We also expect this forum to help us select the faculty to use this model next semester and identify the content areas they best would be served by this model.

• Interaction between faculty creating flipped class content and subject matter experts in the field of this model: After the teachers have identified the content they wish to deliver using flipped class, they would be asked to come out with a design for it. They would be provided with the help of subject matter experts on this model, and together would be expected to come up with their final product.

### Resources

Besides the instructional designer, we would expect to also have a subject matter expert work with us on this task. We would require the use of a hall for the two workshop sessions with multimedia presentation facility, moveable desks and tables, flipped charts and other stationary supplies. We would need to create a forum and conduct a survey online. The subject matter expert would assist the teachers form flipped class content.

After the flipped class content has been developed, the teachers would require classrooms that are suitable to practice this model, i.e. with moveable chairs and multimedia capabilities. We would also suggest the use of resources like Google classroom for this purpose.

### **Product Specifications**

The final product to have at least 3 faculty members using flipped class model for at least 30% of their content would entail:

- The two sessions would need to be structured. The first one is more lecture type to deliver the idea behind the model. The second session would run activities to demonstrate the model
- There would also be a handbook that would compliment the workshop
- Online resources concerning flipped class model and relating to content to be demonstrated will be made available. This can be videos, tutorials, games or similar interactive online content.
- Online platform to create a forum, discussion board, drop box
- Identification of the faculty to develop the flipped class content for next spring
- Identification of the specific content to be delivered using flipped class model

### Evaluation

### *Evaluation of our process and product: Piloting the flipped class model in the department* Assessment and evaluation of the process would be conducted throughout:

- The initial workshop would have a demonstration activity checklist and debrief session at the end with a summary by the participants using "one-minute paper"
- The instructional designers would observe the online forum's activities (and have check-lists)
- The student's perception survey would be conducted online. The data from this would be used to assess the instructional needs of students

### Evaluation of students taught through flipped class

When evaluating the effectiveness of their courses, the practitioners usually collect the following types of information:

1. Students' grades: considered grades as strong evidence of students' improvement.

- 2. **Students' comments and perceptions** on (i) quality of teaching (in terms of clarity of delivery, clarity of goals and standards, opportunities for skill development, etc.); and (ii) assessment design and workload.
- 3. Students behavior in face-to-face interactions and online

### Methods of data collection

Students' feedback can be obtained through formal and informal means.

- 1. Formal feedback can be obtained through surveys and interviews.
- 2. Informal feedback can be quickly obtained by teachers in class and online.
- **3. Observation of students' behavior in face-to-face interactions**: It is also important for teachers to observe students' response and behavior in class, as their body language honestly reflects their extent of engagement and satisfaction.

### Reflection

A limitation of this project could be the course content that might not be suitable to this method. Also, time could be an issue as students would require preparing coming into class and hence would need to be given ample time to do so. Further, all students might not be able do participate in this model well, especially if they are struggling on the content understanding and students who have special needs. Finally, the school may not have enough physical facilities conductive to this model of instruction if a lot of content is delivered in it simultaneously.

The client interview was very thorough (especially since multiple groups asked). While going into the designing of this whole program, obliviously we would have much more questions to delve into with the client. But at this initial stage, I would say we have enough to work on.

# Team Process Critique

Given a choice, I believe it's always a good choice to work in a group (but not too big a group). Two people groups are ideal for short tasks like this one. The concept behind the model was first suggested by David. However, his thinking was what I initially wanted to do too, so it worked out well.

David contributed to the overall design and evaluation portions. He also digitized our model. The final edits went between us a couple of times each.

The advantages of groups are that you can always keep your idea, but also get other ideas and perspectives. If a group can be managed well, then it brings a lot to the table. However, a group needs to be managed well to get the work done. This can create another dimension to the task and become a double-edged sword. This very dynamic becomes more amplified when the size of the group gets bigger.

The project went smoothly, and we did things on time. We met a couple times in person and had quite a few helpful exchanges online. The load of the semester had also gone down by the time of this project, and hence we did not have to juggle this with other course tasks.

This team worked well, and nothing really went wrong. We freely communicated the good and the bad and arrived at consensus. I believe we have been on groups many times and were able to navigate this short task easily.