

**Transcript for Did a Flipped Classroom Flop?: Experiences After 7+ Terms
2024 ETUG Spring Workshop: Digital Literacy Today – Day 2, May 10, 2024
Educational Technology Users Group
Presenter: Lynda Robbins**

BRITT DZIOBA:

So today we have Lynda Robbins, who is an instructor at Camosun College to talk about the flipped classroom. So I'm going to hand it over to you, Lynda.

LYNDA ROBBINS:

Okay. Thank you very much. I need a thumbs up that you can hear me and everything is okay. Yeah, we can hear you. Okay. That's great. Thank you very much. I appreciate being here today and I want to say that I am acknowledging that I live and like thrive on the unceded territory of the Lekwungen, Esquimalt, and Songhees Nations, and I really appreciate it. And I also appreciate all of the other comments that have gone on today and yesterday about what we need to do to make things better. So, it's a, it's a great, it's a great thing.

So, okay, so today's plan and running into a little technical problems here. Oh, no, here we go. I'm going to talk about a flipped-classroom approach that I did. Started during COVID, I did a presentation for ETUG in 2022. So if you want the whole background story, you can go and look that up, it's online, but today's plan is going to be, I'm going to give you the setting. So the course details about what I was doing, the description of the flipped classroom, And then I'm going to do the instructor's points of view, which are of course my points of view. And I'm going to look at that from advantages and disadvantages. And then I'm going to look at it as much as I can from the student's point of view. And I'm doing that from feedback that I received with a survey and also feedback that I received throughout the terms that I taught these courses. So we're going to look at advantages and disadvantages of that as well. Finally, I'm going to end with some general thoughts.

So the setting, the course details of the courses are. So it's programming. Term 1 is algorithms and programming in the Java language. We assume no experience from the learners whatsoever. Some of them do, some of them don't. Then term two is a progression of the course. All of the resources that we use for the course are online. So we have an interactive textbook called the Zybook, which I have used for many years now and even pre-COVID. So it was not a thing that I did just because of COVID, it's a really useful thing and I encourage everyone to go look into it. Then I used online recorded lectures, which I did from COVID. But then I decided after COVID was sort of over that I would continue on with that idea. And this is the flipped classroom. So the college-scheduled classes for these courses for both term one and term two are 3 hours of lecture and 2 hours of lab. The reason why I have them in quotes is because when you do a flipped classroom, there's really no lecture and there's really no lab. So it's just the assigned time that the college gives us.

What is the description of a flipped classroom? And I, I know from earlier presentations yesterday and today that it's important to have a definition of these things and we're all kind of navigating the new definitions of all of this stuff. So here is my definition or description of the flipped classroom. What I expected students to do before classes and labs. So basically, there's no difference for me between classes and labs. The only difference is the labs have fewer students in them. That's it. For, from my point of view, there's no difference. So students study what I call mini-lecture videos before they come into class. They are short, maximum of 30 minutes and most are 15 to 20 minutes. They're very focused on, you know, particular topics and the lecture notes are posted online in the form of PDFs. So some students choose to print them off. Some students choose not to print them off and whatever. I mean, it's up to them, they can decide how they can best learn. So then during the in-class time, the students work on assignments and on the online interactive textbook. As an instructor, what I do is I do one-on-one and what I like to say is one-on-few help. So, what does that mean? Exactly. Well, sometimes when I'm helping one person, actually, very frequently when I'm helping one person, another person, I see their head go up and they're having the same problem. And when I am helping students, I'm not quiet at all. I make sure that, you know, a lot of people can hear me so that if they're having a struggle with that same problem, they can listen or come over. So, quite often I've had, like little groups up at the white board as I'm, you know, going through a problem. So, the other thing that I can do is class discussions of common problems and that's with the, you know, the little groups as they, as they see it Computer science is a big thing about problem solving. So, one of the big advantages of the flipped classroom that I have found is that they get the information at home or wherever they are and then when they come into class they can actually do the problem solving, and they have me there to help them. And that is, I think, one of my strengths.

So from my point of view, the advantages are what I, what I describe as "feel good" teaching items. So lecture perfectionism. And this is because during, when I, when I make the videos, if I make a mistake, then that video is trashed. I go and I redo it. One of the advantages of the videos being short, 15 to 20 minutes is that you don't, you don't have to make. Well, it is not a big deal. If you make a mistake, you just kind of go back and for another 15, 20 minutes and redo it. I can focus on helping when the students are there rather than just lecturing, rather than standing up at the front of the room and just saying stuff. I can actually go to them and help them individually. Student connections is another advantage. So I get to check in with the student every time they have a lecture and every time they have a lab. So every time, the first thing that I do when I go into the room is basically say hello and then I go around and I make sure that I visit each person and just say, hey, how is it going? This created an experience of collegiality with the students as to like they, they started asking me, how was your weekend? Whatever. The other thing that I really noticed from here is that my knowledge of the students allows me as a first-year instructor to give references for them. Whereas before I was not comfortable with doing that. I was, you know, kind of like, well, the only thing I can do is I can tell you what grade they got and that's about it. Now, I can give references to first-year students. The other thing, advantage. No performances. Yeah, the performance is on the lecture material, right? I go into work and I don't do a performance. Other examples of

advantages is if there was illness with a student or deferred test or exam, they still have the lectures online that they can go and see. So that's a huge advantage.

So the disadvantages, well, recording lectures, it's a big effort. It's a lot of work. And when I go into work, my days are full of problem solving because that's what we do in computer science, right? It's all problem solving. It's not the easiest thing, context switching that I do a fair bit of because students will be at different positions in the course. I always give them an idea as to where they should be at this point in time. But I also say to them if you're behind or if you're ahead, it's okay.

Students' points of view. Advantages. So this came from the online survey and general comments that I received. So flexibility. They can do lectures and studying on the go. In other words, like someone said, I listen to your lectures in the car as I'm driving home. In-class time, time management was really increased. They all said that they increased their time management because I told them that during class time, if you have other things that you need to do, and you've done the things for my course, then that's totally fine. It's all good. You can work on whatever you need to work on during this class time. So that goes to the custom pace as well, right? Instructor access. That's a big thing. Right. So for 5 hours a week, they had total access to me. I was not standing up in the classroom and talking to them. So I really do think that that increased the instructor relationship as well. Again, that goes to the point of me being able to be comfortable about giving recommendations to students for jobs, etc.

Students' points of view, the disadvantages. Oh, wait, look, they're the same things. It's, it's on purpose. So again, the disadvantage is the flexibility because, okay, like you don't have to come if you don't want to. Although I did do attendance this year, which helped, but it makes the students actually do work on their own in class time. They've got to learn about time management, custom pace. They again have to worry about where they are. Instructor access. Again, I'm there every day that they come in and so, you know, if they're kind of behind and I was taking attendance, if they're behind then, well, they kind of are a little sheepish. And so it built an instructor relationship and like I say, that can be an advantage to a student or a disadvantage, depends on the type of student.

So, my last thoughts on the flipped classroom are a couple of things. So, some interesting thoughts. It's a 14-week term that we have. So there are 3 hours of lectures per week. If I did the math correctly, that amounts to 42 hours of lecture time in class. Okay. So that's before the flipped classroom. The flipped lecture totals that I have for my mini lectures are as follows. Term one, 16 hours. Term two, 17 hours. I got better at selling the flipped classroom after the couple of offerings of it. And this is one of the things that the students really liked and one of the, the feedback issues was a student said, you know, they have a problem with lectures and they kind of zone out and whatever. They didn't have to do that in my class. They knew they could come in, they were working on a problem, they knew they had my assistance with it. So the lecture hours and I think, I think there's two reasons for the huge difference in the number of hours there. One is that when you especially have 3 hours separate or it's actually 50

minutes separate, right? You have to do a start up and then you have to do like a tail down at the end, at the end of a lecture. With the videos, you don't have to do that because they can go and look at the previous one if they need that start up. So that doesn't happen. The other thing is I just think it's like so focused that it takes less time and they have opportunity to, to look at it again and again, and I got lots of comments about that. So the other thought here is this works for me. It worked really well. I'm really happy about how it's gone and how it's going. However, having said that it may not be for every instructor or every course. And as a matter of fact, I would not recommend that we do flipped classrooms all the time. I think we need to work for our strengths and if it's a good thing for you as an instructor, good. If it doesn't sound good then, you know, don't do it or for your course or whatever you may be teaching. The feedback survey that I got, approximately half of the class responded and it was all positive, which is really great. And I think I'll just kind of end with, it's important to have a variety in teaching styles. I wouldn't want to have to have classes, have all of the flipped classroom. I don't think that would be a good thing. So we are unique and therefore we need to teach with our styles or styles and strengths. If anyone has any questions, I'm happy to, to answer those.

BRITT:

Thank you so much, Lynda. I'm just checking the room here. Does anyone have any questions? Oh Andy.

ANDY:

Yeah, Lynda. because I've thought about doing this before for say physics which is, you know, very much problem-solving based as well. I think, I think my fear was that, you know, some students would not do the kind of the pre-work, like watch the videos and, and everything and then you start, you start the class time work with them and you find out okay, they didn't do the prep so they, they have no idea. you know, where to start with the problems because they haven't actually got the basic material. So did that happen?

LYNDA:

So, you know, yeah, it's a really interesting question. So that started, that happened initially when I, when I did this. But what I feel is that I got better at selling it to begin with at the beginning of the term. And I told them stuff like that. You know, if you come to class not prepared, then you're not going to get the best out of me. Like I also told them that I am the best source for you, right? You can, you know, and I, I see people googling stuff and whatever and you know, and I'm like, no, just ask me, I'm the one that's teaching this course. So, you know what my focus is so come to class having done that. And in the last couple of years, like I say, I've done this for seven-plus terms now. In the last couple of years that has really increased. They've been better at coming to class prepared to work and I do believe it's because I've done a better job of selling it.

ANDREW:

Hi, Lynda. Thanks very much. It's Andrew from VCC. Do you know if the outcomes have changed over those seven terms?

LYNDA:

I don't have any empirical data about that. I have a gut feeling and my gut feeling is, yes, that has improved. So I, yeah, I don't know. I'm sorry, I don't have any empirical data, but it does seem, I mean, you know what? I mean the thing about that would be I need to ask our second-year instructors as to how they feel the students have done.

BRITT:

Great. Were there any questions online? No questions online? Well, join me in giving a huge round of applause to Lynda. Thank you so much. Thanks very much.