Linyuan Wang

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Mario

We're sitting here today with Linyuan Wang, PhD student. Very welcome to the podcast. Your interest is in student engagement with blended learning in higher education if I'm correct. You're currently working on a review paper, a review of the literature, and in parallel you're also conducting or have already conducted a study in which you are looking at the relationship between learner control and student engagement in study activities in blended learning. So this is going to be like an open-door question but I have to ask it just for those who are not aware or who think they are aware but have it wrong: what exactly is blended learning? When is learning blended?

Linyuan

Okay. Well, as you mentioned the definitions of blended learning, there are actually a lot of definitions of blended learning and for example that in an activity level that you can always use some new technologies and to blend it with your traditional setup or traditional activity and that you can always address that as blended. And also in the course level and you combine the traditional course with some other activities you can also address them as blended course. But well I think different researchers or different educational specialists, they can have their own definitions of blended learning. From my perspective, in my paper the definition of blended learning is the combination of online learning and also offline learning, the physical one. And the reason why I think is very important, nowadays the teachers or the institutions are trying to take advantage of online platform to better prepare students. So for me it's not only about the definition of blended learning, it's also about how students prepare themselves for the class. So that is the definition in my paper. Of course, I think, different researchers, they can have their different definitions.

Mario

Yeah, yeah. But it is similar to the way I understand it. So having online learning and face-to-face learning in a combination that's obviously an advantage to the student. Because there are advantages related to blended learning above and beyond just physical presence. And can you say something about what kind of advantages there are?

Linyuan

Well for example, for universities, blended learning can give university and all these institutions an opportunity that they can just reduce the classroom time. That means, well nowadays that we have a lot of students and some universities don't have enough space for all the students, by you know combining or involving blended learning courses in university

can kind of save universities a lot of money, and to just save the money for something more essential or more important.

Mario
So it is cost-effective then basically. But are there also advantages in terms of learning, or the way that students prepare involved?

Linyuan
Yes, definitely. And for learning part, I would say that students, if they can be very prepared before they go to the tutorials or I mean, physical classroom, and they're more easily to get involved or engaged in all the learning activities in a physical classroom. That will definitely, you know, be very beneficial for their learning also and for teachers' teaching. And, well, I would say that before, without Internet, all these online platforms and teachers, they also knew it was very important to prepare students before go to classroom. But you know that's the traditional ways to read some literature books, and well sometimes it's just a little bit hard and without internet, because with internet they can kind of like just involve the videos, video clips. And that's more interactive. I don't mean that's interactive, but you can see a real person in the video. Maybe it's easier for students to just gather all the important information in three minutes. So it's also, you know, that's efficient for their preparation.

Mario
Yeah, so because they watch those knowledge clips or the video clips beforehand, they come into class and they actually get more out of the face-to-face meetings, if that is that correct?

Linyuan
Yes I think so. And if the teachers design the the pre-class materials or pre-class activities in a very good way, and if all these activities before they go to the class are related to the activities they're going to do in the classroom, and then the student can get benefits out of that. But if it's just you know that the teachers just separate or divide different activities into online parts and offline parts without thinking about the relevance between these two types of activities, I mean online and in physical classroom, that won't help much.

Mario
Yeah, so you're thinking that you have to put in a lot of thought to make it...

Linyuan
Yeah, the teachers actually need to think about which activity should be put into the online part, and what kind of preparations they expect students to do. These are all very important.

Mario
Yeah yeah. So I'm guessing, and you were already discussing this a bit, so one of the things that you're particularly interested in is student engagement. So I'm thinking that blended learning can be conducive for student engagement during the live sessions. We shortly talked about this. Now, I can imagine that this is an important factor. And can you maybe explain shortly, what do you mean with student engagement? So could you give some examples, for instance, how you know that students are engaged? So what kind of measures would you

collect as a researcher to say something about the engagement of the students during the, for instance, face-to-face time in blended learning?

Linyuan

Well, there are actually a lot of different ways to measure student engagement from researchers' perspective, and for example, we can use questionnaires. And we have cognitive, emotional, and behavioral engagement, and we can just use traditional classical questionnaires to measure student engagement. And also we can use the online data to capture the students' engagement. That's more like the behavioral engagement. But there is already an article written by researcher in the States, and he said okay all this online data is a reliable thing for us to know also know their emotional and cognitive engagement. Also from the psychology department and they also use some equipment to to capture the students' attention. There are actually different ways. But I would say that from the teacher's perspective instead of researcher's perspective, student engagement is very noticeable to the teachers. If you go to a classroom and you see the student is following you or paying attention, you know that they're engaged in your class. So, well, that is also a question for myself. Because the way that researchers usually measure student engagement is not the way that teachers see or perceive whether the student is highly engaged. How can we close the gap and how can our research by measuring all these things in a scientific way contribute to the educational practice, and I mean to support the teachers to improve the student engagement in classroom, not only in blended learning.

Mario

So you're saying that for a teacher it might be more observational. So you're in class, and if the student is awake then they're probably paying attention, if they're asleep then they're obviously not. So that can be like a sign on the wall. I saw in the review paper that you also mentioned logging data. Do I guess then we're talking about the online part and the engagement during that part. So can you say something about how you can use logging data to measure…

Linyuan

I think that that is also related to what I just mentioned about the teachers, the observable data like whether the student is awake. And logging data is not like the questionnaire data, because the questionnaire data is actually based on students' perceptions. It's like perceived student engagement and when we ask the students to fill out the questionnaire, it's kind of like it's not their actual behaviors, it's like their reflections. So the logging data is like something they couldn't change. It's their actual behaviors. But there is also a problem regarding the logging data because we have multiple ways to interpret one number. Maybe the student was just bored, so he rewatched the video clip several times while doing some other things at home. So we couldn't really say that okay this student is hard working by seeing the figure, sorry by seeing the number. And so it's also very hard the reliability of the logging data. So usually when we want to use the online data we combine it with interviews and with questionnaires, just to triangulate all these things to increase the reliability.

Mario

So these mixed methods are necessary to get a complete picture I guess.

Linyuan

I think so.

Mario

Yeah. One of the things you mentioned about questionnaires, that also emotional engagement is a big part of it. And you also mentioned that maybe for future research it might be interesting to look at the negative emotions that students experience. I thought that was the interesting take. So what kind of negative emotions are we talking about and how do you think these impact the online part for instance or the offline part of the blended learning?

Linyuan

Well, I think it's very important to focus on the negative part. Sometime, I think I have learned a lot from the course, maybe your students may say that, but at the same time I don't really like it, but cognitively I have learned a lot. Whether the cognitive engagement is aligned with the emotional engagement, it's a very interesting thing. Because are we only going to focus on the cognitive part and if they have already learned something, or their learning experience and whether they are happy about this is also very important. So, it's usually and in most research studies, and they concluded that the two things are just parallel, when one is positive and the other one is also positive. But there are also some studies that the things are totally opposite. And how can we handle the situation? What should we do about the kind of disalignment between emotional engagement and cognitive engagement?

Mario

Yeah, I can imagine that it's crucial. So what can we do? That's the million-dollar question. It's also the next question that I have written down here. And then I'm thinking about, let's say that I'm a teacher and I want to make my course more blended. Do you already have some general recommendations for teachers who want their students to be engaged within a blended design?

Linyuan

Okay. Well I think the teacher, maybe you are the teacher, but I think the teacher should really think about why do you want to make it blended. So that is a more important question than okay I'm going to make it blended because blended learning or blended courses are trendy or popular. So think about what blended learning or blended course can actually bring something new or something important to your course. If you have a clear idea of that and you know what to do. But if you don't see a real reason to do so and don't touch it and just to really reflect on your teaching instructions part instead of thinking about 'I need to make a trendy course'.

Mario

So you're saying that, do you think that a lot of teachers do this, that they make their course blended just to make it blended?

Linyuan

Well, I've heard that two years ago, I've heard that Leiden University is going to have actually something like we're going to be a blended university. I think then it's kind of like a policy-

driven thing, and maybe a lot of teachers think okay maybe we should also make it more blended then that can maybe reduce my workload or something. I don't know much about their motivations of making their courses blended, but I do think there are a lot of teachers, at least in my home country, in China, that do that thing because they think, okay, the university actually asked us to do so.

Mario
So, yeah, I think this is interesting. So you're saying don't just make it blended to make it blended for just for the sake of it. So are there circumstances where you would say, well, it's not really necessary to make this a blended course or I would leave it as it is or...?

Linyuan
Well, I think, according to my experience, blended learning is just to better help students prepare before they go to the classroom. And if a lot of things are just about maybe text learning or all these things, or I mean the difficulty level all these different activities they are all same. So I don't see the significance of making that course blended unless the teachers wanted to, you know, kind of, you know, reduce his or her workload. Well, yeah, so I would say maybe don't go for blended learning if all the course activity difficulty levels are the same. And I would say that classroom learning is much better than online learning.

Mario
Yeah, that's very clear. You also mentioned that you're a PhD student from China and you were already touching on, I think: are there differences in an approach to blended learning between China and here in the Netherlands that you see, or are you more ahead in China, is it more common to do it or less common, I have no idea.

Linyuan
I think here it's more common, and in China it's like a lot of students have already had a lot of experience of online learning before COVID,because we have some private institutions to teach students to for example learn English, learn programming, other things. And during COVID in China, there were a lot of online courses, but blended learning, I would say that it is not that common because all the students in China, they live in their campus. And so, well, it's very easy for them to commute so there is no very urgent reason for them to change all the courses into blended courses, they're all in the same place. So I think that's a very practical reason why blended learning is less popular there.

Mario
Students on campus they might have just live, and other students have only online but no blend.

Linyuan
Well only online, I would say that's most for the private institutions. But for university and for the formal education, well there are some teachers they're trying to, you know, do blended learning courses. And but, well, most of them, they are just trying to do that in campus. But I am not very sure because I didn't really have a lot of talks with my previous Chinese classmates about, oh, do you have a lot of blended courses there, because my research focus is here in the Netherlands. So maybe that's a very good question, and I should really

ask them how many blended courses do you have, and what is the university's policy regarding blended learning.

Mario
Yeah. So you're already thinking about what steps you're going to take in the future, because that was actually my next question. So you're doing the review study, you have done this nice study where you look at the student engagement, part of which was more an experimental study I think, or a correlational study?

Linyuan
Not experimental, correlation study.

Mario
Yeah, correlational. But what are your next steps? So what kind of studies are you envisioning doing in the future? So where do you want to go next with the project?

Linyuan
Well, as I mentioned that blended learning is the context for my research I think during the last three years I have already developed myself a lot of transferable skills, which I can use in different context. I think really important in my project is that I see the importance of preparing students before they go to the physical classroom. Maybe I think I'm going to focus on the preparation part or their activities outside of classroom. That might be my interest. I'm not very sure now, but maybe I will change in half a year. But yeah, for now, I think it's very interesting to see what the students do out of the classroom.

Mario
Yeah, I think that would be a very interesting venue for research indeed.

Linyuan
Thanks.

Mario
Thank you so much for joining me today. I learned a lot. I hope the listeners as well. And I wish you all the best with your research

Linyuan
Thanks.