

Technical challenges for blended learning in Ethiopia, episode 10

Solving the Global Learning Crisis podcast, text transcript

Podcast intro with instrumental drum and flute music playing on the background: Welcome to this podcast series on solving the global learning crisis. We'll discover how Ethiopia, Nepal and Mozambique are reshaping their higher education programs in response to the changing demands of the 21st century. (Music playing)

Mr. Matiyas: Hello everyone, I am Matiyas Teshome. I am the MOPEDE project coordinator at Ethiopian Technical University and ICT director. I am with the two ICT specialists, ICT technicians, with me this afternoon, Mr. Naol and Mr. Fikadu. We are here to discuss basically 2 points regarding the satellite colleges in this MOPEDE project. So let me give them the chance to introduce themselves first, so please colleagues.

Mr. Naol: OK, thank you, Matiyas. I think you should change your career to media expert or interviewer. (laughs) You are a quite nice interviewer. My name is Naol Anbesie and I am ICT specialist in the MOPEDE and I am from Ethiopian Technical University, and thank you for the introduction.

Mr. Fikadu: Thank you Matiyas, my name is Fikadu Aweke. I am ICT expert at Ethiopian Technical University and ICT specialist in MOPEDE project also. Thank you.

Mr. Matiyas: Thank you colleagues. So, two key issues for this afternoon. As you know the MOPEDE project is going well. It's almost a year since we have started implementing it with the universities in Finland. Now instructors are creating digital contents and we are using both our servers and also the Jamk university's Moodle website. But basically, in the future we'll be using our server. It is based in the main campus in Addis Ababa. As you know we have 15 satellite colleges distributed across the country in the different regions. And in connection with that, what do you think that the campuses need in order to access the courses that we are creating? As you know, the courses will be stored in our server here centrally. We have a new and good data center. But given the fact that these 15 satellite colleagues are dispersed geographically in different areas, what challenges might they face to access the courses?

Mr. Naol: Well, thank you so much for this question. From the beginning just we have implemented a small enterprise data center and that's working 24/7, except we haven't installed a generator. For future we will install a generator and that will be actually in 24/7 service to give. The question is referred to the satellite colleges that they can access some contents as a blended learning they have to upload and they have to check some course contents from our data center so our data center should be available 24/7 online for them. In the meantime, they need to have Internet connection. A good Internet connection to access our data center because they consider our data center as a cloud, so they will upload data content on our data center, and they will fetch, and they will give assignments whatever the teachers expect to do, they will do that. As a challenge I consider, at first there is an availability problem, because our data center needs to be available 24/7. We'll avoid that availability problem by installing the generator. But from the EthioTelecom side actually we have implemented SLA, service level agreement, so there is no Internet connection interruption from our side, but in the satellite side, maybe in the middle, for example, if you take a look at Hollota Polytechnic college, if they want to access our data

center from Hollota to Ethiopian Technical University, the line of Internet connection have to be available always. Otherwise, if the Internet connection interrupted in the middle, they can't access our data center, so that will be one barrier or obstacle for them.

Mr. Naol: The second is that they need to have a technical specialist in the satellite campuses. But they don't have. [In the satellites these problems are dealt with by the teachers and ICT teachers, they don't have actual or dedicated ICT experts in their places to fix certain problems. So, we might face such problems like that. It might not be continuous, but to make it short there are few barriers or problems so. We are working on that, so this is my answer for the first question. Thank you so much Mati.

Mr. Matiyas: Thank you, Naol, now I will come to you, Fikadu. So, what do you think about this challenge?

Mr. Fikadu: OK, thank you Matiyas. According to my view, those 15 satellite colleges need support, especially ICT support. We need IT infrastructure, like computer lab, e-learning lab, and a good Internet bandwidth from EthioTelecom. The other thing is training, because those teachers need training and creating awareness for teacher and student, and the follow up from the ETU side. That's good, thank you.

Mr. Matiyas: Yeah, thank you for your answers. I also share the points you raised, and in my view, as you already said, since the system is web based and it is Internet based, they can access the system actually. But if they want to fully use the e-learning platform in a blended learning environment, that Internet connection must be stable. So, we might face some challenges from the EthioTelecom side or the satellite side as, Naol, you said. We have a service level agreement with the internet telecom provider and we our servers might be always up. But if there is a power or Internet connection problem in the satellite side, they might temporarily lose access, but that may not be the case always, so overall they will have Internet connection, so I hope it will not be that much a big problem. And I will go to the second question. What challenges will we face in supporting the satellites, technically? We are the ICT people here on this project, especially Naol and Fikadu, you are ICT support colleagues in the project. So how do you see the future in supporting those geographically dispersed satellite colleagues? Are there are, as you know, very silly questions up to complex ones, so there should be at least somebody to ask for them. What ways do you see in fulfilling their requests? I will start with Naol and come back to Fikadu.

Mr. Naol: OK, thanks so much. The challenges in these obstacles in overall I have tried to mention some points in the first question. But the big thing is this satellite colleagues are separated in from the capital city of Addis Ababa. Probably they are from 100 kilometers minimum I mean the Hollota I think. Tegbareid and Wingate are in the capital city of Addis Ababa, but other satellites they are too far away from 100 kilometer up to 460 kilometers about that, so the geographical distance is a big barrier or obstacle. It's challenge for us to go there and maintain problems. So, to mitigate those problems the satellite we just need to have dedicated IT expert who can collaborate with us because it's easy if they understand our language, they understand the technical terms. If there is a dedicated ICT expert in those places, will explain such terms such technical problems and then we can access it even if remotely and with the help of the technical expert in that location we can overcome problems without going there physically.

Mr. Naol: The other challenges for the future we might face storage problem, as you know, in the blender learning in the cloud system cloud computing system, there is a large problem of storage for future. For now, for the time being we have a big vast amount of storage. It is suitable. But when the time goes, and when the teachers upload a lot of contents, there might be storage problems in our site and the Internet connection interruption by EthioTelecom, as you know EthioTelecom is the monopoly of Ethiopian telecom provider, so if there is a problem, we have to only wait for them to fix it. Otherwise, we can't intervene in these problems, and we can't fix the Internet connection or the breakup between us and the satellite colleagues. So, to summarize, one, they need to have a dedicated IT specialist and for the future we have to add more storage in our server side. The third is they need to have like an SLA agreement, maybe EthioTelecom have to work on their side to have a stable Internet connection between us and them. So, these three points are, I want to generalize, and, in addition, they need to have a lab connection lab. They can access it because the 3G mobile data connection might not be as fast so they need to have a good boundaries Internet connection and the dedicated lab so that students can go there and make their own blended educational work and the content they can upload from there. So, if it's beyond from these problems, I think we can go to their satellite places and we can fix it by being present in the scheduling, the program and we shall fix those problems by going there. Thank you.

Mr. Matiyas: Thank you, and Fikadu, what do you have for this?

Mr. Fikadu: Thank you Matiyas, as we see from those 15 satellites, I think 13 of them are existing in the regions, so it's difficult to get face to face or daily support in face-to-face. I recommend maybe when we use the ICT helpdesk, by giving the training to those satellite users, in addition to that, by selecting one representative from all the satellites, and the contact with ETU also other option for support and giving training follow up from ETU site, or from ICT directorate in ETU might be the best option. In addition to that, also it's possible to go within six months or within three months to all satellites and check the progress.

Mr. Matiyas: Thank you, thank you colleagues. Yeah, I on this point also I share your ideas. It would be easy if we have a local person there and then we collaborate with that person, and that person we can contact the person with a remote. I mean with conferencing tools or by phone or by whatever means and then orienting on how to assist. I also share the idea of visiting them casually. So, thank you very much colleagues. And this is what I wanted to discuss with you this afternoon and, thank you!

Podcast outro:

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