

Chapter 7

Unlocking STEM Potential: Leveraging AI to Support Multilingual Learners – Pritha G. Roy,
Uma E. Sarkar, Kelly L. Knight, and William Franz Lamberti

Tosin Adetoro Interview Transcript

Interview Transcript

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Kelly Knight: All right. Hello, everyone, and thank you for joining us today. My name is Kelly Knight, and I am one of the co-authors of the book chapter entitled Unlocking Stem Potential Leveraging AI to support multilingual learners. I am really excited to have an amazing teacher with us today who's going to be sharing with us her experience

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Kelly Knight: with using AI as a tool to support multilingual learners. Thank you so much for being here with us, Tosin, can you begin just by briefly introducing yourself to our audience.

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Tosin Adetoro: My name is Tosin Adetoro. I am the sustainability coordinator at Meridian High School in Falls Church City Public Schools. I also teach physics and design classes here at Meridian High School.

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Kelly Knight: Great. So we'll jump right into it. So can you share with us some of your thoughts on the benefits of using AI tools to support multilingual learners with STEM. And if you have any specific examples about how it could be helpful, that would be wonderful.

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Tosin Adetoro: Absolutely. So. My background is technology, education and physics. I actually just recently left a position where I was teaching STEAM at an elementary school for 7 years.

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Tosin Adetoro: and as a STEAM specialist you teach all the students in the building. So differentiation of lessons was very, very, very important for the success of our students. So as an educator, one of the things that we do is as we prepare our lessons.

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Tosin Adetoro: finding really cool ways to differentiate and change and adopt or modify the lesson to fit the learner. So AI is a amazing tool to help

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Tosin Adetoro: with differentiation for different learners and finding unique tools that we could possibly work with our IT department to support student learning in the classroom.

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Tosin Adetoro: One big way is when we have our multilingual learners coming in. And they're given a piece of technology that they are struggling to use. And we're struggling to use it as well. So finding a unique

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Tosin Adetoro: tool that allows them to understand in their home language how to utilize these tools is really important. As well

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Tosin Adetoro: apologize for the bell. So, using AI to do more of like the research and the background for the teaching that's happening in the classroom is one of the big ways that I have been able to incorporate AI into my teaching and learning.

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Kelly Knight: Wow! That's really exciting. I am so excited about how teachers can incorporate the use of AI to support our multilingual learners. I think there's a lot of possibility there.

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Kelly Knight: But with that being said, we know with all the good there could definitely be some bad or not so good as well, so with that in mind, what do you see as some of the biggest challenges or barriers with integrating AI into STEM lessons, or just with teachers who are trying to incorporate AI?

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Tosin Adetoro: We are actually an IB district. So international baccalaureate is a framework that you use where students are looking at local and global contexts of what they're learning. So what we're finding is that students are misusing the technologies and AI for purposes of

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Tosin Adetoro: cheating and finding information with the least amount of work and the least amount of effort. So I think when you think of AI, that's the 1st thing Chat Gpt, using it to find answers and not really understand the process of getting the answers. So the 1st thing we see at the high school level is really trying to educate students on proper use

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Tosin Adetoro: of AI. With our district being an IB district, we took the path of not

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Tosin Adetoro: pulling the use of AI, but really educating the students on the best use and the proper use of AI, so that we're finding that students are using it in a way that is supplemental to their learning and really not violating any academic integrity rules of the school and of IB in general. So I think that when you think about misuse, that's the 1st piece that we find.

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Tosin Adetoro: Of course

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Tosin Adetoro: using AI as an easy route is also one. We want students to use all their skills to find answers and solutions to information. So we don't want them to just rely on technologies. We want you to use a textbook. We want you to use your notes. So making sure that they have a robust understanding

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Tosin Adetoro: of how to use their resources is also very important when it comes to AI and technology in general in the classroom.

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Kelly Knight: Yeah, I think those are really great points. We're experiencing the same thing in higher education. And I think

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Kelly Knight: as educators,

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Kelly Knight: we're getting to a point where we're realizing that it's not going anywhere. So just saying, "Don't use it" and not educating them is not helpful because they're going to use it regardless. And so now we're at a point where we're trying to figure out, how do we strike the balance between, you know encouraging ethical use and smart use of it, and not the over reliance of it, because.

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Tosin Adetoro: Absolutely.

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Kelly Knight: Them, as we know, is going to change because of this use of AI. So we have to think how we're gonna work with it instead of working against it, because it's here to stay.

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Tosin Adetoro: Absolutely. And as educators we are building lifelong learners. And AI is in the real world. It's part of the world. It's part of how we exist. So if we are really doing our due diligence, and we're doing what we say and educating the future, that's a part of their world. So we have to incorporate that good and bad.

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Kelly Knight: Right. Absolutely. So, what advice would you give to K-12 teachers who are listening to us today, who are considering the use of incorporating AI to support their multilingual learners specifically in their STEM classrooms.

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Tosin Adetoro: The

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Tosin Adetoro: 1st and probably main advice is to have patience and have grace with yourself and the students. We actually are really good at having patience and grace with students, and we don't have so much with ourselves.

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Tosin Adetoro: Students are definitely a lot more tech savvy sometimes, than we are, especially in the STEM fields we tend to, and students tend to feel like you are the expert. And you should know. And with AI as new as it is, we're all learning together, so it can be a learning process for both

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Tosin Adetoro: the teacher and the student in this scenario as well. So have a lot of patience for yourself.

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Tosin Adetoro: Kind of embed yourself in learning in the learning process. Reach out to those who you feel are doing things in that space of AI and education and share your thoughts and ideas. I do a lot of like looking on groups and having conversations and asking questions.

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Tosin Adetoro: mistakes are okay. We want our students to make mistakes. So we have to understand that we're going to make mistakes as well. The intention is always good. We have intentions to do the best for our students, and as long as you go in with that thought, whatever happens is going to be good, it's going to have a good outcome in some way. So I think that that's the biggest piece. I am definitely

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Tosin Adetoro: not even close to a snippet of a expert in this field, but I think I just I'm a risk taker. One of our student traits in IB is being a risk taker and being open minded and really going into those spaces that don't always feel comfortable.

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Tosin Adetoro: And that's 1 that AI can feel for the majority of educators is really going into a space that's very unfamiliar. So really having patience with yourself, and how you embark that new process and take little baby steps, find new ways where you have the time in the summer to modify one lesson

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Tosin Adetoro: and and use that as a piece to to launch what you're going to do with AI in your classroom.

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Kelly Knight: That's great. Yeah, I agree with the baby steps. I know for me what has been helpful is there's a lot of

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Kelly Knight: like educator seminars that have been available virtually, that have really helped to educate me on the possibilities, and and I consider myself one of the people who likes to stay up to date on things, but I am shocked every time I attend one of these seminars, and

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Kelly Knight: I'm just mind blown by the capabilities of AI, both the good and the bad. So I find that using some of those resources online and attending the seminars has been really helpful because it can feel very overwhelming, because there's so much

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Kelly Knight: to learn. There's so much out there, and it's easy to be distrustful of it, because we, especially when we don't fully understand how it works and and how everything is being used. But thank you so much for your time. Today I know all the teachers know how valuable your 10 min are within your teaching day. So I thank you for donating that time to us, and I will give you the rest of your day back. Thank you so much.

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Tosin Adetoro: Thank you.