

## UDL in 15 Minutes with Ashraf Meguelatti and Yacine Hakmi

### The transcript with audio descriptions

[UDL in 15 Minutes written inside a circle serves as the logo followed by a screenshot of the Algiers STEM Center on the World Learning website, followed by images of Ashraf Meguelatti and Yacine Hakmi, both young Algerian men with close cropped dark hair]

LOUI: Hello and welcome to UDL in 15 minutes where educators discuss their experiences with UDL. I'm Loui Lord Nelson, UDL author and leader. Today I'm talking with Yacine Hakmi and Ashraf Meguelatti, who are senior STEM education specialists in Algeria. Today Yacine and Ashraf, are going to talk about their teacher training program for STEM teachers across Algeria. Hello to you both, how are you?

ASHRAF: Hi, Loui. It's really a pleasure to be here in this podcast. Thank you for the invite.

YACINE: Thank you so much for the invitation. I'm so happy to be here and talk about something that I've been obsessed with since 2019.

LOUI: [laughter] Wonderful! Wonderful! [Two young men dressed professionally and with close cropped dark hair and a young woman dressed professionally with long dark hair work on a tangram puzzle] So can you both provide an overview of this program? Just let people know about what it is?

ASHRAF: Alright! So, as we've been talking about the teacher training, so the idea first, they started when the STEM Center started in Algeria, exactly in Algiers, and when we started back in 2016, we faced our first roadblock, which is how we can offer equal learning opportunities, and provide quality education in Algeria. And honestly, UDL was our key to make STEM education, integrated, fun and accessible for everyone. So, the teacher training based on Universal Design for Learning helped us and helped university students who were motivated to share that technical knowledge with others, to know how to best deliver those workshops at the STEM Center. [A group of 11 young professionals gathered around a scientist in a lab coat asking questions during a STEM activity]

YACINE: Yeah, as my colleague started stated the name is STEM Teacher Training, and one of the objectives was to reduce barriers for Algerian students in STEM

education because in Algeria, the modules are taught more in a theoretical way, with a few practicums. So, by training many STEM UDL enthusiasts willing to share knowledge with others, we will be able to give the opportunity for those students to access materials and engage in hands on courses or workshops.

ASHRAF: And that's exactly what happened throughout the four years that we've been active in Algeria. [A close up photo of a participant playing a game about the Pythagorean Theorem using dice]

LOUI: Okay. And so, Ashraf you were first speaking and then Yacine, you followed up. Am I correct?

ASHRAF and YACINE: Yes.

LOUI: Okay, good just so listeners know who's speaking. Okay. So actually, could you both share your education background?

YACINE: Sure. I accidentally graduated last year with a master degree in automation and systems, and during my years of university, I grew a passion for English teaching as well.

ASHRAF: Same for me, actually. I also studied automation and systems, and I got the Bachelor degree in that but then I was more focused on trainings on delivering workshops and self-learning. So, I was a more immersed in game design learning and also an E-gaming, so I dedicate more time to the industry. But then I was more into education, and that's why I joined the STEM Center and started delivering activities there and so on. [Four men gathered at a table and participating in and discussing a STEM activity]

YACINE: Something funny that I can maybe share is, it's a coincidence, but also education specialists who has, who have worked in the Algeria STEM Center, all of them studied automation. So, so it's like something really, we find it really interesting to know.

LOUI: Oh, that is interesting! So then you both came from a more of a technology field, rather than an education field is that correct?

YACINE: Yes.

LOUI: Wow! That's fascinating. Well, okay! So, as you mentioned, the STEM Teacher Training Project includes writing to STEM teachers in UDL by modeling UDL, so can you talk about those trainings and how you've designed them?

YACINE: Yeah, sure. In our teacher training course, we go over lesson planning components and assessment types. So, teachers can identify how they can assess, assist their students in different ways, and also how to create a lesson plan that can serve all their learners. After that we implement UDL on what they learn. First, we help teachers to be more open and explore other teaching styles. By the way, study cases activity, where teachers highlight the best practices of some teachers who have already applied UDL in their classrooms. After that, we help them learn about the brain networks and how they actually work. We would go first with a demo activity to just try to affect the teachers' brain networks by showing them some pictures that can activate their recognition, strategic, and affective networks, then we reflect together on what happened. Like this teacher would identify them and learn how to design lesson plans that can affect their students brain networks. At the end, we ask them to take the variability test so we can compare the variability of their answers, and we show them that the brains are easy to be tricked. This would help them to understand that all learners have different ways to learn, think, envision and prosper. [A selfie of the 15 participants in the STEM Teacher Training workshop all smiling at the camera] We conclude that UDL provides multiple means of representations, engagement, and action and expressions. So all students can have equal opportunities to learn all in one, inclusive classroom. And to put their notice into practice, teachers with first work on online assignments where they will apply UDL guidelines on a lesson plan that they have created on module one, then they would participate in a micro-teaching session with their fellow teachers to apply UDL and receive constructive feedback, and then they would have to practice what they have learned in practice teaching sessions with real students. Here, trainers, Ashraf and I, will observe and support their classes and help them throughout their journey with UDL. So, we will provide one to one feedback, and just help the teachers to be ready to use comfortably, the UDL guidelines. We can say that our course is mostly like, we start with a demo, then we reflect together so

teachers can live the journey as students, then open their teachers' eyes to see the big picture.

ASHRAF: I may also add on that our training is more like a demo, like Yacine said, to UDL. So, each activity we are doing during the training is following the UDL guidelines, and after each activity we do a reflective practice with the teachers. And by then, this teacher would recognize UDL step by step until the phase where they are actually preparing the lesson and teach it to the other teachers inside the training. Basically, that I hope this is the good answer for the question you asked us, Loui. [Two men and two women huddled around a table participating in a biology STEM activity]

LOUI: Absolutely! Now, I have to ask, tell me about the variability test. What is that all about?

YACINE: Yeah, actually, we took some tests that, that have to be in the UDL Lesson Planner book. They do have like three types of variability tests. You can find them, if I remember correctly, page 30. So, you can find them there, they will just have to answer some tests that can affect their recognition networks, strategic networks, and also their affective networks. So first we give them the first, the first test, they take it individually and then they will have, and then we start seeing the answers together. And then we ask them what do you notice? Like, each one has its own strategic to think about something or, each one has its own way to think about the answer, and so on. This, the variability test just to help them know, and live as a students first so they can know that students, each one has, has it's, his own way to think or to learn or to see things. So, this way we help them to see that UDL is for all. [Two men and a woman working on circuitry in front of a lap top].

LOUI: Perfect. That is a book by Patti Ralabate, a dear friend and colleague of mine so, wonderful! She'll be so excited to hear that you're using those resources! That's great! Great! As you work with teachers from different provinces, and I want to make sure that people who are listening who maybe are unfamiliar with Algeria, your provinces range from parts of the Sahara desert to the fertile lands of the Northwest which also translates to minimal resources and abundant resources, you have variability across Algeria, and how do you address that variability of resources through the design of your trainings? How do you help teachers understand that even if they may have fewer

resources, they can still implement UDL? [A group photo of the 18 men and women along with Yacine, who participated in the STEM Teacher Training workshop]

ASHRAF: Alright, that's really a good question, Loui. Actually, I would go back to what we said earlier, what Yacine said exactly. So, we are applying UDL guidelines in trainings related activities. So, each activity in the training has the materials that are used, the activities the everything is UDL connected, so learners from across Algeria are able to perfectly interact with the training modules. We are taking into consideration the language barriers, and time zones to plan and schedule and deliver based on each province's preferences. We made sure that English language is used in a simple way. We endorse each explanation of each information given using the Algerian Arabic dialect, and we provide engaging, and well represented tactile and visual tools with each information given by the trainer, so that each learner and each province, or wilayas as we say in Algeria, can interact with the training as we are expected. [Men and women actively placing post-it notes on papers during a STEM activity]

YACINE: Yeah, I would like also to add that we are not only making UDL the accessible for teachers in Algeria, but also using UDL to teach UDL itself. So, what I mean by saying that is teachers can interact and have fun while learning. We have received a very positive feedback on how teachers have appreciated the course and how it helped them to shape their classrooms. And we think that this is a continuous journey, we always reflect as trainers after each course and module, even to learn how to make it better in the future. As you already mentioned, Loui, Algeria has the diversity in almost everything: culture, language, tradition, and even weather. So, by working with different teachers across, Algeria, I think we have the chance to design and redesign, a course that is UDL framed to teach UDL.

LOUI: Yea, yea. So, when I think about this project and we haven't even discussed numbers, but it sounds really big, it sounds like you you're touching a lot of teachers, but did it start that size? And has it, I'm assuming it's grown. And how did UDL play into all of that. [A man gesturing to a screen with the Periodic Table of elements projected onto it]

ASHRAF: Yeah, so this is kind of going back to our first question which is, what is the training and how did it start. So, I would say firstly it started in Algiers, where we actually

started the STEM Center. So, once we started the STEM Center, I said we faced that roadblock, and we had to come up with this UDL-based teacher training to teach several generations. So, after three to four generations of mentors, being trained in the STEM Teacher Training, we reach the good number of UDL practitioners in Algiers. And the thing that builds our current capacity in Algeria, like you said, it's kind of huge, is basically those mentors or those teachers were originally from different provinces in Algeria, and they were studying in Algiers. So, since they have learned about UDL and apply that during their stay in Algiers, either by delivering activities at the center, or even at the level of that academic presentations or workshops. So, that spirit of UDL helps them and helped us start the new corners in the origin provinces. So when they went back there, they started doing activities STEM activities in their provinces which made people fascinated about the way they deliver these kinds of activities, and we got contacted by many schools and many associations to provide the training locally in each province. And now we are in almost nine provinces, the spread between like the North, the West, the East and also the South. And so far, we have more than 150 volunteer mentors across Algeria delivering these fun activities during their free time. I also want to highlight the word mentors or mentor. So probably I've noticed that I use this a lot and we're talking about these teachers. Through UDL principles and on why UDL should be used in teaching, we developed this link with the volunteers, which is having a high sense and awareness of responsibility towards students. So, you will find that our mentors are actually connected with their students, even after classes to guide them and help them in either STEM related topics or projects they have, or even in their application for studies or opportunities online or abroad. This is all happening via multiple communication platforms such as Discord for example where teacher and students, or students and students and directions can be easier and beneficial.

YACINE: Yeah, I can also say that UDL and Algeria has been carried through years now, with different staff who have worked and worked on it. And Ashraf explained, already explained, we can say that UDL is a core value in this course. And we are still learning on how to make it better for all teachers. [34 participants, plus Yacine and Ashraf, holding up their certificates]

LOUI: Yes. Well, this has been wonderful. The 15 minutes has of course, flown by, and I have so many more questions, so I know I'm going to be asking those later.

YACINE: Sure. Any time!

LOUI: Oh thank Yacine and thank you, Ashraf so much for being guests. I really appreciate it. It just, it makes my heart joyful to know that UDL is literally all over the world and in every corner and it's so exciting. Thank you.

ASHRAF: Thank you, Loui. Thank you for the invite.

YACINE: Yeah. Thank you. Yeah, thank you so much for this opportunity. So we can talk to the teachers and everyone who is interested in education. I think UDL is really great so I encourage everyone to go explore it, have fun. You, believe me, you will be obsessed just like we are! So, I also like to say that UDL Lesson Planner book is a great tool for you to start implementing UDL. So go ahead, check it out and have fun. [Video captures of [www.theudlapproach.com](http://www.theudlapproach.com) followed by the podcast logo]

LOUI: Well, thank you so much! So, for though for those listening this podcast, you can find supplemental materials like an image montage with closed captioning that montage with audio descriptions, a transcript, and an associated blog at my website, [www.theUDLapproach.com/podcasts](http://www.theUDLapproach.com/podcasts). And finally, if you have a story to share about UDL implementation for UDL in 15 minutes, you can contact me through [www.theUDLapproach.com](http://www.theUDLapproach.com) and thanks to everyone for your work in revolutionizing education through UDL and making it our goal to develop expert learners.