

APPENDIX

Surah Ibrahim: 4

*“We have not sent a messenger except in the language of his people to clarify
[the message] for them. Then Allah leaves whoever He wills to stray and guides
whoever He wills. And He is the Almighty, All-Wise.” (Ibrahim: 4).*

VIDEO TRANSCRIPTION

1. Multilingualism and Its Impact

“greetings everyone my name is srishti Gotham today I want to talk about how multilingualism affects different aspects of your life experience as a bilingualist before I start I want to speak a greeting in Hindi um this means welcome I'm so glad to meet you and I hope you are as well you may ask why Hindi oh when I was little I spoke Hindi fluently in my household I want to play a little game with the audience so raise your hand if you can speak one language now raise your hand if you can speak two languages last but not least raise your hand if you can speak three or more languages many of the people in this room were taught at a young age in their household like me because I remember when I was little I spoke Hindi fluently in my household but once I got into Pre-K and I started learning English I lost my fluency in Hindi now I'm picking back on my Hindi and working even harder on my English to embrace the different cultures and environments that I'm around some people in this room were taught for school or when they think a language is really fun to learn for some of you I think you guys learned Spanish elementary school and middle school and then you had an option in high school for me elementary school was a specialist class and then seventh grade was a Career Connection and eighth grade at optional High School Credit some people think that multilingualism affects only your career but there's a lot more to it one reason that you should be multilingual is because it helps with your mental capacity for your mental capacity there's two categories explicit memories and implicit memories explicit memories are your if the events that happen to you and the general facts these are helped by the hippocampus amygdala and the neocortex then you have implicit memories which are the motor memories that you do which are helped by the basal ganglia and the cerebellum these are parts of your brain that are improved when you're multilingual there's also another reason why is because you can retain even more information so once you start learning the one language you can learn even more I can do an example so I only know a little bit of Spanish but I can learn and become fluent in it or I can do another language which is in the same geographical area of South America where Spanish originates from another aspect that is important is your social aspect because if you have a group of people that

speaking the same language as you, you can collaborate with them more, you also respect them more, and you have relationships across the globe, no matter if you have the same culture as them or not, you can break language barriers by this, as well. Nelson Mandela once said, if you talk to a man in the language he understands, then it goes to his head, but if you talk to him in his own language, then it goes to his heart. There's also another thing that I want to talk about, which is your confidence. Confidence is very important in many things, and when you're multilingual, this improves because you have a boost in your identity, and also you're proud, because you've done all this hard work, and you have something that you are very passionate about, which is your culture. There's also an improvement in your cognitive abilities, which technically makes you smarter, but in your cognitive abilities, you're more open-minded to new ideas, which makes multilingual people better problem solvers. You can also do various tasks simultaneously, and you are also a lot better at doing different careers because you're so able to understand the different things. Now, that was how confidence and cognitive abilities are improved, but now I want to talk about the career, which I said is very important, so the University of California, Riverside, which I know many of you guys know of, is actually learning the advantages of multilingualism, and is actually working on making education and learning impactful for multilingualism. Also, the University of California, Riverside, had made a job center where it shows what jobs need are better to have be multilingual in. As an example, you could be an immigration officer, you could be an interpreter, the list just keeps going on and on, and I can give you way more examples, but these are all different industries that you can be multilingual in, but it's not just a job that helps, it's also the area. So, if you're a social worker in Georgia, there may not be a big ability for you to use your multilingualism skills, because there's not that much diversity here, however, someone in Florida, who's a social worker, would probably be able to use their multilingual skills and Hispanic cultures and languages, because of the large population there. Now, I want to talk to you guys about a story, it's an event that happens to me pretty often, and I don't mind it, because so I was born in the U.S., but my parents were born in Pakistan, so when I talk to someone else about my culture or something of the sort, they're pretty shocked when I tell them that I'm Pakistani, that I have Pakistani roots, instead of an Indian origin, I don't mind it, though, because it allows me to have a sense of

appreciation between me and the other person because I can understand their culture better and also they can understand mine because I can elaborate and show them how the world comes and connects together if you're a multilingual I see the future in this room and I know the future is now so learn a new language or encourage someone else to do so because Abraham Lincoln once said the best way to create the future the best way to predict the future is to create it multilingual people have better cognitive skills they have higher they have better social life they have higher confidence boost and they there's so many scenarios in life that they can have different perspectives on which shows that they have a better connection with the community I want to end in an ending in Cynthia as I did in the starting with another sentence so this means thank you and I hope you have a great rest of your day I'm srishti Gotham I hope you acquire something for the future thank you”.

2. Where Have All The Teachers Gone

“So I want everyone to think about when you were in kindergarten through 12th grade. Did you have a teacher that impacted you in a really positive way? Or you were excited to go to class? A teacher that knew their content really well and was able to teach it to you in a way that you understood? Maybe even went above and beyond? If you did, then chances are you had a qualified teacher. I had that teacher too. Miss Riley, my second grade teacher not only taught me math, reading, and writing, but she taught me life lessons that impacted who I am today. I am a teacher because of Miss Riley. This is my 19th year as an educator. Thirteen of those years were as a middle school teacher, and this is my sixth year as an assistant teaching professor in teacher education. What I am seeing with the teacher shortage and the lack of qualified teachers, frankly, makes me very nervous for the future of public education. A qualified teacher is one who has successfully completed an educator preparation program that’s prepared them in theory, practice, and pedagogy. A qualified teacher has also successfully passed the content assessments for the content which they teach. The “Teacher Shortage Report” from December 2021, published by the Missouri Department of Elementary and Secondary Education, showed over 3,000 teaching jobs had either been left vacant or filled with unqualified teachers. These are the results from the educator vacancy reports in June 2021 and March 2022, which shows that the vacancies are highest in elementary education and special education. I don’t know where I would be today, if I had an unqualified teacher in

second grade. Because teacher impact is so important for student success, it's necessary that we evaluate what's going on in education right now and turn this teacher shortage around. When education changes, it's often a chain reaction to global or societal events. In my years as an educator, I've experienced the impact that current events have on education. I'm going to share some of those with you today, concluding with the ongoing impact on education from COVID. Policymakers and educators need to figure out how to frame current events in positive ways for education, so that we can turn this around. My first year of teaching was 2001. And I will never forget where I was on September 11th - at Lincoln Middle School in Peoria, Illinois, teaching a class of eighth graders with two other teachers in the room. One of the teachers wheeled in a TV, and we watched the news of the Twin Towers coming down. I will always remember that sorrowful feeling that came while watching that moment with my students. A big thing 9/11 taught us is patriotism and a sense of fighting for our country. American flags were flown at half mast, and while schools were pulling counselors to talk to kids about the events, many administrators were figuring out new safety protocols for the schools. I experienced this increase in safety, as I observed more school resource officers in the buildings. I also noticed that at faculty meetings, we began to talk more about lockdown procedures, even began to practice them with our students. Unfortunately, 9/11 also caused many to discriminate and even commit hate crimes against Muslim, Middle Eastern, and South Asian populations. In education though, teachers came to realize that they had a duty to teach about these other nationalities and revise curriculum. This led to lessons about how to teach kids about 9/11, along with bigger changes to the curriculum that included topics that were left out before, such as Muslim culture and U.S. domestic terrorism. Prior to 9/11, these topics were not thought of as necessary to include in the curriculum, but now they were given a voice. In 2002, the government became more involved in education through the "No Child Left Behind Act." The US felt that American students were falling academically behind students in other countries, and the government wanted to find a way to hold schools accountable for students not being successful. This led to Adequate Yearly Progress, increased funding for Title I schools. choice of schools, and lots of testing. All of this personally impacted me, as I was teaching at a Title I school at the time. We had a very lofty goal of trying to get our students to be proficient in math and reading standards,

and it created a lot of stress for the teachers. Some days, I felt like I was just teaching to the test, even though I knew that was not the best learning experience for my students. During testing week, all of the teachers, myself included, were on pins and needles, praying that our students were trying their hardest. In 2015, “Every Student Succeeds Act” replaced “No Child Left Behind,” and the expectation for students to be successful was still there, but some of the pressure on teachers was decreased. Common Core Standards were introduced in 2009, as a way to make standards more consistent across states. This was the first time we really saw social media impact education. This is a post from a parent that went viral: It was about the homework his child was bringing home and saying it was more difficult than the way he was taught. He goes on to mention his Bachelor of Science degree in electronics engineering and how even he can’t figure out this Common Core Math. Many parents felt this “new math” needed to go away. As a junior high math teacher at the time, I was constantly hearing from parents and friends, none of whom are in the education field, that this Common Core math was more difficult and we needed to go back to the way things were before. Many times they referenced that social media post from the parent who struggled with the homework. In education though, teachers realized that Common Core was about rethinking the standards and giving students a variety of ways to learn the content. Textbooks used became focused on applying learning and understanding why things worked a certain way, rather than focusing on memorization, which helped to increase rigor in the curriculum. Current K-12 students will not be able to answer where they were on September 11th, 2001, but they will know where they were in March 2020. This was one of the fastest changes to happen in education. Many students were sent home in March and told that they would be back two weeks later, but didn’t come back the rest of the school year. Teachers who were not trained in online learning were expected to put the rest of the curriculum for the year online, and this led to different learning experiences from district to district, depending on how comfortable teachers were with technology or how easily they had access to technology. Teachers have gotten better at using technology in the last two years because of the quick move to virtual, but the digital divide is still very real in education. Many rural schools in Missouri have students and teachers that lack Internet bandwidth at their homes, making it difficult to participate in Zoom or access online assignments. When students were sent home in

2020, many principals expected their teachers to just review what had already been taught and not go further with the curriculum, because not all students had equal access to assignments and classroom resources. Some districts stopped grading schoolwork altogether and instead gave students credit for attempting assignments. The idea of not accepting late work became a thing of the past, and students were allowed to complete assignments with more flexibility. There are some clear parallels between the educational reactions to the current events I mentioned earlier and the recent reactions with COVID. For example, with 9/11 we saw an increase in safety protocols and more emergency preparedness training for staff. With COVID, we also saw an increase in safety protocols, although these were more focused on the health of students and teachers. But students had new protocols for how they went out to recess. Many students began to eat breakfast and lunch inside of their classrooms instead of the cafeteria in order to cut down on interactions with other students. Teachers were provided more resources on how to keep their classrooms clean. With “No Child Left Behind,” we saw an increase in government funding. We saw that same increase in government funding with COVID. One example is the free breakfast and lunches that came to the schools during that time. As I mentioned earlier, Common Core got a pretty bad reputation right away because of a social media post from a parent. Social media is something that’s impacting education more and more lately. One thing I noticed with COVID, teachers are getting more of a voice on social media than they had before, with teachers all over Instagram sharing their thoughts and ideas on what is happening in education right now. Who better to make change than the people involved in the system? So it’s really important that we trust what the teachers in the classroom are saying. One parallel that I could not find though was an increase in educational expectations. In the past, with current events impacting education, they've led us to evaluate our standards and increase rigor in the curriculum. With COVID, we saw a pause in learning among many, and that unfinished learning has led students to fall academically behind. We need to find a way to get these students back on track, and having qualified teachers in the classroom is a really good place to start. So how do we get the qualified teachers back in the K-12 buildings? Well ... the teachers that are staying in the classroom are doing so because they're passionate about teaching children. And as parents and onlookers, we need to listen to them and help in whatever ways we can. Many teachers feel

overworked and unappreciated. Due to staff shortages, many times they're asked to fill in other places during their prep periods. Some districts have tried to address this, but real consideration needs to be made for teacher wellness. Allowing teachers to take mental health days or providing mentors in the schools are some ways to help. In Missouri, over 100 districts have moved to four-day workweeks, in part to recruit teachers. Another reason why there's a decrease in qualified teachers is because many are looking for higher-paying jobs. Everyone knows that teachers are not in their chosen profession because of the pay, but because of the teacher shortage, many districts are looking at pay and increasing salaries. Missouri recently voted to increase teacher pay, as we were the lowest in the country, but we still have a long way to go. Student loan forgiveness for teachers, housing allowances for teachers that work in rural areas are some ways to help financially. Public education is hurting right now and it needs the support of you. Listen to the teachers that are still in the classroom and figure out ways to support them, whether that be writing to your congressman about increasing teacher pay, or volunteering at local schools, so that they don't have to use their prep period to fill in other places. Hopefully we can learn from educational reactions to current events in the past and overcome what this global pandemic has done to our public schools, and most importantly, bring back qualified teachers into the classrooms."

3. Why Technology Can't Fix Education

"hello Chicago this is an apple. some of you may look at it and think that reminds me of the American public education system or any education system for that matter yet despite how red and juicy and plump it is it doesn't necessarily correlate with the realities of how American students are performing. when you look at them and their performances compared with seventy-one other countries worth of students across the world journalists are the first ones to jump on this and try to figure out exactly what the reason is for this sort of performance and typically they focus on teachers here are some examples rotten apples crackdown on lazy teachers what the heck is going on in these schools I can tell you from firsthand experience because I was a sixth and seventh grade math and science teacher at one point that there are some incredible examples of teaching out there they just don't always make it to the forefront and so about four and a half years ago I decided to put my money where my mouth is figuratively and join the education journalism world but I chose to move

somewhere very in particular the Silicon Valley who where all of a sudden an entirely new narrative was brought to my attention technology is going to solve all of our problems technology can fix education the Silicon Valley billionaires remake schools artificial intelligence is going to do everything we need it to do well when I first heard that I started to feel like Morgan Freeman and this meme which is one of my favorite memes and you'd be surprised how many power points I put this in in my career including when I had power points in my classroom and you know I thought to myself what is this pressure all of a sudden I feel to join this narrative to write about how incredible technology is for our students so over the next 4 and 1/2 years of being an education journalist I would endeavor to try to answer this question can technology really solve all of our problems I'm gonna take you back to one of the most popular article so I ever wrote for the education technology journalism organization I used to work for ED Serge it was about a charter system down in Southern California USC hybrid high college prep the University of Southern California has a large School of Education and they wanted to run a bit of an experiment they decided that at this new charter school they were going to put students on devices for 90 percent of the day the teacher was there but sort of put to the side and they had a lot to work with because a number of these students were coming in without proficiency in math science or language arts so there was a lot riding on this and yet by the end of freshman year 50 percent of that incoming freshman class was credit deficient meaning that they were worse than when they had first come in it's almost as if the Charter system took a page out of the book that Los Angeles Unified School District wrote who around the same time had decided to reallocate a billion dollars in funding from the space in their budget that was supposed to go to remaking decrepit buildings in the district to iPads for all every single student in the district received an iPad but there was a bit of an issue with this very little teacher input went into this decision making and very little professional development was provided to the teachers to help them understand how to incorporate the devices into the classroom now some of you may have read about this and if you have then apologize for bringing up those negative memories once again but approximately two years ago the superintendent of LAUSD John Deasy actually resigned and a major reason for that was because of the ultimate failure that the iPad initiative had been oh don't get me wrong I actually recently joined Google so I theoretically like technology but I don't think

it's the main thing that we need to fix all of our problems I think it can be a tool but here's the thing I saw lacking and a lot of the stories that I read about that I wrote that he interviewed people on and that was the teacher factor because oftentimes teachers are the ones that ask the best questions around tools that are used in the classroom around how a student is feeling they have those relationships that a piece of technology can't simulate for example Ricardo elizalde is probably one of the best teachers I've ever met in my entire life he is a public school teacher and he spends his life teaching non-native speakers English now students in his class even when they become proficient sometimes lack something in particular he noticed this with one of his particular Honduran students who was doing very well but when she went home wasn't really able to speak with her mother because she lacked one crucial thing confidence now Ricardo being the resourceful and innovative teacher that he is decided I think there's a way that I can incorporate technology into the scenario to help her out so he created a student project that brought in Macs and iMovie and wrote this story actually for us after the whole thing happened the students created animated digital shorts over which they dubbed with the English that they had learned and the beautiful thing about it was that they were able to take those projects back home and demonstrate to their families just how much they had learned and I'm going to take you back to hybrid high because actually that story doesn't end as bad as you might think it did I'll be honest with you we the the charter school system did pluck a new leader actually from Chicago and dragged him out to Los Angeles but the second year the charter school system was around thank God he was there because he realized that the big missing element in what they had done up until that point was teachers in the classroom working with students more consistently instead of having kids on devices 90% of their time but that wasn't all he did he also made it rain he every single teacher \$3,000 at the beginning of every year and the teachers could spend that on whatever software technology they wanted in addition to that if they really like something and wanted licenses for the whole school if they got other teachers and students on board and the administrators saw that then they'd buy licenses for everybody and I am happy to report that last year that first freshman class made it to senior year and graduated 100% of them graduated and 100% of them were accepted to four-year colleges and universities it's funny to hear you clap because I certainly can't take credit for that but I'm glad that I was able to share

that information with you now as I'm up here you may be thinking to yourself okay Mary Jo these are a lot of California examples I don't know if you know but you're a TEDx Chicago we're a different place we have other problems to deal with like when it's negative 10 degrees outside and first off I totally get it I went to Northwestern go Wildcats I'm right there with you anybody at Northwestern yes this is why I didn't want to do TEDx San Francisco but there's actually a similar example that I want to share with you that's something for you to be aware of because I imagine that many of you have students in CPS some of you may be funders some of you may be politicians that make choices that affect the district so in 2016 the Chicago sometimes that summer reported that more than a thousand positions were eliminated from Chicago Public Schools just gone some of which were teaching positions now interestingly enough simultaneously that same summer a position was posted on the jobs board for an executive director of personalized learning and this six-figure salary to individual was going to be amongst other things bringing technology into the system now it would be unfair of me to say that there's a direct causation between these two things but I think it's something to be aware of because in my line of work I hear a lot of people talk and complain about the 1950s vision that we have of the classroom one teacher up at the front students facing forward you know everything's focused on that one teacher everything is right there but at the same time I don't know if this situation is much better and I've seen this live where students are sitting in desks tapped in singular device no collaboration no project-based learning no communicating no soft skill development and where's the teacher that's why I fundamentally support what I consider to be the triangular relationship and that's where you have to have three individual pieces working together the student the technology the teacher technology is a wonderful thing I'm not gonna lie to you I see it do wonderful things in schools all the time I've seen it offer access to students with disabilities I've seen students that aren't able to travel abroad get access to incredible virtual reality experiences that open up new worlds for them but before I leave today I want to leave you with one last crucial question how do we as a collective figure out the best learning environments for our students that balance the utility of technology with the beauty of human nature because I'll be honest with you my friends and I've seen it firsthand the relationships between teachers and students is sacred and that should never ever be eliminated thank you.”

4. 3 Skills Every Middle School Boy Needs

“Whenever I tell people I work at a middle school, they often lean back and suck their teeth. It's like they're having a visceral reaction to the mere mention of those years, and it makes sense. Middle school is a time like no other. It's when significant biological, neurological and emotional changes are happening all at the same time. So how do middle schoolers respond to these changes? Well, some might ignore deodorant but overuse Axe body spray. You can find them holding up the walls during the school dance. And there's usually a desire to be treated like an adult, but they can't quite let go of their action figures. You might imagine that it looks a little like this. This was me in sixth grade, and like many middle school students, I was earnest, I was goofy, and I was just discovering who I wanted to be. Now I had no idea that I'd go on to teach middle school. They say the grade levels you teach are most reflective of your personality. So I'm not quite sure what it says about me that I later went on to found a middle school for boys. But in all seriousness, it didn't take long as a teacher to realize that my male students were acting kind of strange. I remember there was this one year, we were doing a get-to-know-you activity where students would use old magazines to create collages representing who they were. And many of the collages had all of the things that typical middle schoolers like: the outdoors, sports, the latest fashion, the hottest shoes, you know, all the important stuff. However, there were some that were not exactly what I had in mind. A group of middle school boys created these collages that were comical, if not concerning. It was almost as if they had made templates of who they thought that they should be. Girls in bikinis, fast cars, professional wrestlers, first-person shooter video games. You get the idea. One collage actually had to have had at least 25 different images of Kim Kardashian. And this wasn't an isolated incident. Whether it was going down a somewhat sketchy YouTube rabbit hole or mindlessly indulging in meme culture, which we know can get really hairy really fast, I was noticing a pattern with my boys. Instead of chalking it up as mindless activities or typical middle school behavior, I decided to investigate. I became a mentor for an afterschool program called My Brother's Keeper. And in this space, we could have more in-depth conversations. Inspired by the 2016 presidential debates, I asked this group of boys an age-old question: “Does absolute power corrupt absolutely?” Students began to discuss amongst themselves. And then I asked, “Now what would you do if you had this

kind of power? And what if it was unchecked?" Students continued talking and then they shared out. Many of them said that they would use their power for good or even share it. And as I listened, I felt hopeful. Realizing that young men could take a different path. And then I brought the group together and I just said, "Does it have to be this way?" Their collective light bulbs lit up, realizing that they could reject this version of masculinity. And at the same time, I too had an "aha!" moment. It became clear to me that middle school boys are so impressionable and so full of potential. But what if I told you those same middle school boys could lead us to a more just and equitable society by redefining masculinity? Now in the days and weeks that followed, I continued to reflect on this idea. What actually is masculinity? If we reject the gender binary and affirm people of all genders, how does masculinity fit into that? What are the expectations of masculinity when it comes to race, class and other social factors? I knew that middle school is fertile ground for this work. And my reflection led me to identify three critical skills that middle schoolers can practice to redefine masculinity. I call them the three C's. The first one is confidence, the second is communication, and the third is community. Now these three C's stand as the pillars of my school to show people that middle schoolers can redefine masculinity. Now number one, confidence is essential to teach in middle school. Students are exploring their identities, and they're more open to abstract thinking. I believe that having a healthy and balanced confidence allows boys to feel good about who they are rather than feeling uncomfortable for trying to be someone they're not. It's different than simply being praised or rewarded for achievements but rather rooted in a deep sense of self. And so what my school does is move away from either-or thinking. Instead of boys believing that they have to choose between being smart or athletic, poetic or pragmatic, we guide our boys to a more holistic version of masculinity that includes both-and. And as bell hooks and Olga Silverstein said, we need men who are empathetic and strong; autonomous and connected; responsible to self, friends, family, to community; and capable of understanding how those responsibilities are ultimately inseparable. And from a purely academic standpoint, we provide opportunities to teach confidence through cross-curricular work and projects that include math, science, the humanities, art, home ec, sports to show them that deep learning and critical thinking often require an integration of all of these subjects. Teaching confidence allows boys to understand that there's an entire spectrum of how they

can express themselves, and they can feel good and value the complexity of their identity and stand firm in it with confidence. The second C represents communication. Now communication is key. To counter the messages that society tells boys to constrict their emotions, my school practices a variety of communication methods, both intrapersonally and interpersonally. Now intrapersonally is how you communicate with yourself, and interpersonally is how you communicate with others. One example of our intrapersonal communication methods is we'll have students arrive at their desks at the beginning of the day. They'll close their eyes, breathe evenly for about a minute so they can just check in with themselves, see how they're doing, what they're thinking, how they're feeling. It allows them to put a frame around their thoughts and emotions so they can focus on it a little more deeply throughout the day. Students also keep gratitude journals. Research shows that when students express gratitude on a regular basis, it increases positive emotions toward themselves and toward others. An interpersonal practice that we like to do is at the end of the day, we'll have students gather in a circle to offer an appreciation for someone or something. Open it up to an apology or talk about a social issue that might be on their hearts. And we normalize these forms of communication to show boys that it is perfectly human to open your minds and your hearts to your community. Now the third C represents community, to counter this false sense of individualism and having to pull yourself up by your bootstraps. While we also know that there is great value in teaching our boys the importance of independence, it can be stymied when taken to an extreme. And so what we do is we engage in an inquiry process where we observe what's going on in our communities, either locally, nationally or globally, and then pose an essential question. One year we posed an essential question to our students that asked, "How can we create a community where everyone feels a sense of belonging?" Students took this question. They generated initial thoughts. They sought multiple perspectives from their peers, their teachers, community leaders. And then they came back to us and said, "We'd like to address homelessness in Seattle." We loved this idea. And so we partnered with a local construction company to design, build and donate a tiny house. Now what we realized is through this community learning process, students felt a greater sense of satisfaction with studying, taking academic risks and just valuing the overall learning process. In addition, students felt more comfortable taking on leadership roles inside and outside of the

classroom. One thing to note that in each of these three C's the adults involved modeled this new version of masculinity to prove to students that they don't have to fit into a stereotype. And while I'm often impressed by the vulnerability and kindness of each of my students, it's still a middle school. It's this liminal space between childhood and adulthood. And amongst our sophisticated conversations, there's a lot of nonsensical humor. And very few of them have taken up regular usage of deodorant. (Laughter) And I know that this is lifelong work and there's no quick fix, but they show me that a better future is possible. What if masculinity meant having a healthy and balanced confidence, communicating clearly, being connected to your community? Just imagine how different our world would be. My students don't even show me that this future is possible, but this future is here, with middle school boys leading the way. Thank you.”

5. The Board Game Getting Kids Excited About School

“At the very young age of less than one year old, a violent civil war broke out in my home country of the Democratic Republic of Congo. As a result, my family was forced to flee. And as luck would have it, we found safety in Kyangwali refugee camp, located in western Uganda, where I grew up from and have learned to call home for the past 24 years. Every morning, my two parents would wake up at 5am and leave for the fields where they went to cultivate our small garden, to plant maize and beans to feed the family. And every evening when they came back home, they would end the night in the same way. Usually, they would gather me and my siblings and would give us a pep talk on how much they desired for us to go to school and be educated. Surprisingly, none of my parents actually had gone to school. But to them, education meant securing a well-paying job at some point in the future. And with this, we [could] afford the three meals a day. We perhaps could build a nice-looking house for our family or even decide to take our family from the refugee camp to the city. And so when I started going to school, I took this [to] heart and I took school seriously. Even though I was just a little kid, I managed to wake myself out of bed, take all three goats to graze and be back on time to dress up and go to school. Classes in the refugee camp can be overcrowded. I was one of the nearly 200 students who sat in a single classroom as I tried to focus and learn. But besides the problem of overcrowded classrooms, we also had an issue whereby most of our learning was characterized by rote memorization. On a typical day, we showed up in a

classroom, copied down notes that teachers gave us and were expected to go back home [and] cram these in preparation for exams. And if I can be honest with you, I did not enjoy this. We barely interacted with our teachers and even amongst ourselves. And even though as serious students, most of the time, school seemed to be very boring. However, as I was growing up and as I took on the routine of going to school in the morning and then coming back to my family in the evening, there seemed to be one thing and one thing only, that truly held my attention, and that was the idea of playing games. And I most loved playing the game of football. Now I will start off by addressing the biggest elephant in the room. I know most of you love American football, but actually that's not the game I'm talking about. I'm five foot three, and given my size, I truly can't play American football. So I'm actually talking about football, where we use our feet, and that's soccer. I also loved playing the cards of spades. And most of the time after school I would come to my house, and I would be holding a deck of cards. And every time my parents saw me shuffling these cards, they would be paranoid, thinking I'd started gambling. But I wasn't. And perhaps because I then didn't have money to do so. No wonder, while in high school in 2016, the idea of gamification became the best solution I thought about I could use to be able to address the problem in the refugee camp. And since then, I've been on a quest to make education more accessible and more fun and engaging for children within Kyangwali refugee camp through the use of board games. And if you don't mind, I'm going to share with you how it all happened. One year before, in 2015, I was lucky and got an opportunity to go and study at African Leadership Academy, located in Johannesburg, South Africa. And here I was introduced to the idea of entrepreneurship for the first time. And my amazing teachers taught me that entrepreneurs were simply problem solvers. And I immediately knew that I wanted to work on an education problem. The first idea I thought: I could build a primary school. More children would access learning spaces, teachers would not have the problem of overcrowded classrooms. But the problem was I was 19 years old, didn't have the money, didn't have the skills of what it took to build a primary school. The second idea I thought: I could advocate for a well-equipped library. With this, we would have enough textbooks in the library, and children would have enough reading materials. They would do it at school in performing in the national exams. However, I had one issue with the library. You see, food can be scarce in the refugee camp, and

several times when I showed up at school, I personally remembered every time I entered in the library, all I could think about was food. More than anything, I needed a solution that was cheap, a solution that was credible, and something that would be very exciting to the children. Something that somehow would help these children forget about their hunger and then engage with learning. But also something that would help teachers have control on overcrowded classrooms. But most importantly, help children engage with algebra, with the science they were learning, and have fun every single day they came to school. And so even though I had never taken drawing classes, I picked up a pencil and got some courage to start making sketches of what would be my first board game. I also generated a number of trivia questions and then called up my former primary school teacher in Kyangwali refugee camp. And I asked if I could visit my primary school once again. He was generous, and he said yes. When I showed up at my former primary school, the kids were excited, and most of them jumped out of their seats when I told them what I held in my hands was a board game. Surprisingly, none of them actually knew even how the game was played. But heading towards the board game, they were thrilled. Working with the teachers and the school administration, they give me about one hour to test out the game for the next couple weeks. And the game was a huge success. So much so, that the next morning my mom woke me out of bed telling me that there was a group of children wearing my school uniform, looking for me. I was still confused because it was about 6am in the morning. But I woke up out of my bed, still in my night dress actually, and then opened the door. There was about six children, and when I looked at them, there were about two faces that I could recognize. There was James and Patrick, two of the children I had worked with the previous day. And with the most innocent faces that I have ever seen, they were like, "Could you come and join us at school, and then we play the game before school starts?" And looking at their faces, there was no way I was going to say no. I said, "I'll dress up and meet you over by school." And this group of amazing children became my early testers. We would play the game in the morning, and then in the afternoon, as they waited for their afternoon shift. And today, the game has evolved into what my team and I at My Home Stars, a nonprofit we are running in Uganda, have called the 5 STA-Z educational board game. And here is how the 5 STA-Z education board works. At the beginning, a classroom divides itself into groups of five children.

And these children begin interacting with one another on questions and content we've developed in partnership with a group of 16 teachers. All this content is a reflection of the actual content covered in the Ugandan educational curriculum of mathematics, English, science and social studies. And as they interact, they get to earn points for every trivia question they get right. And they use these points to advance around the star-shaped board with a goal of being the first one to enter the middle and take on the big yellow star, which usually gets children very excited. My team and I also have worked together to incorporate game mechanics such as chance and jeopardy, where children actually can earn extra points when they collaborate and help each other with difficult trivia questions. This has been intended to make sure that children actually are learning the components of communication and working together in teams. But also it makes learning become more child-centered. And actually, teachers can focus on groups of children that are struggling most, a model that we are finding to be very helpful in communities such as refugee camps, where most of the time we don't have enough teachers. And there's one particular reason as to why my team and I decided to call the game the 5 STA-Z. And it's simply the conviction that no matter where you're from and the current existing circumstances, we can all reach for the stars. And like Neil deGrasse Tyson would put it, not only do we live among the stars, the stars themselves live within us. And that includes children from refugee camps. And as children also start playing the game, we encourage them not to use their actual names, but actually to take on the characters of the five brightest stars in the galaxy. And that's Canopus, Rigel, Arcturus, Vega and Sirius. And also, when we hand them the board game, we remind them that they are already stars who are interacting with one another to help each other just shine a little bit brighter. And perhaps our biggest impact was realized in 2020 and 2021. Like most of you remember, these are the two years when COVID-19 pandemic decided to visit us. And during this time, classes in the refugee camp closed, and children were sent home with no way of accessing learning resources. My team and I took on the challenge to make learning happen within homes, and we produced about 1,000 game packages that we gave to teachers and community leaders. And with this, we're able to help about 5,000 children to access home learning in the most fun and engaging way through the use of board games. Today, we are working with five schools in Kyangwali refugee camp where we've actually been able to work with

school administration to make the 5 STA-Z part of the learning schedules. In the morning, children spend the morning time learning the normal classes they're supposed to take in the curriculum and then spend about one hour in the afternoon to put what they've learned in the morning into practice. Beyond being a game that is helping children master the curriculum content and do well in the national exam, my team and I are committed to continue building the 5 STA-Z into a learning resource that will continue to put a smile on these children's faces, every single day they come to class and a game that can continue to inspire them into what is possible for them in the future. And also, we are committed to continue building this game into a game that we shall be able to make available to other children in other refugee camps across Uganda and other countries across the African continent. In the past one year, about 100 million people across the world have been displaced, and many of these are the result of a civil war. From Kyangwali refugee camp in western Uganda to New York City and standing in front of you today and engaging with you is a big, big, big privilege. And the only reason I'm able to do so and stand in front of you, is because I've been given an opportunity to go to school. And while board games such as the 5 STA-Z will not be able to solve some of the world's complex problems of the 21st century, like refugee crisis and displacement, I strongly believe that you and I that are here today, that happen to be a little bit privileged, bear the responsibility to continue building platforms and systems that will help refugee children imagine a better future for themselves, their families and their communities. Thank you.”

Multilingualism and Its Impact



Where Have All The Teacher Gone



Why Technology Can't Fix Education

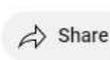


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The Board Game Getting Kids Excited About School



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