

Future Directions for Higher Education in Africa

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Speakers (in order of appearance)

- Romina Bandura, Senior Fellow, Project on Prosperity and Development, Project on U.S. Leadership in Development, CSIS
- Patrick Awuah, Founder and President, Ashesi University College
- Otto Chabikuli, Director of Global Health, Population and Nutrition, FHI 360
- Alejandro Caballero, Principal Education Specialist, IFC

Dan Runde: Okay let's get started. I'm Dan Runde, I hold the Schreyer Chair here at CSIS. We're going to have a conversation about future directions for higher education in Africa. We have a very interesting panel that my colleague Romina Bandura, who's a senior fellow, will explain. We wanted to do this in the context of several things. One is we think that we need to have a greater focus on Africa here at CSIS. We need to be thinking about the fact that there are going to be more than 2 billion people in Africa. So, the demographic pull of gravity of Africa is going to be enormous. It's beyond what we're imagining now. We're going to have at least 400 million young people and so higher education in Africa is not the solution but is part of a larger conversation about how we're going to see Africa transform itself, which is going to transform itself, in the ways that parts of Asia have done over the last 50 years. What I say is this is not your grandparents' developing world nor is it your grandparents' Africa. It's richer, free, more capable with a lot more agency in a lot more options. When I tell American policymakers that to the extent that we don't help meet the hopes and aspirations of African governments and people on the ground, they will take their business to the Chinese. So that's I think the option we have to be thinking about.

There's huge wonderful things happening on the ground that don't get well covered in the press or elsewhere. And so, we want to be thinking about what are the ways in which how we can think about participating in those solutions. We have a bipartisan task force in the future of work and developing countries that Romina's leading and we have for country case studies we're leading including Nigeria, India, Brazil and Kazakhstan and Romina was recently in Nigeria. I think that will inform some of the conversation that we're going to have. And so, without further ado, I'm going to turn the floor over to our Senior Fellow Romina Bandura.

Romina Bandura: Thank you Dan and hello everybody. Welcome to CSIS. I'm Romina Bandura. I'm a senior fellow here and I'm really pleased to be hosting this this panel today. Dan didn't mention it, but in about an hour we're going to solve all the higher education issues in Africa, so I hope you're prepared. So as Dan mentioned, this is a huge continent with a lots of education needs, especially in higher education. We have a rising middle class. I believe that Nigeria is going to be the third most populous country by 2050 so you know there's this unmet demand, in particular in universities, vocational training, online platforms that can deliver learning.

So, we have three great experts today; I'm going to quickly introduce them. Patrick Awuah is the Founder and President of Ashesi University College in Ghana. He founded Ashesi in 2002 and we're going to talk a little bit about how you came about doing that. Otto Chabikuli he's Director of Global Health, Population and Nutrition at FHI 360 and prior to that you were a university professor who knows a lot about the Africa education system. And then finally Alejandro Caballero, he's Principal Education Specialist at IFC, but previously he was Principal Education Specialist at the World Bank.

I'm going to pick off with a very general question to the three of you: What are the main challenges that higher education in Africa is facing today? That is a huge question, but what are your takes? What are the main problems?

Patrick Awuah: It's such a big question. I would say that one big problem in higher ed is just the focus of our mission and the fact that higher ed has been very focused on rote learning. We're running a pedagogy that was designed decades ago and this needs to change to be educating people who are critical thinkers, who are problem solvers, who are entrepreneurial in their mindset and we also need to take on very strongly this idea that we're educating ethical leaders for the future of the continent. So, this is a big issue that we need we need to solve.

The second problem is that in the 70s and 80s, higher education in Africa suffered greatly from not enough resources. And our countries all suffered a significant brain drain in the higher ed system. So, the faculty was diminished. And we're in a rebuilding process at a time when demand for higher education is rising because of growing populations and so the universities on the continent are overburdened with very high enrollments that don't match the resources and so very big class sizes and so on. So, there's this transition that's happening but it's not happening quickly enough and between these two problems, we now see university graduates who are exiting university and having great difficulty finding jobs and we also see private sector actors who are saying we can't find enough qualified people right so there's this gap that needs to be bridged. And institutions like Ashesi are trying to show the way in how we address both of these problems.

Otto Chabikuli: Yeah, I just I just wanted to get to that I think when I look at the higher education that's in the next 15 to 20 years the biggest challenge will be one of harmony. Harmony between the offerings of higher education, the industry, society and the world pretty much, because we're in the knowledge economy, and that's where it's going to be even more pronounced in the next 20-25 years. Competitiveness will depend on how much you can play in that particular environment and for several years or decades, higher education has been developing maybe not in harmony with what is needed a societal level. The evolution of society, the demand of society, particularly now that we're going to have this youth bulge which will have access to technology, information, that will have aspiration for a better life. Higher education will be looked upon as one of the solutions to the societal needs but also there's going to be some movement at the level of the industry, at the level of the economy, moving from maybe extractive industry to maybe we might not even have manufacturing. We may just slip into, depending on how technology will be absorbed on the continent, in a

different level, so higher education will have to adopt at those multiple levels to remain relevant. That's a big challenge for us.

Alejandro Caballero: I would maybe just add a couple of ideas. Now on access, I think there's still needs an issue of affordability in in in sub-Saharan Africa higher education is expensive. It is expensive for the for the average income of much of the population and if we still have gross enrollment rates that are single digit in many countries, I mean expanding that is difficult in the absence of support systems also that help cope with the affordability issue and obviously we talk about financing, lending and a number of things that I think would be beneficial also in the Sub-Saharan African context.

Second point would be around quality. I think building national quality assurance systems is still an objective for the region. I mean some countries are doing an excellent job on that front. I think in Ghana for instance there's been significant progress and development, but we still believe that institutions need to go through the national systems to accredit themselves and to be able to be part of this continuous improvement process. And we're very happy to hear that Ashesi, an institution that we've supported over the past few years through two different loans, has actually received the charter status in Ghana. And obviously they more than deserved this a long time ago but this is a significant achievement. It's some legitimate legitimacy from the national system that is important, and we would like to see many institutions going through these processes also going forward.

I would maybe add something on the relevance side. I think labor informalities are a reality in Sub-Saharan Africa and you need to prepare graduates for employability. I know obviously there's the whole issue of high youth unemployment in many countries, but a class structure which is quite informal. And where they creation of wage-paying jobs is a need for the system. Knowing how to prepare students in that context also taking into account the whole future of jobs agenda that Romina was alluding to. How to prepare people for a world that does not exist, in a context where there's not sufficient paying jobs is a big issue. I would add maybe a final point on regulatory system. We think regulations are important also for systems to develop. And in sub-Saharan Africa, as it happens in other regions of the world, regulations have not kept up with development of the sectors. We see realities in Sub-Saharan Africa higher education like for-profit provision. In some countries we see the rising online education, distance education models. All of this is really not addressed in detail in the regulations. There's more of a laissez faire approach in many cases and actually these things are not being forbidden in any way. But I think regulation also needs to look at the different realities and the new higher education landscape.

Romina Bandura: Thank you. Now, let's turn to more specific questions on what you're doing at any of your institutions. Patrick, you founded Ashesi in 2002, that's been 16 years. It's a private nonprofit institution in Ghana. Tell me how this dream of funding your own university came to fruition and what do you think Ashesi brings which is different in the Ghana context?

Patrick Awuah: Well I was working at Microsoft at the time when I decided to return to Ghana and help with development. And initially I thought that I would start a software company, because that was the industry I was in. But I went to Ghana and realized that the way computer science was being taught and engineering was being taught was not very hands-on or practical and so the human capital question was a difficult one. I settled on education and higher education in particular because following my decision, that okay maybe not a software company, had to ask what the problems are and look at different problems and ask for each of those problems, "Why is this the way it is?" And if you ask "Why?" enough times we would always settle on leadership as a fundamental issue. So, leadership in terms of people in positions of influence who were accepting the status quo or were not solving problems, or didn't expect problems to be solved, and some cases where there was just corruption. And so, we ended up saying that, look, if we could educate the way future leaders are educated, then we can change the country. And at the time I was asking these questions, only 5% of college-age individuals in Ghana went to college. So that almost by definition what happened in our university classrooms was a predictor of what would happen when these 20-year-olds were in their 40s and 50s. They would be running the country and so this is how I got to the conclusion that I should get engaged with higher education and that I felt I would be able to pull together the resources and get the people to join me that would that would enable us to do this

***Romina Bandura:* And just to follow up: What types of careers do you offer? What do you think is different in your university versus the rest?**

Patrick Awuah: Well, the big difference with Ashesi is that we start with this purpose that we're educating people who should be the people who will transform a continent and that our university should be about educating ethical, entrepreneurial leaders. And so, as we designed our curriculum we looked at critical thinking as really fundamental, the ability to communicate in powerful ways. The ability to solve problems, to tackle problems that are ambiguous, and a very deep ethical philosophy for the future leadership of Africa is important. And then we went to the private sector, and we did focus groups with business leaders, military, faith-based organizations and asked them, "What should this new university do?" And we took all of that together and ended up with a curriculum that blended the liberal arts with STEM and management. And so, that is Ashesi has done. We have this curriculum that gets students to study the humanities, social sciences, design thinking, and leadership and then they're studying a lot of math, engineering, and business.

***Romina Bandura:* Just following up on Alejandro: I wanted to ask you about the private sector participation in this area. IFC is the private sector arm, and now you're leading the health and education division. Do you see appetite for investments to go into higher education? How do you see the landscape changing in Africa in this regard? What does IFC do in this area?**

Alejandro Caballero: Africa is part of the global trends in higher education and that's clearly happening and has happened for some time. There's a lot of interest in Africa higher education. There's a number of entities trying to develop platforms, in some cases with a cross-border approach. We see some entities that are for-profit, that are sponsored by private equity funds

that are trying to play a consolidating role in the market. We've seen examples with emerging capital partners, with [MARIFA](#). There's some North African platforms like the ones sponsored by [YACTIS](#) with _____ ([CANNOT MAKE OUT 18:04](#)) universities that is starting to expand into Sub-Saharan Africa. There's some South African groups and we're very happy to support ADvTECH, one of the leading South African education companies that operates both schools and universities. Our theme for our collaboration with them was to expand into East and West Africa to through a strategy that entailed mainly acquisitions and partnerships with higher education institutions in the region. Obviously, as I mentioned earlier, we're very happy to support Ashesi, which is an entity that has potential to bring lessons learned to the region. Not only to Ghana but to the broader region, this liberal arts approach to education promoting 21st century skills: critical thinking, entrepreneurship, employability. And that's a type of model that I think we would like to showcase and see more Ashesi's happening in different parts of Africa.

And also, IFC. We've been trying to promote education technology investors. We've supported Andela, which is a boot camp concept trying to leverage the skills gap between Sub-Saharan Africa and large technology companies like Microsoft, Google and the like placing top African talent in these companies for an extended period of time, about 4-year training. So, I think that's a model we'd like to leverage more. We're also establishing some awards for ed tech companies that are innovative and have potential to bring new approaches to the African education landscape and investors are starting to see that Sub-Saharan Africa is a very promising market, as they're operating in other parts of the world.

***Romina Bandura:* Thank you. Otto, you are Director of Global Health, Population and Nutrition at FHI 360. You also have a very strong specialization in education. How is FHI 360 working in this space and how do you see the intersection between health interventions and education and learning trending?**

Otto Chabikuli: Thank you, Romina. We're coming from the perspective that higher education, by the time a young person gets to higher education, what you dealing with his mind that you want to mold, that you want to develop, that you want to make creative and entrepreneurial. And there's a question of readiness. So, the children who are entering education today they were born maybe 17-18 years ago. And a lot of things happened 17-18 years ago that will determine whether they're cognitive development has been optimally attained. And that is where things like nutrition comes to the fore. There's a lot of evidence showing that the first thousand days from conception to the second birthday is where your development as a child is established. And if you miss that window, you have impairments that will last for the rest of your life. So, working from a nutrition perspective, just look at the statistics. In Africa today, about 15 million are stunted under the age of 5. That is about 40% of children under the age of 5 are stunted. And that is a condition that you cannot reverse anymore. We're talking about the future. In about 10 years they'll be entering college. And they've already got this disadvantage because they cannot optimally utilize their intellectual capacity. FHI 360 working with USAID under the Lift Project and food and nutrition technical assistance, those are the kinds of interventions, bringing the mothers and children who are going to be born today, and prepare them for the future when they enter higher education by providing advice, tools, the necessary

counseling so that the children who are born and growing on the continent of Africa are able to attain their full potential by the time they get to higher education. So, that will be one component of the work we do. We also have an intervention called Alive and Thrive that is funded by the Gates Foundation. Along the same line, there is a strong focus on breastfeeding as well.

But the other aspect of our work deals with young adolescents, particularly pregnancy among girls. 11% of pregnancies on the continent, as we speak are among girls aged 15-19. And that is a big barrier for their progression. So, we do a lot of intervention in family planning and making accessible contraception so that we give opportunities to these young adult girls to fulfill their equal potential to boys. But thirdly, FHI 360 also does a lot of research. A whole range of research in partnership with universities in the US, and in Africa. And it really ranges from operational research to implementation research to clinical trials and we even do a lot of clinical trials with pharmaceutical companies. And that proximity with tertiary institutions help us to increase the scientific productivity of some of the tertiary institutions on the continent.

Romina Bandura: Otto, you mentioned girls. How have women's careers changed throughout these 15 years in Africa. With the choices, the opportunities they get in higher education. Have you seen a positive change or what are the things we still need to work on?

Alejandro Caballero: When we look at statistics in different countries, there's fairly even enrollment leveling at some levels of education, but we continue to see huge disparities in some disciplines and I'm sure Patrick can talk a little bit about his engineering programs at Ashesi and what's the reality there, but women in science and engineering is an issue worldwide and continues to be an issue also in sub-Saharan Africa. And I mean progressively, some institutions in our appraisal process, when we have this discussion and we ask potential new IFC partners, what are they doing in this dimension. Institutions are becoming much more aware that this is an area that they need to pay attention to, but it's still I think that there are still significant issues on that front. And again, we're trying just by mainstreaming some of these questions into our standard appraisal discussions. We can have a sense of whether there is growing attention to this issue, I think. But obviously there's a lot to be done.

Patrick Awuah: Alejandro is right that we see gender equity or balance in certain disciplines but not in others. In the sciences, if you look at medicine you see more women than in computer science or engineering, and this is something that we are paying a lot of attention to. Our engineering program is now 40% women. Four years ago, we started a program for high school students. During our summer break, we bring them to campus and put them through a program in engineering and robotics and Entrepreneurship and we were very clear that 50% of those kids have to be girls and so we built this pipeline of getting boys and girls working together in engineering and the word goes back to the high schools when these kids go back to the high schools about how much fun it was and how capable they were of executing. So, this is how we're dealing with it. But Alejandro is right. If you go to the law school or the medical school or business school, you're going to see more gender balance occurring than in engineering.

Romina Bandura: At that mention, I was just back from Nigeria and one phrase that struck me and going back to Alejandro's point on employability: An expert told me that Nigeria has been producing decades of unemployable youth. So, sometimes youth enter university, but they leave, and they can't find jobs for years and at the same time you have big vacancies in lesser levels of jobs such as construction, etc. But youth's aspirations are also against those types of jobs, in construction or agriculture. How do you see the brawl of the private sector in signaling types of skills that are needed and the types of professions that young Africans, I'm not saying should aspire, because you know you have your own strengths and your preferences, but if the market is talking, is there a roll for companies in higher education? Second question is: What about technical and vocational training? Is that a thing in Africa? Do you see a growing market for that type of education?

Patrick Awuah: I'm glad you used the word signaling. I think that the way private enterprise should engage is first of all be proactive about engaging the universities. We go to the private sector and invite them onto a corporate advisory council to give us advice. We send students to internships and work. We're proactive about going and getting feedback from them. Not all universities go to the private sector, but I think it can be a two-way street where the private sector can come to the universities and give feedback anyway.

The second thing is I think a really important signaling mechanism: wages. If the private sector is paying very low wages for vocational jobs, that signals to people who have aspirations to do better that they should be seeking other kinds of jobs. And so, I think we need to pay attention to how we're signaling to young people what promising careers are going to be. And on the one hand, you got the vocational jobs that really need to be filled, and then there's also some very some high-level management roles that are not being filled locally. They're being filled by expatriate staff and it is really important that industry is engaging universities and technical universities to educate people for those roles but there that has to be that conversation.

Otto Chabikuli: Before I answer that, I wanted to add on the question of girls that it is not only improving access at the undergraduate level, but there is also question of role modeling even among faculty, among senior staff. There aren't enough women in Africa who have attained [professionally at] a very high level. I mean that, we should, could get more. And that will encourage girls to go even further. On the question of employability, I agree that the dialogue between industry and higher education has to happen, but also the government has a role to play and there are some good examples in South Africa. For example, it started by the government having a plan, understanding where the gaps are and that could inform things like immigration processes: What skills do we allow in the country so that we protect the jobs that could be accrued to the local population and in South Africa they've done a good analysis of that. And they even went to the extent to give tax breaks to companies that provide internships to some of graduates who are sitting out there and still need some experience. That becomes a critical: You have a degree, you finish your education, but before getting a job they say you need experience and that is a first hurdle. How do you get experience before you get employed? So South Africa has created an enabling environment for companies to take on some of the young ones to take on that internship which will kick start them into a job.

Alejandro Caballero: I think that the region needs to strike a balance between supporting traditional industries and obviously agriculture, things that have to do with civil works. I think Romina, you were talking about that. Obviously, these will be big generators of jobs in the future. But also, preparing the new generation for the world of the digital economy and this in some cases might sound ambition, in some cases it's a reality. There's a number of initiatives right now, and the World Bank is spearheading some of this, trying to leverage the opportunity digitalization brings in Africa in particular for the potential to leapfrog traditional technologies and get ready for a new world where there will be new jobs being created in areas that have to do with this digitalization agenda. Be it traditional coding, and jobs related to engineering and so on, but also there's a need for bringing up the general skill level of the student population to perform other types of jobs that will have a digital component in any case. IFC is starting to see employability as a big area for the region and we have here _____, who's the head for the head for the employability initiative within the IFC and the idea is to work closely with higher education institutions in developing a new agenda for employability in trying to strengthen and support structure for employability. Thinking about employability not only in traditional ways but also embracing entrepreneurship and also a whole new work agenda that we're trying to promote, and we have a dedicated initiative on this front that has been launched with the goal of supporting higher education institutions through advisory services.

Romina Bandura: So, Alejandro, talking about technology: How do you see technology impacting higher education? Are online platforms going to be important players in the future? What challenges remain? Rural access, internet plans I've heard are very expensive. So, are online platforms, online learning, books going to be key players in the future?

Patrick Awuah: At Ashesi, the way we've engaged with online platforms has been more with a blended model, so there's some courses where students are getting content online before they come to class. There are instances where we use digital platforms to really enhance learning in a way that we weren't doing, even say 5 years ago. So, for example, a student studying statistics at Ashesi today has access to really large data sets and is working with real data and formulating questions that they're trying to answer out of that data, cleaning it up, doing analysis, and etcetera. So, the quality of the learning has changed because of access to technology. We have an online learning management system so that the way students engage faculty, so there's engagement that happens in class, but also engagement that happens after class. Content is posted online. It's easy for students to have access to information to have conversations with each other both in the classroom and online. That's how we're using this technology.

Alejandro Caballero: There are two angles to technology. One angle is new, innovative EdTech companies that are starting to see opportunities and we start to see a lot of energy an action happening in the sub-Saharan African region and I mean again, Andela is an example of that and some traditional ones like Coursera have been targeting the region and have a relatively large user base coming from the region already. But those are more like pure EdTech models through either pure online or traditional models leveraging technology very intensively.

The other area where we see significant opportunity, and I think it goes to Patrick's point, is that the digital transformation of more traditional face-to-face providers, no I mean the universities that are starting to adopt top technology, that are using I mean introducing learning management systems that are offering a traditional face-to-face course, maybe one hour or two hours per week of online, I think that's also a big area and that's an area that we would like to do to support as well and I mean any university that we talk to there's things happening already on this front so I think either through pure models or through the digitization of traditional providers that increasingly develop this type of tools we see great potential for the reason in particular in the context of a very large access gap where we're still single digit in terms of gross enrollment rates. I mean online has significant potential. There's definitely issues, difficulties with internet connectivity in cities outside the main metropolitan areas. That's a big issue still. There's quality issues.

Let's not forget the stigma that still prevails against distance education and maybe for good reasons in some parts of the world and I think Sub-Saharan Africa is not different from that. I think that there is regulatory barriers because this has not been properly regulated but the private sector is moving faster obviously than regulations. There's models targeting the region now even from outside Sub-Saharan Africa like University of Liverpool in the UK or Unicaf in Cyprus that are developing an offering for Sub-Saharan Africa through distance learning. Some of the South African players like [EduCorp](#) and _____ are private players that see got huge opportunity in expanding into the rest of Africa through online and blended models and maybe a typical convergence, more hybrid and blended rather than pure online because I think the region probably needs this and students in the region benefit significantly from having some face-to-face component as well. So, I mean this natural evolution is much needed if you want to also improve quality and make sure that they offering in distance education is not that different from a quality perspective from the offering in traditional face-to-face programs.

Otto Chabikuli: I think if history is anything to go by when technology starts moving forward it hardly ever goes back. So, it's not really a question of whether technology will be applied, but in my mind, it's a quest of how fast. And the determinants will be accessibility to internet, bandwidth once we have cable fiber optic high-speed access on the continent. That will speed up adoption of technology. But also, there is that component of credentials. So, if one takes up a course by distance learning and doesn't have the credentials that will give you the job, that would be a hindrance. But if you do get the credentials equivalent to those who follow the face-to-face, that will be a facilitating elements to adoption of technology. As implementers of international development programs, we see it already happening. 10 years ago, almost every in-service training used to happen in hotels - expensive, travel per diem, and so on, but increasingly people are using WhatsApp groups, Zoom, Skype to deliver the very same in-service training that we used to deliver 10 years ago at a much cheaper rate. And I think that it will be part of the DNA of higher education in the future in Africa.

Romina Bandura: I have a final question which is two questions in one. So, for each one of you: What keeps you up at night about higher education in Africa and what gives you hope?

Patrick Awuah: The thing that keeps me up at night is that we have this demographic bulge happening in Africa and there is this real urgency in making sure that our higher education systems are educating people who will create the economic environment and the social environment for that economic bulge to be a good one. We obviously need more access and we need more quality in higher ed. The thing that gives me hope is that when we think about scale, scale happens from two things really: the government and the market. And I look at Ghana today, actually this is not Ghana but as you look at Nigeria and Kenya, you see a lot of energy in higher ed around government engagement and private sector engagement in terms of the numbers of seats coming online. So, in Ghana today there are now 80 private universities that are accredited and the public universities 30 years ago there were really just three. Now there are 10 public universities and 8 technical universities. There is expansion happening and it's good to see that expansion happening. If we can do it with quality, we will catch up and we will meet the need. So, that's what gives me hope.

Otto Chabikuli: What keeps me awake at night is just the impatience of the youth. We're going to have a lot of young people, we already have a lot of young people eager, hungry for knowledge and advancement. And they want education today, not yesterday. They won't wait. And if they don't get it on the continent, they will walk through the Sahara Desert. They will swim if they have to swim across the Atlantic and they'll get away. They'll go where they feel the future is. And then the government and the private sector have to react very quickly, and traditionally higher education has been extremely slow in reform. To change curriculum, I think in South Africa used to take us about 3 years of negotiation and talking and so on. I don't think that the youth have the patience for that. So, we need a private higher education that is very nimble and very quick to adapt to the demands that are coming our way. And my hope is the future, again, it's the very same youth. I think that they will get what they want, because we have no choice but to give them what they want. And when they become leaders they'll be much savvier than the leaders that we have today. They will adopt technology much faster than some of our leadership on the continent and that is my hope. It's in the youth.

Alejandro Caballero: I'm thinking in terms of thoughts and I'm thinking about the sector. I think it's how you incorporate lessons learned of the international development experience and the development of higher education sectors into the development of African higher education. I'm just thinking about the way some education systems evolved in Latin America. For instance, the case of Brazil, where today 75% of the sector is private and that helped significantly expand capacity in a way that's maybe very different from other markets. So, I think making sure that in the given where the stage of development of African sub-Saharan African higher ed we can incorporate some lessons learned from other realities, from other markets and make sure that we don't make same mistakes as in other countries and we adopt ways of development that can be relevant, obviously respecting the homegrown nature of the sector and the local particularities which are very important.

I think in terms of hope, by being part of my discussions with many institutions in the region, I tend to see that many of the global trends that we see are happening already and I think I

mentioned this, the importance of new segments like working adults, which is starting to be relevant. I mean the whole progressive growth of online education, even if starting from a low base, consolidation is happening in some markets. New actors like private equity are coming into the space, interesting cross-border activity which is something that maybe we didn't see a few years ago - all of these things already happening in Sub-Saharan Africa higher ed and I think it gives me hope in terms of seeing that the development of the sector is starting to happen. A lot of things need to be done and there are still significant challenges and issues, but I'm hopeful that that we will continue to see this very strong development going forward.

Romina Bandura: Thank you. Now we have about 15 to 20 minutes of public Q&A. There is a mic at the back and I'm going to take a round of questions.

Audience Member 1: *I'm Tiagee Sian Blythe, I work for the Congressional Research Service. Mr. Chabikuli actually kind of hit on the question I was going to ask Mr. Awuah. And that's regarding accreditation, particularly international accreditation for the university. I looked it up online I was quite impressed with what I saw. We have a lot of highly educated African cab drivers around here and it breaks my heart. I would hate to see that happen for Ashesi students. The ability to be able to take that education, go abroad and come back home is incredibly important. But it has to be internationally accredited. They can't land in the United States or Europe and their education not be respected. I want to hear from you about how your university is dealing with that.*

Patrick Awuah: I think that the most important accreditation, if you will, is just performance of your output and we actually have a goal that most of our students and graduates stay in Africa. So, we work very hard to get them placed on the continent in really good jobs so that they don't feel a need to leave. But we also have a goal that they will be globally competitive, and they will be helping run globally competitive companies. And for that reason, we do care about whether our students, our graduates will get placed into graduate programs outside of Ghana and whether they would qualify to get jobs outside of Ghana. And 10% of them do. We find that our graduates are not having problems getting placed in universities. Mostly they're going to the UK and the United States, but they're going to canonical, well-known, very good schools like Oxford or University of Pennsylvania to do master's in computer science or business management and so on. And we see global companies like Goldman Sachs, Bank of America Merrill Lynch, Microsoft, Amazon, Amazon Web Services recruiting from Ashesi and that those graduates who go to those companies are actually performing at the level that their peers from around world are. And I think this is the most important thing.

Otto Chabikuli: I couldn't agree more, and that's where we at FHI 360 focus. We have programs focusing on Early Childhood stimulation. We have programs that are targeting literacy and basic education on the continent. And again, it is what you get after 15 years of life, that is what you'll have to work with at higher education. If you get good material, you'll get optimal output. if you don't have good material because you neglected the beginning, then you'll struggle. You'll still have results, but it's not going to be optimal results.

Alejandro Caballero: I also agree that we need to work at all levels and the World Bank Group is doing very big working basic and secondary education also early childhood development in the region. I would maybe mention something around technical, vocational education and training, knowing how important this is in many countries and how this might be an agenda for Africa going forward. Developing not only obviously the tertiary level, technical and vocational but the upper secondary as well. What I would like to see in a few years is maybe institutions of relatively large size emerging in the region. It's a very fragmented space. We've tried to focus as IFC in supporting technical education institutions, but again, the size is still fairly small.

There hasn't been a consolidation process that we see in traditional universities and we're looking. For instance, in Chile we had an institution that we were supporting with 100,000 students. I haven't really come across anything even close to that in the region. But I think that's typically the type of scale that you need to also make sure that you have education of quality and something that can really have a system effect at the country level. So, I think that's an agenda. A lot of support for this needs to come from public sector as well, but private sector needs to be ready. And I think at least from the private sector perspective, maybe the easiest way to do to expand into this segment is for universities that achieve certain scale, I'm thinking Mount Kenya University in Kenya or universities that are already at 40,000-50,000 students size, that they can start to go down market and venture into the technical, vocational space. We've seen that happening in a lot of countries like Brazil where many of the institutions actually come from the university space and they go into to the technical, vocational space and operate a little bit at that intersection. But we haven't seen much of that happening in sub-Saharan Africa.

Audience Member 2 (Richard America): Richard America, Georgetown University Business School. Hello Patrick, I visited you some years ago, and you went to the Haas School at University of California Berkeley for your MBA I taught there many years ago - Go Bears! A two-part question: governance at the board of trustees' level. It's probably not where it needs to be at most universities in Africa. The boards of trustees need to get stronger and if they perform at the highest level, a lot of other benefits follow throughout the institution. So, what is happening to improve the performance of trustees who are very often cronies and rubber stamps and need to be replaced? And related to that is private individual philanthropy: that is Bill Gates, George Soros, Oprah, who can write a check for \$100,000,000 for your business school and make it world-class almost overnight. That's how US business schools got where they are - an individual gave them a big chunk of money and made it possible for them to excel. So, what are you doing to tap those kind of people? Billionaires in Africa funding business schools and engineering schools.

Audience Member 3 (Sabrina Robinson): Good morning. My name is Sabrina Robinson. I'm a summer advocacy intern at Malaria No More and I've spent considerable time in both Ghana and Nigeria, but I would say more familiar with the Nigerian education system. And I think it's after your college experience that you have to do some sort of summer service. And to the topic of signaling earlier, most students I know aren't really interested in doing it that much and it's also usually not on the track of what they would like to do. So how do you see that

sort of program kind of intermingling with what Mr. Chabikuli said earlier about the government having to really play a part in helping students find their way? Thank you.

Patrick Awuah: I can tell you we have two boards for the trustees. The foundation here in the US, and a board of directors in Ghana. And both boards are working on fundraising. The US board of trustees is further along in its ability to raise money here, but we're absolutely looking at two things for local fundraising. One is making sure that we're cultivating our alumni because that's a long-term future for fundraising but also connecting with corporations and high net-worth individuals and we're starting to see the interest in funding scholarships for students to come to come to Ashesi. So, for example, Jim Ovia who's the founder of Zenith Bank in Nigeria just did a big scholarship award for students from all over of the continent to come to Ashesi to study. So, it's going to take us time to build it all out. I wish Soros and Gates were here to ask them to give me a hundred million dollars. But you're absolutely right. I think that when I look at international development in the US's role around the world, one of the strongest examples of really long-lasting impact is the Indian Institutes of Technology that were established with very strong US support. And this was a real intentional effort to build human capacity in India, human capital in India. And we need that in Africa as well. So, I completely agree with you that the boards need to be stronger. With the public universities there has been sort of a history of depending on government funding and government-appointed boards and so on. There needs to be a shift there to really look at how they raise funds from their along alumni body. I look at some of them and they're 60 years old and they have alumni who are quite influential in our country and I wish I had their alumni body. So, I think that there's real opportunity there to maximize Capital inflows into higher ed.

Alejandro Caballero: I would just a couple of thoughts on that. First of all, I think Ashesi does a fantastic job on this front in the context of the region and the broader context of higher education in developing countries. I was extremely impressed when we did our due diligence process by the depth of some of the relationships that Ashesi has with donors, obviously many of them US based, but increasingly aiming to be more global on that front. I agree that there's a lot of work to do to continue to be done on that front, but I think Ashesi's starting from a very good base. It's a unique model. I would tend say that we would like to see more of this happening. I think it's a great suggestion. And we would love to see more donor engagement, in particular in capital development and capital-intensive projects in higher education because that's much needed and as you rightly alluded, some of the big donations like Knight for Stanford have really taken institutions to the next level. But to be frank, that's very hard in developing countries. It's a very interesting agenda that we try to promote. Even through our employee ability tools there's significant analysis placed on alumni relations and how alums can contribute to an institution but in general we find it or something hard to do in the developing country context and it would be great if we can spread the word and maybe get to get the word out to more net-worth individuals that investing in higher education is a very valuable investment, and that many institutions in the developing world need this type of support to really kick off their process and be able to set up infrastructure of quality that is equivalent to that in countries like the US.

Patrick Awuah: Ghana has a similar system. We have a national service requirement for all Ghanaian citizens who go to university, whether it's a public or private university, to do national service for 9 months. And the national service placements can be going to work. Being placed by the National Service Secretariat to a government agency or school or somewhere in the country, or they could go work in industry but then the company pays the National Service Secretariat. So, students do both of these - they will either get placed by the National Service Secretariat or go work in the private sector. I think of all of those engagements as useful. So, for us, we have our students already working internships, we already have them do community engagement projects in rural villages and urban slums and so on. And it's all part of getting them to really understand what their country looks like and getting them to see that they can make a difference to people. And so, for them to go do that for an additional 9 months with the national service program is just fine. And we see our students going through that and they get back and get placed in whatever job they want. So, I don't see that there's a problem with it for students to do it. The more important thing is if they go get placed in a government agency where there isn't a lot of work to do, that's really unfortunate because you take a young person who's all charged up after school and go sit in a place and do nothing. But if they're getting placed teaching that's great.

Otto Chabikuli: In South Africa it is slightly different. That is the system I know the best. We have a community service. Every graduate in critical professional areas like nursing, the medical field, pharmacy, are compelled to do one, sometimes two years of community services placed in an area of need. So, you are not really taken out of your professional practice area, but you are just taken out of your comfort zone, your mother's home. And you go and spend two years in the rural area with much less amenities and that is where a lot of young professionals complain a little bit. We had incidences where a young graduate, nurses or doctors put in rural areas where there aren't any senior doctors to mentor them. So, you're just dropped into the deep end and you have to swim pretty much. And for some people they've advantage to build they're confidence. And some are traumatized and say never again, I won't do this again.

***Romina Bandura:* Unfortunately, we've ran out of time, but I want to thank our panelists. So, please join me in a round of applause and thank you for coming.**