## AAIG 2021 SUMMIT WEBINAR 2 TRANSCRIPT - DR ALBERTO FENIX

I would like to greet Evelyn Songco, the president of the UST Alumni Association; Dean Anthony Vasco; and to my fellow speakers: DepEd Undersecretary Tonisito Umali, TESDA Deputy Director General Rosanna Urdaneta, and our DTI Secretary Ramon Lopez. My fellow speakers are all my good friends. An paraphrasing the memorable line in the movie Casablanca, I would say that you have rounded up the Usual Suspects to be the speakers of today's forum. And I'd like to say good morning to all participants of this forum. I hope to do justice to the topic assigned to me. I have a brief presentation and I don't even have a PowerPoint. Being a businessman I strive to be sparse in words but heavy in content. I'm currently one of the members of an education task force convened by the Philippine Chamber of Commerce and Industry and we are in the thick of a work to come up with recommendations to improve our education system to meet the demands of the current, of the 4th Industrial Revolution. The CDF (Comprehensive Development Framework) paper to be titled "Innovate Education, Transform Our Future" will be published in booklet form and available in November 2021. According to recent McKinsey report, and I quote: "The fourth Industrial Revolution which started in the 2010s is causing the lines between physical, digital and biological realms to blur. From artificial intelligence to self-driving cars, robotics, 3D printing, quantum computing, virtual reality and more, are already upon us." These technologies are reshaping the world, or to put it in another way, disrupting our lives. It is disrupting the world of work, eliminating metatarsal jobs but creating new jobs requiring higher skills and knowledge. Technologies made possible by the ever increasing availability of cheap computing power, storage and connectivity are are operating many routine tasks. Computers are increasingly taking over bookkeeping, clerical work and repetitive manufacturing jobs. At the same time, many jobs are being created that require creativity and problem-solving skills. So now we come to the topic of my talk. What are the challenges that Industry 4.0 brings to higher education? The answer is that higher education needs to move beyond existing approaches. It needs to restructure and utilize new methods of teaching and learning. Although our topic is limited to higher education, let me state that this process of restructuring higher education must start with restructuring basic education. In basic education, learners should acquire the 3 R's: Reading Writing and Rithmetic. In class today we must digital literacy. The learning should be a circular staircase with increasing complexity as the learner moves from grade level to the next grade level. Learners need a strong foundation in literacy and numeracy. You cannot code if you cannot do math. You cannot communicate effectively if you cannot read or write. You cannot innovate without knowledge. Higher education should continue this circular staircase with still increasing complexity as we give the learners that skills, competencies and capabilities needed in the world of work. The way education is organized and structured today is still the same as it was centuries ago. Because even date it back beyond 1620 when the University of Santo Tomas was founded, education was bricks and mortar.

In a location, teacher and students in a classroom, and what was being taught and learned was mostly dependent on what the teacher knew. I dare say that if you still see this structure in a majority if not in most educational institutions in our country, to me education is absorbing information into our brains and accessing that information when we need it. With the technologies I previously mentioned, information is more and more digitized, stored and made accessible by electronic means. The early version of this is Google. When we need to look something up, we research using Google. Before, we would go to the library or use the more concise encyclopedia. The digitization of information makes possible the simultaneous provision too many, the knowledge when we need it, where we need it, and customized for what we need it for. The next step will be augmented or virtual reality, where one can experience and learn touring the canals of Venice without going to Venice; in learning how to operate a complicated machine, an early example of the latter is the flight simulator where pilots can hone their piloting skills. There will therefore be an rise in online education. Here we must focus on the most urgent need on education  $\rightarrow$ internet connectivity. We have to put in place connectivity with faster bandwidth and with access available to all Filipinos from all over the country. Connectivity is essential to modern Life so much so that I think it is a public utility and I believe it should be made available for free. This gives a future education, however, makes me wrestle with what I believe is just as important which is that as social persons, we need interaction with other persons especially with our peers. My own prediction is that education in the future will be hybrid with online learning at home or in other places but with period spent in bricks and mortar institutions for person-to-person interaction. Therefore in addition to having universal and countrywide connectivity, our educators must search for technologies that transform our education system. And also in addition, our educational institutions should fill to other roles. One is research and development of new technologies, products and services. This is woefully lacking in our Philippine educational institutions today. The second is to be a stimulus for the growth and development of the communities around it. Such as setting up business incubators, reskilling and upskilling programs, etc. We have been reading and hearing that the Philippines is a laggard, not only in its economic development but also in many other metrics of which education is one of them. I believe our being a laggard in education is at the core of our country, being a laggard in development. It is imperative that we re-structure our education system immediately, we cannot stand still. We must redouble our efforts to shorten the gap or even overtake the other countries. How to achieve this, this is what the PCCI education task force is currently working on to come up with recommendations to innovate education, transform our future. Thank you very much for inviting me to speak the day today. As I said earlier to the early people that came in, I laso have connections to the University of Santo Tomas. My mother is an alumna with a Bachelors Degree in Education and she went on to really become and educator, establishing the Teacher's College at Notre Dame University in Cotobato where

she educated and trained thousands of teachers in that school. So again, thank you very much, good morning.