

FUSION

Papers read at FUSE assemblies

(June 2017 - October 2018)

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Preface

This is the twelfth issue of FUSION, the journal of the Foundation for Upgrading the Standards of Education (FUSE), which serves the purpose of compiling the talks given during the General Assemblies of the organization. There is inevitably a time lag between the presentation of papers by the speakers and the publication of FUSION. This is because it takes roughly one-and-a-half to two years to transcribe the talks, copy-edit the transcripts, lay them out, proofread them, and finally print the volume. Inevitably, some of the talks are time-bound, and the concerns expressed therein might have been overtaken by events. On the other hand, many of the talks continue to be relevant because they deal with important issues and resolutions. And of course other talks deal with timeless and enduring matters. Therefore, the journal is useful as a form of documentation of important concerns. For this reason, FUSE endeavors to publish the journal regularly even while acknowledging the time lag.

This volume covers the period June 2017 to October 2018. All the talks given at the General Assemblies during that period of time are included here, with the exception of two talks. The presentation of Ms. Jeanie Duwan, Assistant Cultural Affairs Officer of the US Embassy, on “Learning and Teaching Materials/Programs from the US Embassy” given on September 25, 2018, is missing here. The reason is that, unfortunately, the FUSE recording machine malfunctioned, and the Secretariat was not able to document her talk. We extend our deepest apologies to Ms. Duwan.

Another talk given during that time not included in this volume is the one on “Transcendental Meditation and Optimizing Brain Functioning”, given by the husband-and-wife team of Dr. Policarpio Castillo and Dr. Josephine Castillo on March 20, 2018. That paper will appear in another volume of FUSION. This follows the decision of the Publications Committee to separate the non-education/non-academic papers which focus more on FUSE members’ personal or social development. Thus the talks given at General Assemblies on depression in the elderly, financial literacy, caring for one’s sight, etc. will appear in another volume, under another editor.

There was no unifying theme for the year's talks, and thus the papers are arranged in the order they were given at the GAs. As in the previous two FUSION volumes (2016 and 2017), the papers include the open forum following each talk because it has been shown that the questions and answers in the forum help clarify or deepen certain points in the presentation.

It can be said that there is something for everybody here, whatever one's interests or involvements may be. Sta. Maria explains her school's approach to helping children appreciate the importance and challenge of STEM. Computer programs and applications to assist teachers to make their lessons more interesting and memorable are introduced by Segismundo. Hidalgo's talk provides practical pointers for teachers to be able to use constructivism in the classroom. School administrators and non-governmental organizations can learn how to assist public education by availing of DepEd's "Adopt a School Program" discussed by Ballesteros and Soriano.

Two companion pieces show the way that DepEd is moving forward to develop its cadre of teachers and to modernize as an organization. Gonong, as head of the group that prepared the Professional Standards for Teachers, delineates how a new entrant to the teaching profession can move from Beginning Teacher to Proficient Teacher to Highly Proficient Teacher to Distinguished Teacher. Pantoja, as head of the human resources group of DepEd, describes the process by which core competencies and professional standards can be embedded in the human resource system of the organization.

The Philippine Qualifications Framework is a very important document and Veja sets out the different descriptors for each qualification level in terms of knowledge/skills/values, application, and degree of independence. He also describes the process by which his committee has tried to reference the PQF to the ASEAN Qualifications Reference Framework.

For faculty and administrators and anyone involved in higher education institutions, several papers here provide valuable information. When

Bautista-Rodas gave her talk in June 2017, universal access to quality tertiary education was just a bill; the law is now being implemented and it will be instructive to compare the provisions of the bill to its current implementation. Tabora presents the need to continually commit ourselves to quality assurance in tertiary education. Yee offers facts and figures on Philippine higher education and turns his laser focus on teacher education and highlights several areas requiring urgent attention. Graduate students looking for topics for their master's or doctoral papers will find a treasure trove of material here.

We would like to thank Ms. Marjorie Aduan for doing the essential work of transforming talks and slides and open forums into the articles in this journal. Perhaps the most difficult part of the work was transcribing audio recordings that were not optimal in quality. If some errors have crept into the transcriptions, we apologize for the errors.

We look forward to the succeeding General Assemblies and the next FUSION volumes that will help FUSE fulfill its mission of upgrading the standards of education.

Dr. Ma. Lourdes S. Bautista
Dr. Dionisia A. Rola
Editors

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Universal Access to Higher Education

Dr. Dhanna Kerina R. Bautista-Rodas

President, Philippine Association of Colleges and Universities

President, University of Baguio

(June 27, 2017)

Good morning. Thank you for this privilege of being invited to discuss with you the salient provisions of the bill on universal access to quality tertiary education. How many of you have read the bill already?

The background of this is, early in 2017, there was an announcement that there would be free tuition in state universities and colleges. It was all over the news and there was controversy about it because of anxiety that free tuition in state universities and colleges might mean that state universities and colleges would not have the facilities to take in all the students. Also, that there would be a migration from private schools to public schools and such a situation would not be good for Philippine education. But anyway things have moved forward, CHED gave their pronouncement, and President Duterte gave a directive that it should be for those who are financially disadvantaged but academically qualified.

Fast forward: We now have this universal access to quality tertiary education bill, which was signed by both houses on the 29th of May this year. I will not read the bill to you but I will highlight the key points in my PowerPoint presentation. Quality education accessible to all Filipinos is the purpose of the bill; this was the intention of Congress, this was the intention of the Senate, of the House, they want all the youth to be educated and gain access.

PURPOSE

Quality education is an inalienable right of all Filipinos and it is the policy of the State to protect and promote the rights of all citizens to quality education at all levels. Therefore, the State shall take appropriate steps to make such education **accessible to all Filipinos.**

We had our discussions in COCOPEA -- as you know PACU is a member of the umbrella organization, the Coordinating Council of Private Education Associations -- and in the road map of COCOPEA, the first concern is quality education and the second is complementarity of public and private education institutions so that we can share the responsibility of educating our youth. It is stated this way:

... the State recognizes the complementary roles of public and private higher education institutions and technical-vocational institutions in the educational system and the invaluable contribution that the private tertiary schools have made and will make to education. For these intents, the State shall:

- a) Provide adequate funding and such other mechanisms to increase the participation rate among all socio-economic classes in tertiary education;
- b) Provide all Filipinos with equal opportunity to quality tertiary education in both the private and public educational institutions;
- c) Give priority to students who are academically able and who come from poor families;

- d) Ensure the optimized utilization of government resources in education;
- e) Provide adequate guidance and incentives in channeling young Filipinos in their career choices and towards the proper development and utilization of human resources; and
- f) Recognize the complementary roles of public and private institutions in the tertiary educational system.

There's a section on free higher education in state universities and colleges and this is the provision on eligibility:

All Filipino students who are either currently enrolled at the time of the effectivity of this Act, or shall enroll at any time thereafter, in courses in pursuance of a bachelor's degree, certificate degree or any comparable undergraduate degree in any SUC and LUC, shall be exempt from paying tuition and other school fees for units enrolled in,

Provided, That they pass the entrance examination and other admission and retention requirements of the SUCs and LUCs.

This provision is part of managing the quality of education for those who are qualified.

There is an important proviso: Students must pay if they are capable. A section in the bill states that SUCs and LUCs will create a mechanism to enable students with the financial capacity to pay for their education to voluntarily opt out of the tuition and other school fees subsidy or make a contribution to the school. So there is an opt-out mechanism.

The state schools have reporting obligations to CHED:

SUCs and LUCs must report the tuition payments and contributions collected from these students to CHED:

Provided finally, that the amount required to implement the free tuition and other school fees in SUCs and LUCs shall be determined by the respective governing boards of SUCs and LUCs based on the projected number of enrollees for each academic year, which shall be the primary

factor in computing the annual proposed budget of SUCs and, in the case of LUCs, CHED for such purpose.

This shall in turn serve as the baseline during the preparation of the annual National Expenditure Program (NEP) by the Department of Budget and Management (DBM).

The first section is about SUCs and LUCs; now I will tackle TVIs and post-secondary technical vocational institutions. The provisions are the same except that the SUCs and LUCs have to report to CHED while TVIs will have to report to TESDA. The amount required to implement the free tuition and other school fees in state-run TVIs shall be determined by the governing board of TESDA based on the projected number of enrollees for each course, which shall be the primary factor in computing for the annual proposed budget of TESDA for such purpose. This shall in turn serve as the baseline during the preparation of the annual National Expenditure Program (NEP) by the Department of Budget and Management (DBM).

There are exceptions to free tertiary education. The following students are ineligible to avail of the free tertiary education:

1) In SUCs and LUCs:

- a) Students who have already attained a bachelor's degree or comparable undergraduate degree from any higher education institution, whether public or private;
- b) Students who fail to comply with the admission and retention policies of the SUC and LUC;
- c) Students who fail to complete their bachelor's degree or comparable undergraduate degree within a year after the period prescribed in their program; and

2) In State-Run TVIs:

- a) Students who have obtained a bachelor's degree, as well as those who have received a certificate or diploma for a technical vocational course equivalent to at least National Certificate III and above;

- b) Students who fail in any course enrolled in during the course of the program.

Now I go to the matter of tertiary education subsidy for Filipino students - this is the part where we had a lot of discussions. I know that you're all aware that this was passed by the bicameral, but it hasn't been signed by the President yet so anything can happen between now and when he signs the bill. In the bill there is a mechanism for a Tertiary Education Subsidy or TES and it is established for all Filipino students enrolling in undergraduate post-secondary programs of SUCs, LUCs, private HEIs, and all TVIs. So complementarity between public and private institutions is clearly seen here.

The Tertiary Education Subsidy shall be administered by the UniFAST Board. Are you familiar with UniFAST? UniFAST is the Unified Student Financial Assistance System for Tertiary Education and refers to the harmonized state-run and administered system of higher education and technical vocational scholarships, grants in aid, student loans and other modalities of student financial assistance programs in Republic Act number 10687. The TES shall be administered by the UniFAST Board and the amount necessary to fund the TES shall be included in the budgets of CHED and TESDA; Provided, That prioritization shall be given to students in the following order:

- 1) Students who are part of households included in the Listahan 2.0 with DSWD, ranked according to the estimated per capita household income, and
- 2) Students not part of the Listahan 2.0, ranked according to estimated per capita household income based on submitted documentation of proof of income to be determined by the UniFAST Board;
- 3) Provided further, That such prioritization shall not apply to Filipino students in cities and municipalities with no existing SUC or LUC campus. (To me, this is questionable.)

I put questionable there because this is a counterpart of the following item. The TES may, among others, and to support the cost of tertiary education or any part or portion thereof, cover the following:

- a) Tuition and other school fees in private HEIs, and private or LGUoperated TVIs, which shall be equivalent to the tuition and other school fees of the nearest SUC or state-run TVI in their respective areas; (To me, this is likewise questionable.)

There's a problem there because if a student needs to go to school in a place where there is no state run TVI or SUC or LUC, then automatically the student will have to go to a private school, right? And it says that the fee will be equivalent to that of the nearest state-run school, so how will that private school survive? This was already questioned earlier; that's why I was saying that there are still problematic parts in the proposed bill and it is still under deliberation.

- b) An allowance for books, supplies, transportation, and miscellaneous personal expenses, including a reasonable allowance for the documented rental or purchase of a personal computer or laptop, and other education-related expenses;
- c) An allowance for room and board costs incurred by the student;
- d) For a student with a disability, an allowance for expenses related to the student's disability, including special services, personal assistance, transportation, equipment and supplies that are reasonably incurred; and
- e) For a student in a program requiring professional license or certification, the one-time cost of obtaining the first professional credentials or qualifications, which may include the following: application fees, notarial fees, review class fees, insurance premium fees and documentation fees: Provided, That the amount of subsidy shall be based on the guidelines set forth by the UniFAST Board and on the annual budgetary appropriation for this purpose.

Parang ang laking problema pero all of these will be determined by the UniFAST Board; they will have to determine how much of this can be allotted. It's actually mind-boggling for them because there are so many scenarios, for instance, for persons with disabilities and the services they require. How do we regulate and how do we manage this part of the TES? For students in a program requiring a professional license there are provisions for access to obtaining the license so you have here application fees, notarial fees, review passes, insurance premium fees, and documentation fees, masakit po ang ulo ng mga nasa UniFAST, because they have to take all of these guidelines set forth by the UniFAST Board.

Aside from the tertiary education subsidy, which is TES, there is a student loan program for tertiary education. For example, I'm a student, I want to go to, let's say, the private college nearest to UP, maybe Miriam, then the tuition for TES will be based on UP Diliman. Let's say Miriam charges more than UP Diliman. Let's say UP Diliman will accept me for P15,000 - example only - but in Miriam it's double that. So the government will subsidize P15,000 but I have to pay the remaining P15,000. For another student who wants to go to Miriam but cannot afford the P15,000 of her own money, she can apply for a loan. So there are two ways by which UniFAST can give me funding, one is by the tertiary education subsidy and the other is through a loan.

UniFAST offers short-term loans and long-term loans, so how to determine this? Short-term will be for short courses, and long-term for the completion of a bachelor's degree. There will also be a facility for graduate study, and those who do not avail of the loan program for the undergraduate degree may avail of a loan program for graduate studies and UniFAST will also cover the expenses for future exams administered by PRC.

Okay, repayment. How will the student pay back the loan? There will be a schedule of repayment interest rates as regulated by the UniFAST Board. There is the CRT, the Compulsory Repayment Threshold. The explanation of this by the legislators was they do not wish students to be charged if they do not have enough to cover their expenses, their standard of living.

So UniFAST will have to determine what is the compulsory repayment threshold so they will have to have a number for that and then they will allow the person first to establish himself with gainful employment until he reaches the compulsory repayment threshold period and can start paying. The UniFAST Board will also allow OFWs and self-employed persons and professionals in consultation with other relevant agencies to avail of the loan.

What are the requirements for SUCs and LUCs? They have to establish a learner information system to facilitate the tracking of students and their performance. Then they have to submit relevant information as determined by CHED and TESDA on school quality and performance. They likewise have to formulate and submit a development plan updated every 10 years, which shall include plans for facilities and infrastructure development and expansion.

CHED and TESDA shall ensure quality standards in the review and consequent endorsement of the budget of the SUCs, LUCs, and the staterun TVIs. The detailed design of the TES and student loan programs shall also be subject to quality indicators defined by the UniFAST Board.

What are the prohibitions under this bill? It will be unlawful for any person, SUC, LUC, and TVI to collect tuition and other school fees from qualified students, but this shall not apply to collections from students who voluntarily opt out of the school fees subsidy or make a contribution to the school. A violation of the prohibited act will be meted a penalty of six months to one year, or a fine of P20,000 to P100,000, or both, imposed on a president, treasurer or officer, or person responsible for the violation, so patay yung mga nagpapatakbo ng eskwela.

The complementarity of public and private HEIs is shown in the composition of the expanded UniFAST Board, to include the president of the Philippine Association of State Universities and Colleges, the chairman of the Coordinating Council of Private Educational Associations, president of the Association of Local Colleges and

Universities as members, and the president of GSIS and SSS as non-voting members. GSIS and SSS are going to be the mechanism by which the repayment will be done to track the student loans. The UniFAST Board is authorized to establish an enhanced organizational structure, staff development, and incentives and other administrative measures for the effective discharge of its duties. Reporting requirements include having to submit to CHED and TESDA within five days after the last day of late registration the names of eligible students for each semester, so there are reportorial requirements each semester.

The amounts necessary to carry out the provisions of Sections 4, 5, 7, and 8 of the Act shall be included in the General Appropriations Act, which is deliberated annually. Not more than 3% of the TES and student loan program will be for the administrative cost of UniFAST. The government is mandated to authorize or prioritize funding in negotiating long-term concessional development assistance. Other forms of assistance from local or foreign donors can be tapped by the UniFAST Board.

There is a Congressional Oversight Committee to oversee, monitor, and evaluate the implementation of this Act: five members each from the Senate and from the House of Representatives and then three members each chosen by the Senate President and the House Speaker with one member each from the minority. Funding for the expenses of the committee shall be taken from the appropriations of both the Senate and the House.

That's the entire bill. Thank you. Do you have any questions?

Dr. Dhalia Domingo: The table is now open for questions.

Dr. Dionisia Rola: As the president of a higher education institution, are you in favor of this proposal?

Dr. Rodas: Ma'am, I have to answer on a personal level. When the University of Baguio was founded, it was founded as Baguio Tech; it started as a Baguio technical school. My grandparents intentionally designed the school to have open admission because we wanted to provide access to the youth. So I was thinking about it this morning when I was coming over. I think as educators, all of us really have it in our hearts that our mission is to educate the youth and as much as possible we will give access to the youth who cannot afford to study. Presently I know that a majority of the private schools have student loans, promissory notes, scholarships, athletic scholarships, creative scholarships. If you're asking me if I approve of the bill, in terms of access, my answer is yes because the target of the bill is students at the Class C, D, and E levels. I think it is the duty of the government to try to give them access. Studies have been made by Dr. Vincent Fabella and a lot of other economic managers regarding the need for access for the very poor. In terms of complementarity, I think the mechanisms are already in place and this has also been due to much research and study. The mechanisms are in place on how to maintain quality assurance in schools. This is something that we initially were worried about because we cannot just provide free tuition regardless of the status or the quality of the school. We will be wasting money if the schools are poor-quality schools. But the bill already has provisions for quality assurance so I think the bill will be effective.

Dr. Rola: Just a follow up. I'm a little bit apprehensive about quality assurance. Is there a requirement for schools to be accredited? The accreditation can be used as an instrument for determining whether a school can provide good education.

Dr. Rodas: Yes, ma'am. The mere fact that they will have to go through CHED will require accreditation because CHED needs to check the LUCs and SUCs the same way that they check our schools regarding compliance of the programs and the delivery of programs. In fact the bill says that if they do not comply then they will not be allowed to accept any students. There are reporting mechanisms there, they have to report how they perform, every semester they have to report how many students there are,

and every year they have to give the budget proposed so they can avail of grants.

Dr. Alonzo: Just a follow up, but what you stated is more on statistics. I think what we are wanting to see is the quality in terms of what Dr. Rola mentioned.

Dr. Rodas: At this point, I don't know how the UniFAST Board will navigate this question but note that the membership includes the chair of the Coordinating Council of Private Educational Associations. Actually the private sector really has no problem with accreditation because we are all required to undergo accreditation, in fact we spend a lot annually for accreditation of programs. So when we have a level 1, 2, 3, 4 program we are assured that somehow it is at that level because our accrediting agencies are also benchmarking internationally. So is your worry what will happen to the state and local schools? Yes, for them to avail of this -- for the government to give them the budget for the students to come to their schools -- then they will have to go through the accreditation process but I must also say that there are many state schools that are performing well and they are also mindful of accreditation. Yes, I think the worry is more on the LUCs or local colleges and universities. Based on the discussions, if they do not wish to participate in accreditation, then they cannot participate in the universal access program.

Dr. Ester Garcia: Can I say something? Actually the bill as it is, is already a major improvement on the original bill. I don't know if you saw the original bills proposed by Senator Bam Aquino. Many of them actually were giving money to the SUCs and LUCs and public education, without accountability, without quality assurance. But thankfully we were able to do something. The private sector walked in and mobilized, thankfully CHED also came early. PACU, not even COCOPEA, PACU did all the work and as mentioned by Dr. Rodas, it was headed by Vince Fabella, talagang he was able to get the economists in the cabinet to look at the bill. I can just imagine COA having a headache, I mean the President is going to have a headache in COA when this is implemented.

Dr. Alonzo: You mentioned that there is actually a whole lot of research underpinning this but what about the budget, can we afford it?

Dr. Rodas: In the discussions with the legislators they insist that yes there is a budget but it's very difficult to make pronouncements whether they will release what they conceived or not. As Dr. Garcia was saying earlier, there was already a provision in the GAA for free tuition dapat before this first semester pero ngayon they have a budget for TES, they have a budget. For the sake of answering the question, they have a budget for TES and then they also have a budget for the loans and then they also have a budget for improvement. Meron silang nilagay pero tinatanggal lahat yata talaga when they write out the bill because, if you notice, the budget will be only for initial implementation and then what does it say? Every 10 years they have to report on their budgetary requirements for infrastructure development, etc. It's there and then for tracking of students nga every semester so mas interesting talaga pag kayo ang nagkwento kasi mas kapanipaniwala dahil meron na po kayong wisdom. Ako naman, I was inducted only this year, so this is my first year.

There are so many changes because of the change in Presidency -- not only that but K to 12 also, the implementation of Grade 11, madugo na yung implementation, and then we're all waiting for the work immersion proposal, which is not even out yet. A USec was saying last week na nagawa na daw and it's with another USec and it will soon come out, so I'm planning to have it tracked, where is it?, so that we can tell the schools, because everyone is asking. In PACU we have our academic management group and we have all these things, DOLE is there with us, DepEd is there with us, and they really do not know what is happening. For DOLE it was, pwede naman silang manood ng lahat ng ginagawa dun sa opisina, tapos yung mga educators naman, magiging tagatimpla na lang ba sila ng kape? Hindi naman ganun ang work immersion, so of course we know that they need so many hours of hands-on training, etc. And in fact they say that the 80 hours is not enough, it has to be 360, it has to be like this, so the DOLE speaker was floored and then later we investigated what are the laws, where can we move, and they said unfortunately there is a

law for 15 year olds but no law for 16 and 17 year olds because work immersion is after 18 already in college. So this is what we're waiting for.

Grade 12 already started in June for some schools, starting August for others but the work immersion will start second semester right? As an addition everyone in PACU is working very, very very hard for the complementarity part of that bill, yung sinasabi na complementarity na may part ang private education institutions doon sa budget. Kasi kung wala yon, SUCs and LUCs do not have the capacity to absorb the population of the youth that needs to go to school and therefore the private sector will have to assist and help. We cannot sustain ourselves if it will be all for free, so that was the worry of the PACU board, the PACU officers, everyone, so usually, information will be disseminated, blasted to all, and if you notice in the House there were 59 proposed bills -- all of the congressmen/women wanted to be on the bandwagon of universal access so they needed to consolidate 59 bills.

Member: Just a thought. I think the best way is to have another Republic Act, another bill. I have this idea that we should make public school education compulsory for all children of government employees, from the president, senators, congressmen, governors, mayors, down. Walang magpapadala sa private school, think about it, yang mga generals na yan, mga congressmen natin na mayayaman, pag-aralin nila mga anak nila sa government schools from kindergarten, elementary, to bachelor's degree, para maramdaman nila kung ano yung mag-aral sa public school. Thank you.

Dr. Garcia: That was our argument before, for limiting the enrolment in SUCs for high school. The budget maximum for the whole basic education is for 500 students. The only one that followed that initially was UP Baguio, so UP Baguio closed down its lab school so all those politicians who sent their kids to UP Baguio were forced to send them to public schools and that was how public schools in Baguio got funding. That was the strategy of, I don't know, 20 or 50 years ago. We told that to them already but that did not work, somehow we were able to get Ben Diokno at that time to really limit the budget for basic education, kasi money talks,

all the time. If they limit the budget that will force them to do something but then somehow over the years, I have been looking at the numbers, wala na, nakalusot na naman sila, parami na naman ng parami ulit, so we are not only talking about private schools they have been sending them to the SUCs, not to the regular public school system, so that's not the problem. The problem is the public school system will not feel the difference because they are not going to use the schools, they are going to use the SUCs parami ng parami. The composition is not only that in the UniFAST law, UniFAST the first law, if you look at the bill now an expanded board, actually there is an original board, this is just the expansion, it includes the CHed chair, includes DOST, includes NEDA, all the usual suspects, why? Because in the original UniFAST bill you were asking, is there money? In the original UniFAST bill what it did was actually consolidate all the different major scholarship programs of government, CHed money, DOST money, and so on and so forth. I have a feeling although I haven't confirmed it that the other agencies will not really comply. Syempre gusto nila kontrolin nila yung kanilang pera, so there is money but when we discuss this other law we said that even that is not enough. One of the things that they have to do in UniFAST is to make the rules all the same kasi sa ngayon, the rules are not the same, the guidelines for DOST money, for CHed money, magkakaiba, magkakaiba pati ang level of support, so the idea is to harmonize all of these. That was the first law but this other one is to ensure that the private sector will have a little bit more in terms of funding because this already exists in the loan program but the budget is so small and I don't think it will help much if you're talking of Class D and Class E, that isn't there.

Dr. Domingo: Any more questions that we can still entertain?

Mr. Alan Guda: Hello, Ma'am, what is the entire package of this bill? Is there a scheme which has something to do with a service component? Meaning if a student would be availing of a scholarship or whatever, would they be returning it to the government?

Dr. Rodas: There was a part where there was a repayment system, there's a repayment system, but you will only be charged when UniFAST

determines the threshold. So they will allow the student first to establish herself after she graduates and then they will watch her SSS and GSIS, that's why you need the learners' information because they will track the loans.

Mr. Guda: Actually, ma'am, what I would like to ask is if a student, for example, would avail of a full scholarship, after graduating would she be paying it back in terms of working in the government?

Dr. Rodas: No, they can work anywhere but they will pay through SSS or GSIS.

Mr. Guda: And where are we basing our standards now, ma'am? Is it globally? So meaning, ma'am, when we educate these future scholars, we do not expect them to work with us, let's say in government organizations here because we are not holding them.

Dr. Rodas: Ah so you want them to work for the government. Actually, sir, that will still be determined by the UniFAST Board. A lot of the provisions in the bill leave many decisions to the UniFAST Board, so it's a very important body.

Dr. Garcia: I'm telling you, remember that the DOST required return service but they could not provide enough jobs. Same thing with SEI, teacher education, they require you to return service but where are the jobs? Government cannot provide those jobs so if we now say all the students will have free tuition, let's just assume 50%, the graduates every year will number two million. Something like that. Even just half of those, they already need a million jobs, every single year. The government does not have a million jobs every year. The total number of teachers is half a million in the public sector. We don't have one million new jobs every year, so that is an unrealistic requirement. We have done it in the past, SEI nga konti lang ang estudyante nila, di sila makasabay. That's what the issue was several years ago because the graduates were saying where are the jobs that we are supposed to get? Wala.

Dr. Domingo: We can entertain two more questions.

Ms. Elizabeth Co: I would just like to share some thoughts. Most of us are in the private sector. Our greatest problem now as administrators of private schools is lack of enrolment -- many students cannot afford the tuition fees, and so we cannot raise tuition. What is the bulk of our expenses? Salaries. Why do we have to keep increasing the salaries of our teachers and employees? Because the public school teachers are receiving higher salaries than our teachers. So I think if the government stops increasing the salaries of public school teachers -- sorry to say that -- we would be able to survive and then the students can afford our tuition fees. So umiikot tayo ng umiikot, babalik din sa atin yung problema. Now they want us to provide loans to our students, provide scholarships, to help out, di ba? Honestly speaking, why do members of Congress keep on increasing the salaries of the teachers of the public schools? Ano yun? Elections? Because sila ang may hawak ng boto, that's the truth, let's face it. I think that boils down to it, so if ever the private schools absorb these students who cannot be accommodated in the public schools, there should be something and we in the private sector should do something. Ipamukha natin sa kanila, kasi sila ang may kasalanan, that's the truth.

Dr. Domingo: One last question.

Ms. Ma. Rosario Marasigan: My worry now is the dropouts in the middle of the course. Magiging zero ba ang utang nila? Ginastusan sila ng gobyerno, di ba? Usually po ang nagiging problem ng mga nag-ko-college yung pang-baon, yung araw-araw na pang-gastos, kung may allowance man yun, nag drop-out, nagtanan, nabuntis, paano yung utang nila sa gobyerno, lugi tayo.

Dr. Rodas: I will inform the UniFAST Board, it's a big possibility because of the statistics of pregnancies in college. Yes, we will raise it. Thank you.

Dr. Domingo: Thank you very much for a very informative forum. We can now adjourn the meeting.

Quality Tertiary Education

Fr. Joel Tabora, SJ

President, Ateneo de Davao University

President, Catholic Education Association of the Philippines

(July 25, 2017)

I wish this morning to talk about quality tertiary education -- in 20 minutes. So take a deep breath. One of the promising recent developments toward quality tertiary education is the new partnership between the Philippine Association of State Universities and Colleges (PASUC) and the Coordinating Council of Public and Private Educational Associations (COCOPEA).

As immediate past chair of COCOPEA, I had the privilege of working with President Ric Rotoras of PASUC to forge the current partnership between PASUC and COCOPEA. For the first time in Philippine educational history, Philippine higher education, public and private, resolves to “work together in complementarity to improve the quality of higher education in both public and private HEIs” (Resolution 4). (The Resolutions cited here are from the 2nd PASUC-COCOPEA Conversation, Davao, January 16, 2017.) It commits itself “in academic freedom and responsibility to its shared mission of providing quality higher education to the Filipino people and to find the appropriate structures to support and govern itself under the reasonable regulation of government as higher education in the Philippines” (Resolution 8). Public and private universities say they will govern themselves under the reasonable regulation of CHED.

The resolutions to work together in self-governance are in support of a Philippine educational system that provides “access to quality higher education to all qualified Filipino students” (Resolution 1).

It is in this context that PASUC and COCOPEA passed Resolution 7 and this resolution states: “That PASUC and COCOPEA jointly commit itself to the culture of quality assurance guided by the ASEAN Quality Assurance Network and its ASEAN Quality Reference Framework and request the Philippine Government for necessary funds to support this commitment.”

In bringing this to your attention this morning, allow me to say that the PASUC-COCOPEA conversations were a very pleasant discovery that the educators “on the other side” of either the public or private education divide were not all that different from one another. The educators “on the other side” were as concerned as they were to provide quality education to their students. This shared concern, however, is hindered by their respective policy environments, the limitations of human and material resources, and legislators more concerned about legislating for political advantage than for true improvement of the educational system. This was experienced particularly in the discussion on free tuition in State Universities and Colleges (SUCs). Here, public and private educators found themselves “on the same side” advocating quality higher education for all and not just access, recognizing that the complementarity between public and private universities might be a boon not only to improved access but to improved quality as well. So you will see in the bill that was passed regulations against the overcrowding of state universities and colleges and providing for SUCs to provide quality education.

As the PASUC-COCOPEA resolutions which I mentioned earlier indicate, the first leveling of expectations that emerged from the conversations was that all were committed to quality higher education, even if it was clear that that would involve both sides in a shared journey towards improved quality.

In committing themselves to improved quality, they committed themselves to quality assurance. But what is quality assurance?

Quality assurance is about assurance. We must, first, assure ourselves that we are delivering the quality we claim to be delivering. We know we make many claims about what we are doing in our schools. All of us claim to deliver “quality,” “excellent,” “world class” education. We must be able to assure ourselves that despite the challenges that we face with limited facilities, uneven performance of our teachers, uneven preparedness of our students, changing markets, and the fallibility of our administrative decisions we are actually delivering the quality education we say we are delivering. Secondly, we must also assure others – regulative bodies, other educational institutions here and abroad, and our stake holders – that we are delivering this quality. Ultimately, we, you and I, are interested in quality assurance because of our need as educators to educate well. This is primarily a demand from within. I think Dr. Rola will say that this is the heart of academic freedom. We need to know – and we want others to know – that we are delivering valuable education, and not just churning out trash diplomas.

Quality assurance is about structures and activities that assure ourselves and others about quality.

Quality assurance, then, is also about quality. Remarkably, there is no single definition of quality that is accepted by all internationally. In the Philippines, quality is often just another word for “good” or “expensive” or “private” or “exclusive.” UP, Ateneo, and La Salle are considered quality schools. But we also know that some of the most expensive or exclusive schools fail to deliver on their mission statements, fail to achieve the academic outcomes they target, or fail to satisfy the requirements of professional organizations or industry. In some of the best schools there is misbehavior and bad decisions that impair quality. Part of our PASUC COCOPEA Roadmap to Quality Culture would be for us all, public and private universities, to agree on a definition of quality.

With Dirk van Damme, I propose that quality needs four inevitable components: the achievement of minimum standards, the drive for distinguishing excellence in learning, the ability of the educational

institution to achieve its purpose, and the ability of the educational institution to meet the fair expectations of the stakeholders and the market. Quality assurance must assure quality.

Quality is based, first, on the institution's self-realization of its identity and fulfilment of its mission. If the identity of a school is that of a university, it cannot neglect genuine research. If the mission of a state university is to the poor, it cannot be serving the richest students in the country.

Second, it must achieve the minimum standards set by government of its academic programs, its research, and its outreach. The articulation of minimum standards supports academic freedom, for there is a difference between minimum standards and standards of excellence. Between minimum standards and highest levels of excellence there is a range in which HEIs can aim at achieving higher or lower levels of excellence, depending on the discipline, the position of the discipline in the architectonic of the HEI's academic offerings, the readiness of the HEI to invest more towards the achievement of higher levels of excellence. A school may choose in its academic freedom to perform better, and therefore invest more, in engineering rather than in music. There is a tendency of those who set minimum standards – I'm talking of the TWGs -- to incorporate every best practice among the minimum standards. PASUC-COCOPEA, representing all academically free HEIs, ought to play a larger role in discerning and setting the minimum standards that government confirms.

Third, it must evidence excellence based on learning outcomes. Excellence is achieved in learning outcomes that surpass minimum standards outstandingly, distinguishing the HEIs against other HEIs. A school that is distinguished for the humanities achieves excellent learning outcomes in such fields as literature, mathematics, languages and the natural sciences; its quality is co-determined by this distinction.

Finally, it satisfies its stakeholders. Among the stakeholders of universities are industry and the needs of the economy. Much, indeed, has been said about the mismatch between academe and industry. But the stakeholders in universities are much wider than just industry. Society in general, human culture(s), human morality, the environment, religious interests, the secular sphere, and peace, for example, are major stakeholders in the university.

PASUC and COCOPEA have committed themselves to a culture of quality assurance guided by the ASEAN Quality Assurance Network and its ASEAN Quality Reference Framework.

A culture of quality assurance means for us freely generating, promoting, and implementing activities that assure the quality of our schools, and continually improving these activities. It means cultivating habits of assuring ourselves and others that we are delivering the quality we say we are delivering. It means having agreed-upon processes of checking objectively that the quality is there, and assuring others that the quality has been objectively checked and clearly ascertained. Because of the objectivity, it means being able to compare the quality of our schools and their products with the quality of other schools and their products not only in the Philippines but in the entire ASEAN region, if not beyond ASEAN. The quality of the learning and competencies, for instance, of an electrical engineering graduate or of an education graduate for secondary schools would be ascertainable in the Philippines and comparable to similar graduates in Singapore, Malaysia, Cambodia, and Brunei. The quality and competencies of teachers and students would be assessed objectively, allowing the exchange of teachers and students to enrich the quality of our schools. In fact, the Philippines has committed itself to a culture of quality assurance in the entire region through ASEAN, even though bringing individual HEIs to understand, own, and be freely part of the commitment is clearly yet a work in progress. But it is in this context that as PASUC and COCOPEA have committed themselves to a culture of quality assurance, they have also accepted to be guided by the ASEAN Quality Assurance Network and the ASEAN Quality Reference Framework.

In the ten countries of ASEAN, quality assurance is done differently. In some cases it is driven by governments seeking to control and mandate quality. In other cases, it is driven by private initiatives undertaking to develop and invite better quality. Some quality assurance systems are mandatory, others are voluntary. Some governments visit their schools to check quality; some regulatory commissions test graduates and certify professional preparedness. The most familiar form of quality assurance in the Philippines, and perhaps the most demanding, is voluntary accreditation. In this diversity of quality assurance practices, efforts are being exerted to increasingly bring the countries together through a regional quality assurance framework into a common space.

The ASEAN Quality Assurance Framework (AQAF) is our regional quality assurance framework. The Europeans have theirs, the Americans have theirs, the ASEAN has AQAF. It consists of four interlocking, interdependent quadrants: (1) The External Quality Assurance Agency (EQAA); (2) The External Quality Assurance Policies, Standards, and Processes; (3) Internal Quality Assurance (IQA) mechanisms; and finally (4) the National Qualifications Framework.

The AQAF links us to the other ASEAN countries through its translation mechanism, the ASEAN Quality Reference Framework (AQRF). In the diversity of quality assurance practices in ASEAN, the AQRF introduces us to a common space.

Through a set of statements of principle for each of the quadrants, AQAF seeks to bring diverse quality assurance practices together. We use the AQAF to guide us in our quality assurance culture.

We do not have time to discuss all the principles of the AQAF. For that, we would need a whole day. But very briefly let me say:

1. The EQAA must have autonomous responsibility for its operations, and its decision-making processes and judgments made are free from undue influences. The EQAA must be autonomous. It cannot be a

body that is beholden to or unduly influenced by school owners, government, the private or party interests of politicians, the performance reports of administrators or administrations, the budgetary needs of schools. The EQAA must be independent of all conflicts of interest.

2. The EQA-Standards and Practices place the interests of students and society at the forefront of external quality assurance processes. It is therefore not the interests of teachers, administrators, capital investors, and politicians that primarily determine quality. The processes must check learning outcomes, and how these outcomes affect society. Of interest is not only the mismatch between academe and industry, but between academe and society. This means pressing social concerns such as social justice, culture, the environment, religious freedom, and even such topics as terrorism.
3. AQAF sees the primary responsibility for quality in the educational institution itself, not in government, nor in the stakeholders (like industry), nor even in the EQAA. The educational institution therefore enjoys academic freedom. The institution itself through its top management is responsible for its culture of quality.
4. The National Qualifications Framework in the Philippines is established by Presidential Executive Order 83 issued by Benigno Aquino III in 2012. A Philippine Qualifications Framework National Coordinating Committee (PQF-NCC) is now completing its work on this.

My task was to talk about quality tertiary education. I have shared with you how PASUC and COCOPEA have resolved to work together towards improving tertiary education through a quality assurance culture guided by AQAF.

Thank you.

Dr. Rosario Alonzo: Thank you very much, Father, for that very comprehensive discussion of what quality is and, more important, what quality assurance is. We're now opening the table for questions to be directed to Father.

Dr. Rosalina Fuentes: Good morning, Father. You gave a very good presentation of the framework for quality higher education and the effect on the listener is, that's what we want and we're happy to have that framework. But how do we translate that framework into our respective institutions? -- that's the challenge. That's a gap that is challenging to all of us because the existing infrastructure of government somehow is more of a deterrent rather than a facilitator of quality education. Can you please enlighten us on how PASUC and COCOPEA are trying to help government regulatory bodies so that they won't become more of a deterrent?

Fr. Tabora: Thank you very much for the question. I don't know if my answer will be satisfactory, but in all of the talks that I'm giving now, wherever I'm able to speak to groups of educators, I'm expressing the internal quality assurance mechanism and trying to bring the educators back to the original inspiration of education: that education is about truth, that we are searching for truth together, that we want to communicate truth to our students, and that we want to be able to serve our communities. That is something which is often lost on educators because when we're talking to educators often they've lost the joy of being educators because the education is somehow detached from truth, the education is somehow detached from being relevant and wanting to deliver quality. So we are pushing for the next conference of PAASCU to be basically about this. We'll say, look, we're the external quality assurance agency but quality assurance really belongs to you. And I think it's in the recovery of the original inspiration of our being educators together. Now, that said, in higher education we have to take more responsibility for higher education. This is the point that I would like to make.

I really think that with all due respect to those who framed RA7722, I think that those who framed RA7722 and Dr. Rola is here, part of that

group, they have not been respected in their intentions. RA7722 takes seriously the constitutional and legal vesting of academic freedom in the HEI. It comes as a shock to many when I ask who has the role of academic freedom and responsibility, is it the HEI or is it CHED? The constitution and the law vest the HEIs with academic freedom and not CHED, but we have a CHED that positions itself to be the only institution in this country which is empowered to exercise academic freedom and because of that I think we have systemically destroyed academic freedom in the country. We have taught people who are running our higher education institutions, which should be centers of inquiry, centers of discovery, centers of special relevance to the localities, we have taught them all to depend on the decrees of CHED so that every time you have administrators in HEIs who want to begin something new and something different and something innovative they have to ask the permission of CHED. So there has been a systematic destruction of academic freedom in the responsible sense that I mean it. Notice that PASUC and COCOPEA have been careful to say academic freedom and responsibility. What we've done in our country is something like this, you know, you have a teacher in secondary education who wants to teach her students how to write an essay in straight English, so she gives a certain number of guidelines, a certain number of principles, animates the student to write an essay, so the student takes his pen and starts writing and then the teacher says wait, you may not be doing it right, you know, you might make a mistake. Therefore I will write it for you. I will be the one to determine your curricula, I will be the one to determine how you teach your course, or I will be the one to determine who your teachers are, I will determine what you may and may not teach. Whereas academic freedom is precisely the ability to determine who your students are, who will teach, what the methodology of teaching is, and so on.

Over and over again, we have a government body which was designed to be minimalist taking a supremacist attitude, which determines what you have to teach and how you have to teach it. What is the difference between basic education and higher education? In basic education they can do that, they may do that, and they ought to do that, they determine what the basic knowledge is for every Filipino, but in higher education, that is a prerogative that belongs with the HEIs. So if you're asking me how government can be not a deterrent, let government not deter academic

freedom, let government call forth from its HEIs academic freedom, let government call forth from HEIs programs that are truly innovative, truly relevant, etc. but making sure that minimum standards are maintained – the minimum regulatory standards, not the maximum standards. You have TWGs that are being written by persons coming from universities and they're being written in such a way that you can only get those qualifications by going to those universities, correct? This is sort of regulatory capture that is not right and not good for us. That is why they hate me in CHED but I think that if we're talking about quality, we have to place quality in the hands of HEIs.

I was talking to Ric Rotoras and he said, you know they're talking about budgetary concerns, all those things. I was saying let's look at our state universities and colleges. I said, for me especially, since the state university will be free, paid by government money, supported by government, supposedly the mission of state universities is supposedly for the poor, I told Ric, let public and private universities, COCOPEA and PASUC, advocate that everywhere that there is a state university, that should become the university of choice because of its quality and let the private sector insist for the public sector – that the state university which is using our money -- be a place of quality. Therefore let budgets be determined not on the number of students who have access to that school but on the recommendations of a creditable accreditation system, the recommendations of a quality assurance system, so that if you are a school right next to mine, University of Southeastern Philippines, the students are still studying under trees, so do you want to give them more students? We need a process which says, for heaven's sake, take care of the classrooms, let budgets be based on those needs. If the state universities are lacking in libraries, well address the needs of the libraries. If they're lacking in laboratories, address those needs. Don't just pin funding on numbers. The state universities and even those in basic education jockey for more numbers because it will bring them more money but the money will only translate into bad-quality education. So we have to work together somehow to be able to address these structural problems which militate against quality and we really have to take responsibility in higher education for what we deliver.

In Ateneo de Davao, which is a Jesuit Catholic school, we have an Islamic Studies Program and the idea was simple, we're living in an island where there are a lot of Muslims, let's present a program which will study Muslim culture, Muslim religion. But we wanted to focus on political economy because if the Bangsamoro really comes through, the political economy will be driven by Islamic finance, a different system. We wanted to be able to teach our students about this. When our application got to CHED, our four year course they wanted to make a five year course so that our students could also be ustadztes, imams, teachers of religion. That was not our intention but in their wisdom in CHED they wanted to tell us in our stupidity that we were not responding to the situation enough because our students would not become ustadztes. How can higher education in the Philippines be presided over by five people? RA7722 is precisely worded and crafted in such a way that there is collegiality; it's a commission, it's not a secretary, but the present chairman acts as a secretary and those who are in her commission are her undersecretaries and if they do not follow her, then [he makes a gesture]. I'm saying part of the problem is really the way higher education is governed and how things are regulated. I really think there is too much of an overreach of the central government.

Dr. Fe Hidalgo: Father, consider this as an innocent question. I've been thinking about quality assurance and quality control as you were talking. How do these relate to learning outcomes – something which is very popular to us in basic education – their measurement, assessment, and evaluation. May I have a few words from you about that.

Fr. Tabora: Well, a quality assurance process is a voluntary quality control process. People get together and say, because we want to deliver higher education well and know that we have a penchant for deceiving ourselves, we enter into a process where voluntarily we say to our peers this is what we claim, please check us. So when I said quality means the ability to implement your vision and mission, second the ability to achieve minimum standards, those are minimum standards in learning outcomes, competencies which create qualifications which go into the national qualifications framework which then talks to the other frameworks in ASEAN, so all that measurement is important for us so that we can understand and it's the same thing with outputs, achievements, standards

of excellence. Those are learning outcomes, what the students can do with their education that are measureable and I think that's part of the accreditation, quality assurance process.

This is an aside. I'm president of the Catholic Education Association of the Philippines, so in CEAP, we are very interested in the so-called Catholicity of our institutions, so we've set up a mechanism whereby we now have the Philippine Catholic School Standards, an elaborate set of standards whereby we check ourselves how Catholic we are. So if you say, for instance, it's a duty of Catholics to go to mass every Sunday and we find empirically that most of our students are not going to mass, something is wrong. But Philippine Catholic schools as of now are still defined through internal quality assurance only, in other words they don't want to compete with anyone, they're not yet ready to say, we will invite other people to come to our schools and check with us. For me if it's only internal quality assurance it's not serious, it's like saying you will do your own audit but let's get rid of the external auditor. So the whole point of quality assurance is objectivity, it's to be able to check that you are not lying, you are not deceiving yourself, you are not caught in conflicts of interest. Therefore the external check is important so in PASUC and COCOPEA, we're now joined in the idea of clustering our public and private universities and helping them together advance one another's quality, see how that works.

Mr. Mark Fabella: Good morning po. I come from the University of the East. I'd like to start by thanking you for sharing with us your perspectives. My question is this, I have been witness to two instances where educational leaders of state and local universities are becoming beholden to the politicians who appointed them -- I'm sorry to say that. My question is this: once that happens, once educational leaders become beholden to the politicians, it usually becomes -- if I may borrow a word used by a colleague here -- a deterrent to the realization of the objectives of the school. Can your organization come up with a conference or a seminar for political leaders as well as institutional leaders who are heading local colleges so that they may be enlightened, so that the school should be a bit autonomous at least at a certain level so that it may work for the

realization of its objectives and not for the realization of the objectives of the politicians who appointed them?

Fr. Tabora: That's a very good question and it's a huge challenge in the Philippines. I can only say that the situation you are describing is real and we really have to work together to disengage partisan politics from education, and one of the examples I can give you is, where is the worst educational delivery in the country? The worst educational delivery in the country is in the ARMM, the Autonomous Region in Muslim Mindanao. Two weeks ago, representatives of education departments of 17 schools coming from CEAP, came together with the executive director of the ARMM, the secretary of DepEd ARMM, and the head of madrasah education. Now we're trying to understand how we can help in the ARMM, how our schools can help in the ARMM – that's something you might want yourselves to ask since the situation is so grave. We were told by ARMM Gov. Hataman himself that the educational qualification of the ARMM teachers is approximately 3rd grade, so can anybody not understand why the performance tests are so bad and they were explaining to us that they are trying to correct generations of customs in the ARMM where the qualifications of the teacher to teach are irrelevant. What matters is the recommendation coming from politicians; that's what qualifies you for a DepEd job. Now I suggest we all must be willing to protest against such an abomination, how can you have uneducated people educating? We have in CEAP what we call the Madaris Volunteer Program, madaris is the plural of madrasah, therefore the Islamic schools, so we locate volunteers who are willing to go into the Muslim communities for 10 months and teach in a madrasah. Teach not Islamic theology or anything like that but teach the DepEd mandated courses. College graduates are able to share so much with the teachers of a madrasah because they are all uniformly qualified.

So if the challenge today is extremism and things like that, war because of extremism, the roots of extremism are an inability to think things out, an inability to understand history, and an inability to understand relationships, the difference between valid religion and an ideology. What you're saying is really very true, there's been much too much meddling of politicians in the educational system and the sooner we can detach state

universities and the like from the politicians the better. Some have been helpful, honestly Sen. Angara has been helpful, but few of them have that kind of insight into higher education. They're saying free education for all, not realizing how important the contributions of the private schools are in the Philippines in terms of quality. They're not interested in quality, they're interested in saying "this is our bill", but they might be exacerbating the problems. I've always felt that we have to create a council of educational elders who understand education – that could be FUSE – so that we get the wisdom of years of educational practice to talk to those who think that they can make educational policy.

Member: Thank you for that very enlightening lecture. Aren't there more opportunities now for private education, for higher education, from agencies like DOST for higher degrees in mathematics and the hard sciences?

Fr. Tabora: Certainly, there are. I don't have figures with me now but certainly DOST, many of the government agencies, are reaching out to the universities for collaboration. How do the HEIs respond to this? Let's say, in Cagayan de Oro, we have a group of businessmen who go to the universities and say to the universities, how can the universities better respond to our needs? But if the universities were to create something new which is innovative, it passes through CHED if you're not autonomous and the danger is if it is not compliant with their templates, they will say no. I think we have to have a better way of doing this and I think if we work through PASUC and COCOPEA more in self-governance there may be a better way of doing things.

Dr. Alonzo: There being no other questions, we would like to thank Rev. Fr. Joel Tabora for emphasizing the need for quality education at the tertiary level, for discussing with us the very important question of quality assurance, and for stressing also that budgets should be dictated by the needs of the school. Quality assurance is where we need to work as FUSE because we want quality education in the country and we must make sure that there is quality assurance. Once more, let's give a round of applause for Fr. Tabora.

Engineering for Kids and STEM Education

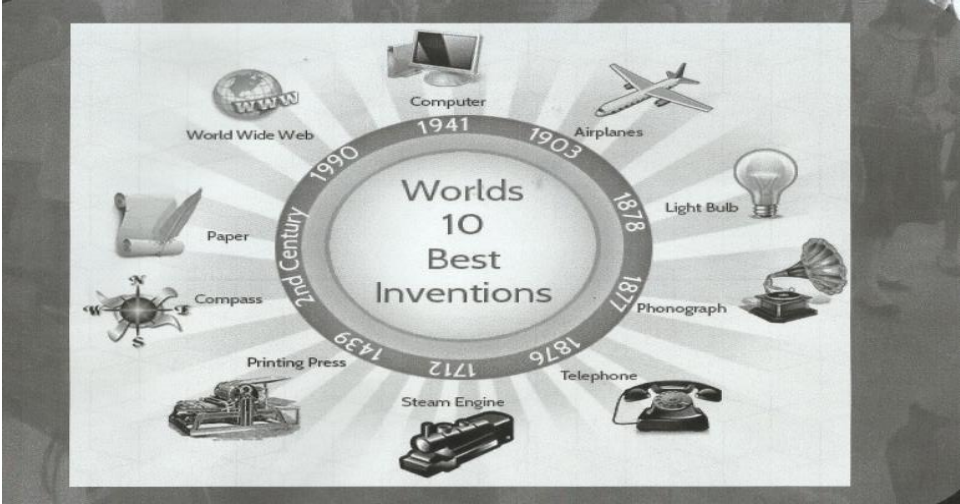
Ms. Lei Sta. Maria

Head Faculty, SMILE Group

[Specializing in Modern Interactive Learning Experiences]

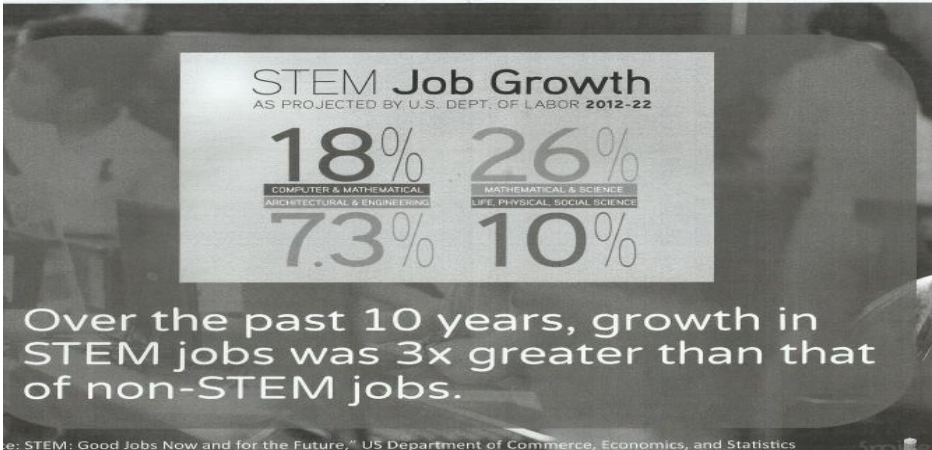
(August 22, 2017)

Good morning, everyone. I'm honored to be here. I'm from SMILE, Specializing in Modern Interactive Learning Experiences, and what we are advocating is STEM education – education in Science and Technology, Engineering and Mathematics -- because we believe that we are in need of innovators, game changers, problem solvers, critical thinkers, creative thinkers. Why STEM education? First because of innovation, next because of economic benefit, and third because of the demand for thinking skills. Let's talk about innovation first. STEM paves the way for progress, it allows for innovation. Before I continue, can I ask you what you think are the top inventions of all time?



Throughout history, these innovations have revolutionized our lives. We cannot deny that these innovations or inventions would not have been possible without an understanding of STEM. Even if we say that some people are not aware that these inventions are STEM-based, they're still about STEM if we will understand STEM more.

Next is economic benefit. STEM is the backbone of modern and industrialized advanced economies. Over the past 10 years, based on statistics from the US Department of Labor, growth in STEM jobs was three times higher than that in other careers. The Bureau of Labor Statistics in the US projects a sustained growth for STEM-related careers.



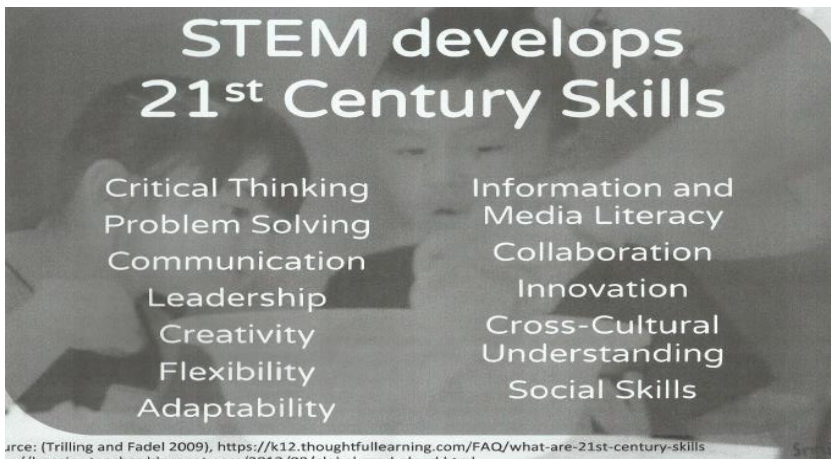
Have you heard of the website Will Robots Take Over My Job? There's now a website where you'll just type in your job and then they'll give you a percentage for whether robots will take over or not. What does this tell us? The jobs that will remain in the future are the ones that will require higher-order thinking skills; they will require creativity; they will require different sets of skills and these skills are all related to STEM.

Based on US data again, STEM-related careers command 26% higher wages compared to other careers. We want more people who will be innovative, who will have the STEM knowledge and skills to be able not

just to earn more, but to be able to solve different kinds of problems that we are all facing right now, so it does not just simply benefit the economy, it benefits the people who are qualified to have STEM careers professionally. STEM demands innovative thinking and skills, so we want problem solvers, we want creative thinkers, we have to keep on trying something new, we have to keep on doing things that will change our lives and make our lives better.

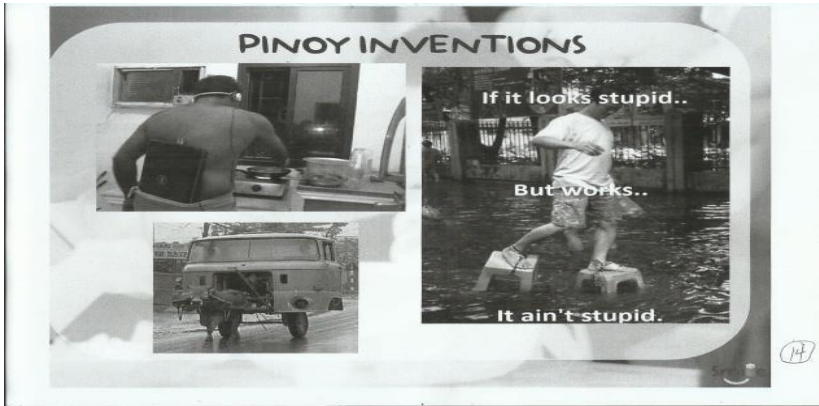
I'm pretty sure you've heard of Henry Ford, Steve Jobs, and Mark Zuckerberg, three people from three different generations who revolutionized different kinds of industries. What's common among them is that they are all STEM-educated, they all have experiences when it comes to STEM, they have the background or the knowledge. Let's hope that later on we can include women there, maybe Filipinos.

If you want change, if you want to revolutionize something, if you want to be more industrialized or advanced, you need more STEM. You will need the kinds of skills that STEM tries to develop or enhance.



I'm sure as educators we are all aware of these 21th century skills but what do you notice about the skills on the left and the ones on the right? I believe the ones on the left are innate to Filipinos, yes? We're all very creative, we're all very resourceful, we adapt really well that's why we get to survive different kinds of calamities. But we have to admit that the ones on the right are the things that we might have to work on as a country and it's not just us Filipinos, you know it's common to other countries as well.

I'll show you some pictures to show it's innate for us to innovate and adapt to change. There are some Pinoy inventions that might seem silly but they work, yes? They might seem funny but come to think of it these would require some STEM skill of some sort, some creativity. It works, so it's fine. Does it solve the problem? Yes, but how can we work on it? How can we improve it? How can we profit from it?

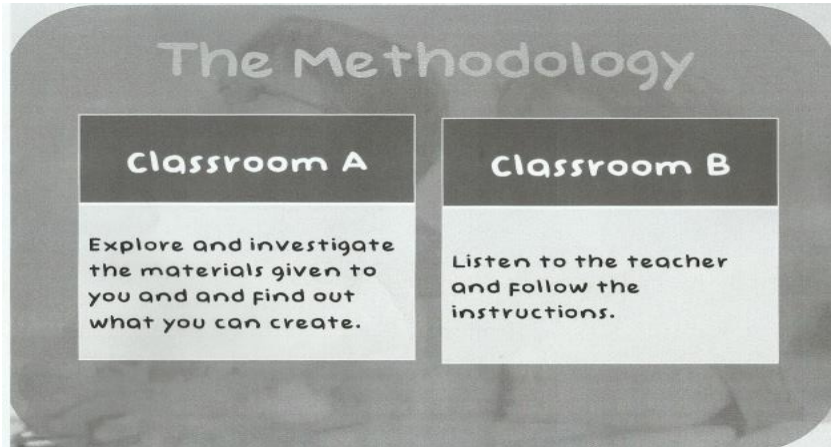


Here are some things that were invented by Filipinos, some of the things that we are proud of -- karaoke, erythromycin, the ink that Parker pens use, the first video phone, and of course the jeepney. So we naturally have STEM skills but we still have to nurture more of these skills and we need to redirect them to solving 21st century problems as well.



How can we do that? We in the SMILE group have had special training -- we were lucky to have Dr. Diana Grabowski from the STEM Institute in the US to train us on STEM methodology. Before we go on I'll ask teacher Charles and teacher Shiene to help me out. We have two tables here; we need some volunteers, we need three for teacher Shiene and three for teacher Charles. Come on guys, we'll let you know what you're supposed to do. So we have classroom A and classroom B -- for classroom A with teacher Charles, just explore and investigate the materials and find out what you can create; for classroom B with teacher Shiene, please listen to the teacher and follow her instructions.

Audience, please try to notice, try to watch their interactions and their movements, how they're doing those things. So both classrooms have the same set of materials, but you notice there are different instructions. Classroom A – explore and investigate; Classroom B – listen and follow.



Now I'll tell you about the kits and the raw materials -- there are plastic containers and there's a white clear substance and a green substance. So let's try to see what kinds of things will come out. This is one of our most popular lessons from Engineering for Kids and we're sharing it with you. We want you to see the differences in how we conduct our lessons for our classes. So in that classroom teacher Shiene is giving them the instructions, how to do it, it's guided, the students are actually instructed. Over here, in this classroom, they're supposed to explore.

Let me mention one thing we've noticed -- we had this school wherein we came in the first semester and the kids were so scared to try things out; they were waiting for us to tell them exactly what to do: "teacher, can we touch this?, teacher, can we use this?, teacher, how do we put these together?" Is that what we want in our kids' classrooms? No, because we want them to explore more, we want them to be brave, we want them to try things out on their own so that they can learn from whatever it is that they are trying. Yeah, and then at the end of the school year you'll see the

difference in that classroom, you know, “teacher, would you like me to start now?, can we begin?” So you’ll see the enthusiasm there already, you see how the ideas are already coming in as opposed to the first semester: “aren’t you gonna tell us what to do?” They asked this even after we already told them to explore and investigate and try to decide for themselves which is the best material to use or what’s the best design to follow or how they can best build something.

So going back to our groups. Over here, do we have a finished product or something? Maybe you can show the audience what we have right now. There, so that’s something that looks like green champorado, yes, green champorado, and then on the other side maybe you can show – di ba parang gelatin, they said it’s like gelatin. Di ba ako din eh, I grew up that way, “hala may natapon, patay na,” di ba?, but in this group they didn’t even use all the materials given to them, so they’re making their own conclusions, yeah, it’s like they have their own understanding of what each material can do with the other. By the way this is from chemical engineering of Engineering for Kids, for kids as young as four years old.

Ok so everyone, do you agree that both sides had hands-on activities? Yes, hands-on because they were able to do things on their own, yeah, they were able to experience it and that’s what we want, experiential learning. We really have to let our students do all these things so that they get to learn more, but my next question is, which group do you think had more minds-on opportunities? This classroom, yeah? Minds-on, meaning they’re exploring, they try to discover more and let’s see, do they have the same product? Almost. Yes, for this classroom, yes, but for that classroom the goal was listen to the teacher and follow instructions, so if they came up with something like that, would it be all right for this group? They were supposed to follow the teacher. If they did not and they came up with that, do you think that’s all right in this classroom? No, because the goal was for them to follow instructions and for them to be able to come up with the perfect slime. So that’s the slime activity. Over here, maybe it’s not the perfect slime kasi it’s a bit wet, it’s just like the weather today, it’s wet, but that’s fine, because the goal of the lesson actually is to learn about non-Newtonian fluids. It’s still an example of what? It may not be perfect

but maybe if we had more time they could learn how to perfect that recipe. Thank you for helping us out. Can we all give them a hand, please.

So we're not saying that this kind of teaching is wrong. There will be times when you will need an instructional type of teaching especially if you'll be dealing with materials that might be hazardous. What we're saying is that there are different ways of learning and there are different methodologies that will help us develop the 21st century skills more. Both groups had opportunities to communicate, collaborate also, but which group had more opportunities to think creatively and critically? This group, right? So that gives us some differences. Classroom A with teacher Charles: the teacher is also a learner and the teacher acts as a facilitator, the teacher is guiding the students, the students are allowed to question, "can we do this? What if we do this? What will we do with this? What will happen if it is like this?" And we encourage that in any type of classroom that we have, as opposed to the classroom over there where it's the teacher that gives the instructions, the teacher knows everything, and me personally that's how it was like in the classroom that I grew up in, the teacher is the source of all knowledge.

The Methodology	
Classroom A	Classroom B
• The teacher is also a learner.	• The teacher knows everything.
• Mistakes = learning	• Mistakes = ☹
• Students question and think	• The teacher talks, the students listen.
• Goal: learning, problem solving, creating	• Goal: good grades
• Explore, investigate, and think	• Memorize facts and finish pages
• Hands-on, Minds-on	• Can be hands-on

But in the generation that we have right now information is everywhere. We cannot deny the fact that maybe the students that I have in front of me

know more about some things than I do, and also, di ba kanina, we heard somebody say, dapat ba ganito? But it's exploration and discovery, what's dapat is that you try it out and you learn from it, whether it's correct or wrong because if it's wrong you know that you're not supposed to do that next time and that you're supposed to try another way of doing things or maybe try another material. As opposed to the other classroom, wait lang, mali na, so you might not get the outcome that we want and therefore the goal for this classroom is to think and to learn, the goal over there may be to have good grades or to have the perfect slime. So when we assess, how can we assess this group? We'll assess how well they follow the teacher's instructions, so it's more of memorizing facts and again yun nga following instructions. When we try to assess this other group, it's quite hard, we have to admit assessment is really hard with STEM but there are a lot of things that we can explore, and that's a topic for another day.

But let me just share this. We can assess this group in terms of how well they collaborated with each other, how well they communicated with each other, how well they understood the importance of the green solution when it comes to the mixture, how well they observed the differences of the materials when they were mixed together. Maybe if we had more time they could also be assessed on how well they took down data, how many times they tried different combinations, what kinds of recipes they came up with, and how many types of products they created. Let me say again both are hands-on, but one is much more minds-on, and that's what STEM education is, for us. So it's more than just science, technology, engineering, and mathematics, actually it's the integration of these disciplines fused together, so it's not just teaching science per se or engineering per se or math lang like how I was taught and maybe how most of us were taught back then, again it's more than just the subjects.

And one of the most important features is that it has to be related to the real world and it has to be able to solve problems, so it's really problem-based, even project-based. This lesson leads to study of polymers and maybe there are studies somewhere around the world learning more about natural polymers so that in the future, I don't know how far or how near, maybe we will have natural polymers instead of plastics. So that's

how we relate it, that's one of the ways we relate it and again it's not just the content but it's also the methodology. So STEM education and methodology are more than just learning the content and being exposed to concepts from science, technology, engineering, and mathematics. For us, it's not just a way of teaching and learning, it's also the way we see the world around us, how we understand the world around us and thinking how we will thrive and affect the world around us in a positive way because at the end of the day that's what we really want. Not just as educators but as a species -- how can we thrive in this ever changing world?

Now all the data that I gave you, all of those things, they're from the US, sadly we don't have that much data for the Philippines but I will now try to bring it closer to home. We know that we consistently rank lowest in science and math, the Philippines is at the bottom, but this is actually old data, from the early two thousands. But did you notice the ranking of the US? You know what? This made them panic, their ranking made them panic, that's why now they're all about STEM education; that's why they came up with Engineering for Kids.

STEM in the Philippines

TABLE 3.4 Eighth-grade TIMSS scores for mathematics, selected East Asian economies, 1999, 2003, and 2007

Economy	1999	2003	2007
Taiwan, China	585	585	598
Korea, Rep.	587	589	597
Singapore	604	605	593
Hong Kong SAR, China	582	586	572
Japan	579	570	570
United States	502	504	508
International average	487	466	500
Malaysia	519	508	474
Thailand	467	—	441
Indonesia	403	411	387
Philippines	345	378	—

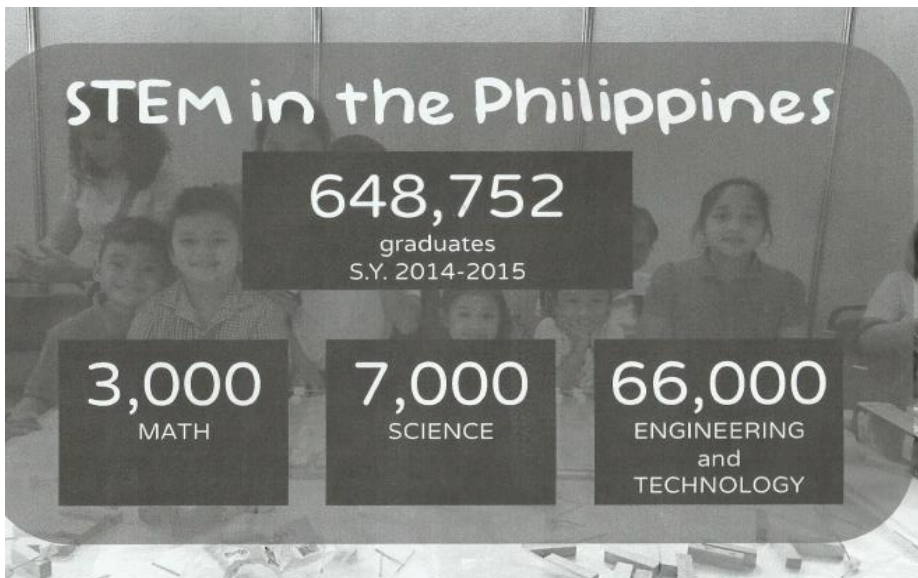
Sources: Gonzales, Guzman, and others 2004; Gonzales, Williams, and others 2008; Mullis and others 2000.
Note: Economies are ranked by their score in 2007.
— = Not available.

TABLE 3.5 Eighth-grade TIMSS scores for science, selected East Asian economies, 1999, 2003, and 2007

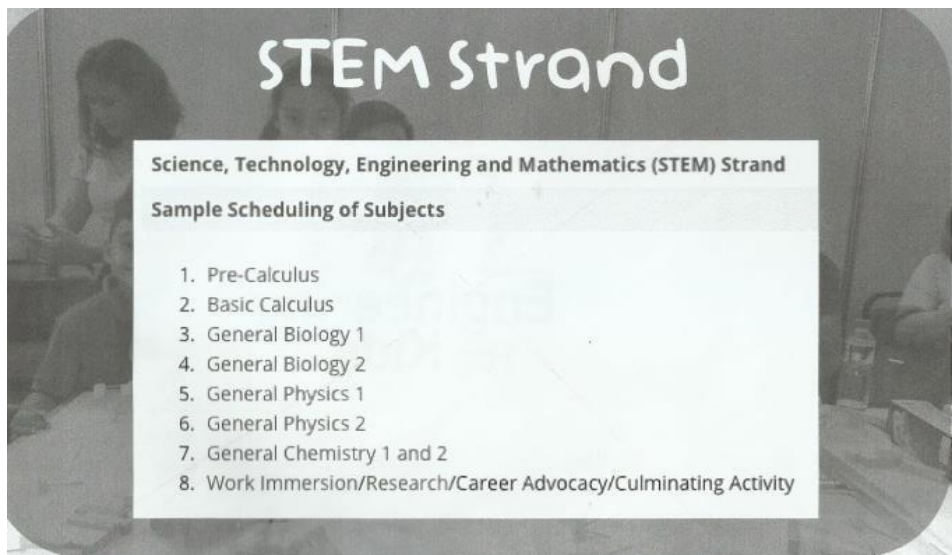
Economy	1999	2003	2007
Singapore	568	578	567
Taiwan, China	569	571	561
Japan	550	552	554
Korea, Rep.	549	558	553
Hong Kong SAR, China	530	556	530
United States	515	527	520
International average	488	473	500
Malaysia	492	510	471
Thailand	482	—	471
Indonesia	425	430	437
Philippines	345	377	—

Sources: Gonzales, Guzman, and others 2004; Gonzales, Williams, and others 2008; Mullis and others 2000.
Note: Economies are ranked by their score in 2007.
— = Not available.

The next slide shows that we are lagging behind and not just in our rankings but also with regard to the number of graduates that we produce. These data are from school year 2014-2015. So out of the 650,000 graduates that we had that school year, only 3,000 obtained degrees in math, only 7,000 degrees in science, and 66,000 degrees in engineering and technology. On a separate issue we have to take note that the quality of IT education in the Philippines is another concern because only 10% of our IT graduates are deemed hireable by multinational companies. So that's a big problem but again that is a topic for another day.



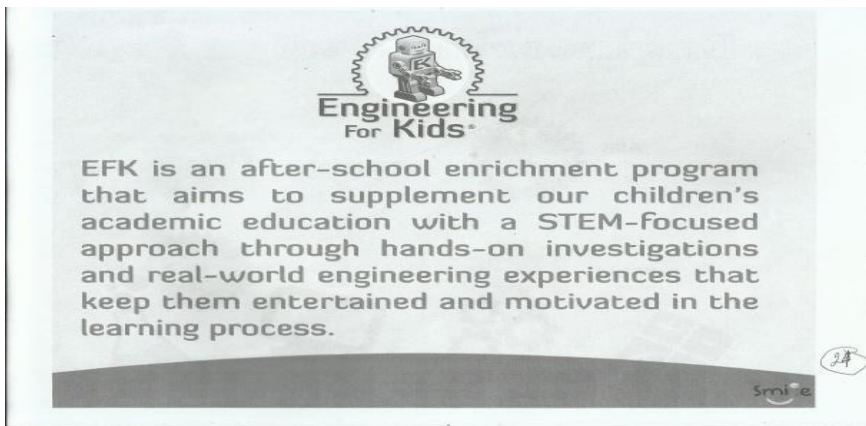
So why is this? I believe that a lot of Filipino children – like children in other parts of the world -- are scared of math and science; they believe that math and science are hard subjects, therefore going to that track or having degrees related to STEM will be very difficult. I grew up that way, I know a lot of kids even adults who grew up that way. We have to give it to DepEd because right now we have the STEM strand in senior high school. STEM students are assumed to be more literate in science, tech, engineering, and math. When you search for the STEM curriculum of the Department of Education, this is what will come out.



So what do we see? We have more science and mathematics subjects in that strand, but we still have more students choosing non-STEM-related strands. We recently had an opportunity to work with the Girl Scouts of the Philippines and the participants were from different parts of the country. We asked them what STEM is, then there was silence -- they were not even aware of the STEM strand in senior high school -- and these are the kids that we are hoping will take that strand, di ba? I also have the opportunity to volunteer in one of the NGOs here in Manila, they're cancer patients from different parts of the country and that organization houses them. They do not even know what engineers are, you ask them, "who builds bridges? Who builds buildings? Who builds houses?" "Si tatay po, karpintero po," totoo naman, pero when we ask them "sinong nag-design noon? Sinong nakaisip noon? Engineers di ba?, architects?" and they're not aware so how will they take the STEM strand in senior high? How will they choose STEM-related careers, they're not even aware who they are and how important they are, who will solve most of the top problems that we have here in the Philippines or in the world.

Right now it's raining so hard, we had a hard time coming here because of the flood, traffic; we have calamities because of global warming, who do

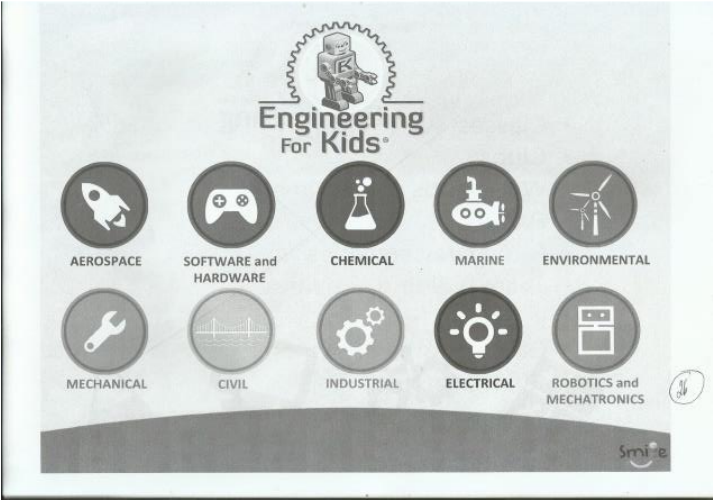
you think will help us solve these things? We need more innovators and game changers and that's what we are advocating and that's why we brought Engineering for Kids to the Philippines. You know our country is the first in Southeast Asia to franchise Engineering for Kids, it's a brand from the US, again it's a product of the low ranking that the US got from the different kinds of math and science tests for different countries. Originally in the US it's an after-school program, because they don't have yayas, they don't have extended families, so who will take care of their kids while they're at work? Parents need a place where they can enroll their kids while they are still busy at their jobs; that's why it's very popular with them, it's an after-school program that offers STEM-based activities and lessons. But here in the Philippines, we have extended families and yayas and all that, so what we did was partner with different schools so that we could come in as an after-school program or as a club and we could have classes, we could have clubs, we could have parties or workshops and team-building activities.



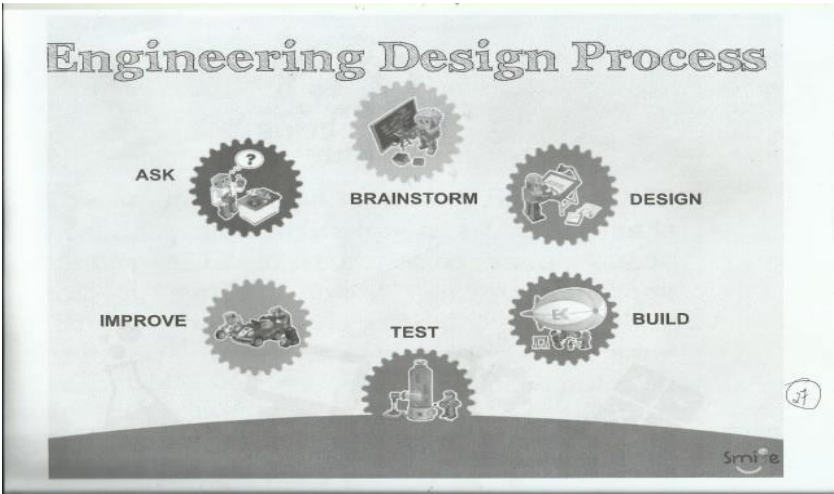
You know about the issue of field trips right now. Kids are no longer allowed to go out. We can bring in engineering stuff to your lessons, to your schools and you'll have hands-on and minds-on activities. We want to spread the benefits even more, we are willing to work with the school's curriculum or course outline so that we can align the lessons that Engineering for Kids has, which are all aligned with the national standards of the US and which are so different from ours. So what are we trying to

do? There's one school who gave us their course outline for the year and then we tried to identify suitable activities for them, kasi ready na eh. That's what's great about Engineering for Kids, the curriculum is there, it's just for implementation by SMILE, because we're the main franchise. So what did we do for that school? We picked out activities that would match their course outline and one feedback they had was, you know we started doing that in class but we did not finish it, and that's what we did in Engineering for Kids, so it's supplemental, it's not just an after-school program anymore, it's something that will help them understand concepts more and will help them develop skills more.

Engineering for Kids has over 350 to 400 hours' worth of lessons. Let me share with you that when we started we just went by the book so whatever was written in the manuals for Engineering for Kids that's what we followed, just like the one classroom earlier, we were just following instructions through their manuals. Luckily, just as I mentioned earlier, we were able to consult with Dr. Grabowski and she shared with us how different the STEM methodology is, so now the manuals from Engineering for Kids just serve as our guide. We have aerospace engineering, software and hardware, the one that you saw a while ago is from chemical, we have marine, environmental, mechanical, civil, industrial, robotics, and mechatronics. It's a lot, I know you might say, huh pre-school naggaganyan? Why not? What's the best way for them to learn?



We want to make it more fun for them so that they won't be scared later on. If they are not interested, maybe we can make them interested. If they're not interested the best thing that we can do is for them to learn about the engineering design process.



What do you notice about this process? How different is it from scientific inquiry? When you Google scientific inquiry it's linear, one step after the other, it's very hard for you to go to the next step without completing the

previous one, yeah? Actually this is from Engineering for Kids but for SMILE if we could change it, para siyang magiging Venn diagram, all of them will be overlapping with each other. Why? Because isn't it possible to ask questions while you are testing something or while you are already improving something. I was talking to teacher Charles a while ago about the different chapters of a thesis, merong recommendation part, right? It stops there. With engineering design process you have to improve it and it doesn't end there, you can ask again, you can even go back to testing it again, you can try to improve it again, that's why di ba minsan yung mga apps natin sa phones version 1, version 2, version 3, that's why all of these are coming out. What's great about the engineering design process is that we don't even have to be engineers to follow it.

We had the opportunity to work with the Human Resources Department of this multinational company and it was so great to see those future managers from Southeast Asia. They came all together for their yearly meeting and we were there to do their ice breaker but we did an Engineering for Kids activity with them and then we talked about this process. They were able to align it with their work as HR managers. I'm not an engineer, I'm not even a STEM graduate but I'm passionate about STEM education and we in SMILE really try our best to follow this process.

Let me talk about some of our milestones. We franchised Engineering for Kids back in 2013 -- that's when the owners Ms. Aiza Mergana, Ms. Cheska Velorio, and Ms. Shaina Magdayao franchised Engineering for Kids from the US. They had a training program, they had the documentation and all that, but it was only in 2014 that we launched it. That's also when the SMILE Group was incorporated as a mother company and later on that year we found a partner in Cebu who's running Engineering for Kids there for us and then by 2015 we were able to transfer to our headquarters in Quezon City. We had the STEM training by Dr. Diana Grabowski and we were able to strengthen our partnerships with different schools and different organizations as well, so that was back in 2015. Last year, because we could not cater to all – the SMILE Group has only six full time teachers – and because of the clients who came in, we

had to look for partners to operate Engineering for Kids for us in different parts of the country. So we found partners from Iloilo and Pasig back in 2016 and then in 2017 we found partners from Makati and then also Muntinlupa and Binondo. Just last month SMILE Cares Foundation was launched and SMILE Cares Foundation is the corporate social arm of the SMILE Group. That's how passionate we are in advocating STEM education, so SMILE Cares Foundation's first venture is in Siargao in partnership with the Yes Pinoy Foundation. The philosophy of SMILE Cares Foundation is that poverty should not be a barrier to great ideas.

We are hoping that by 2018, the first eco camp in the Philippines will rise. What's going to happen there? We want the community there to learn about sustainability through STEM education. How? Through classes and workshops, through livelihood programs, through different projects in agriculture or marine so that it's the real application of STEM education towards nation building. Whether it's for the students or the youth or even the adults we want them to be able to work together. The eco camp is inspired by the Green School in Bali, Indonesia wherein you'll see the methodology introducing the natural resources around their school so it's like they're on a mountain and they're learning a lot about their environment and still learning about the concepts that were originally taught in their schools.

At this point I'm pretty sure you see how different the STEM that we have in the Philippines is as opposed to how SMILE does it or how Engineering for Kids does it. Hopefully we were able to share with you how important it is, not just for us, not just for our country but for everybody else. With that let me end with a quote from Isagani Cruz, in his article from the Philippine Star, where he said, "If on the other hand what you want is to help the country, today's heroes are really the scientists. One reason our country is lagging behind practically every other country in development is our lack of scientists." But is it just scientists? As I mentioned earlier, it's actually the innovators, the game changers, the creative and critical thinkers, the movers and shakers and that's what we in SMILE are pushing for so I hope you learned something new today or relearned something that might have been stored in the back of your minds. Thank you for

letting us share what we advocate and what we are passionate about. For more information about SMILE you can just call us or send us an email. Thank you, everyone.

Dr. Dahlia Domingo: Let's have our open forum so we can entertain questions from you and they will be answered by our resource speaker.

Dr. Lourdes Tayao: Are you saying that SMILE really focuses on concepts? Where does communication come in?

Ms. Sta. Maria: Communication comes in when we hold our classes, our workshops, the different kinds of services that we offer, it's how we conduct these activities. Communication from the students or from the participants would come in, how they share ideas, how they brainstorm. Remember the engineering design process: asking, brainstorming, building, when you test something and you're working in a group you communicate with each other. That's oral; what about written communication? All of our classes have journals; Engineering for Kids has some sheets which require explanation or ideas to be written down.

Member: How do you offer your products? Is there a minimum number of students or do you do it per head?

Ms. Sta. Maria: First it depends on the location, so the minimum number of students will depend on the location and yes usually it's per head. Of course if it's going to be in bulk, there will be a different costing for that. So again it depends on the location, especially if we already have a partner there who can cater to your school, it will be less. For example if it's in Bulacan we don't have a partner there yet. Of course we have to think about our logistics, how many teachers are we going to send, or transportation costs.

Ms. Elvira Galvez: How do you assess the performance for example of class A? Imagine a classroom and you break them into groups. Different groups will each be doing similar things even using similar sets of materials? So you will be going around and listening in to each group? How do you go about assessing? Because what they're doing might be different from other groups and you have certain criteria, so is it more like listening in and observing the groups?

Ms. Sta. Maria: Yes we have rubrics, but also we try to document them through their journals, through videos, through their presentations when they present their projects, or how they explain, and so we use rubrics, we use check lists so no exams. Anyway it's supplementary so it's not like schools being required to come up with grades.

Ms. Galvez: A kind of formative evaluation?

Ms. Sta. Maria: Formative, that's right.

Ms. Galvez: But at the end do you sum this all up?

Ms. Sta. Maria: It's more qualitative, so there are narratives; there are rubrics, because you cannot quantify skills that much; you can only have it through rubrics and check lists and that's what we do. But if the schools require us to assess their concepts then we have to resort to a different kind of assessment.

Ms. Galvez: We do similar things with our training program, like when we give them this hands-on training, we can do similar things like demonstration so when they go back they will be practicing it.

Ms. Sta. Maria: Yes, again just like what I've mentioned we're not saying that the instructional kind of methodology is wrong but it's something that we could align and work with together, hindi naman puro ganyan lang, although for us kasi nga we're not a school -- it's more of a partnership. How I wish we could have a STEM school here in the Philippines and

have something like that but it will require a lot of research, a lot of studying, so what we can do right now is partner and align how well we can complement and supplement each other. Just as I've said, there are these private schools who partner with us for hands-on stuff and then we align. For example, they're learning about gravity in this grade level, oh then let's have this kind of activities from aerospace engineering. It's really fun and it's about learning the different factors that affect gravity so what are these factors -- let's see, weight, distance and all that. Where do we come in in your course outline? Then we will do the activity, let's see if they can apply the concepts in your classroom and then let's see how well they apply them in our class. They were able to let's say predict that the heavier the object is the faster it will fall, something like that or maybe they were able to see how to launch let's say a paper rocket, so these kinds of things. So again it's not saying that we're doing it better than you are, no, what we're trying to say is let's work with each other, let's align our efforts.

Ms. Galvez: We're also confronted with the problem, let's say, it's group work, so how do you grade each member of the group, maybe during the interaction or maybe there's not much interaction, some are kibitzers, some are doers, some are runners, so how do you grade each one?

Ms. Sta. Maria: The teacher-student ratio that we have for the younger kids -- what we call junior level -- that's pre-school to grade 2, it's 1 is to 6, the way we do it in Engineering for Kids and that's a mandate from them from the US. And then for the apprentice, the older kids grades 3 and above, it's 1 is to 10, so there's really the opportunity for the teachers to be able to observe and then listen and really get to know the students.

Dr. Fe Hidalgo: Do you have a complete curriculum for any one grade level or year level?

Ms. Sta. Maria: Right now what we have is just a curriculum for Engineering for Kids. What we can do is actually dissect that and then align it from K to 12. We can assign different programs from Engineering for Kids per grade level but there's no guarantee yet that it will be aligned

with the K to 12 curriculum because the basis of Engineering for Kids is different from the curriculum of DepEd, but that's what we used to do, we'll get the course outline from the school so it's customized. What are the things that can be tackled in this grade level? We'll get the activities from Engineering for Kids. The Engineering for Kids manual or design is per program so it's just like what I showed you a while ago -- there's a curriculum for chemical engineering and aerospace so it's thematic.

Member: Excuse me, we're just wondering how much is it per kid, the price po?

Ms. Sta. Maria: Again, it depends on your location, it depends on how many kids will be taking it, it depends on the program also.

Member: This 2017 you have it only in Makati?

Ms. Sta. Maria: We have a partner in Makati, we have one in Muntinlupa, we have one in Pasig and in Quezon City, the headquarters are in Quezon City.

Dr. Rosario Alonzo: Since you already have some programs on-going, can you give us a ball park figure?

Ms. Sta. Maria: The one in our center, which is located in Quezon City, if you go to us, our rates are P3500 on the average and that's for eight hours per program per student. So that's per program, available at our center, so it will be different if we are the ones going to your school because we usually offer profit sharing with the different institutions that we partner with. But we also hold workshops, so for example, if we're going to hold chemical engineering or hardware engineering workshops, it could be worth P1100 that's for three hours but cost minimum of let's say if you're going to our center, minimum of 10, if it's just along Quezon City then it's just 10, but if there will be more than 10 yes I think the cost can be less.

Member: But that's the after-school program?

Ms. Sta. Maria: No, that's just the workshop, that's worth three hours, that's P1100. We can send you proposals, we can talk about pairing, which will depend on the number of students that you have and we could talk about it. Yes, materials are included. We recently had a robotics workshop for a BPO company so these are adults who had no robotics background but since their company is geared towards innovation they wanted to learn more about how things are right now when it comes to robotics. They got us even if it's Engineering for Kids, so we do that as well.

Dr. Hidalgo: This is just a minor question. I noticed that when you gave the first activity you just told them to do something creative -- there was no context, do you normally give the context when they work on those activities?

Ms. Sta. Maria: Yes, of course we do, but we had limited time today. Usually one lesson is worth 1.5 to 2 hours so may context naman po yun, maybe we can present the problem and of course again we'll have to go through the engineering design process and that will take time. Just as I mentioned a while ago, how do we extend that class? First maybe they can investigate each material, what can they say about it, how can they describe it and they jot it down in their journals and then they try it out. Ideally there would be measuring spoons, measuring cups, they're trying to see how much is needed to come up with something and then they can track down the different kinds of products that they can come up with if they use this much of glue or something it's this slimy but it can be as hard as rubber. That's how different it will be in a classroom. They share, they present their work, yung communications skills so that we can also assess how well they understood what they did. So each of them will have a chance, and it will depend on the class, on the size of the class, it can be one group presenting right after the other. It can be stations like a museum type kind of thing, they display their work, there's like a small narrative there, they go from one station to another, so there are different ways we can see how they handle their projects and their activities.

Ms. Galvez: It is processing to come up with their concept.

Ms. Sta. Maria: Yes, definitely we do have processing, definitely we have that, if we're talking about something and viscosity comes up then let's talk about viscosity, have brainstorming as a group or as a class then we talk about it and then how? They can have cloud mapping about viscosity. So again it's the STEM concepts plus the skills but we try to elicit from them where they're coming from, what they already know, and then we try to add to those things through what they have learned or what they have experienced from the activities or from the explorations of the day.

Dr. Domingo: Ok we can entertain three more questions from the group. I have one question. I was wondering because a while ago we were thinking about our engineering department so when you say Engineering for Kids, you have some sort of workshop and laboratory equipment that you have for kids and then you qualify those kids, what grades are they. So you have a building?

Ms. Sta. Maria: We have a center, we only have a lab of some sort because most of the things that we use in our programs are actually household materials or school materials that are easy to find but we do use different kinds of devices.

Dr. Domingo: So can you qualify the kids there?

Ms. Sta. Maria: Ah, 4 years old to 14, pre-school actually, but again we also cater to adults whenever we do workshops and team building especially those who do not have any background on the programs that we have.

Dr. Domingo: But you only use the word engineering, even though you are teaching the whole STEM?

Ms. Sta. Maria: Yes, because Engineering for Kids is the brand that was franchised from the US, that's the name, Engineering for Kids, it's like the company in the US, the brand name because Engineering for Kids is based on STEM education for the US, it's franchised from the US. SMILE

brought it here in the Philippines so what we are trying to do we're trying to align it with the Philippine setting so for example instead of talking about Golden Gate Bridge in civil engineering we can talk about San Juanico Bridge instead so we try to align it, how it is here in the Philippines, plus we are willing to work with different institutions when it comes to their own course outline and how it can be supplemental.

Dr. Domingo: So that's why our CLS director here says if you can manage to give us a proposal and then we can present it to our University President.

Ms. Sta. Maria: Yes, we could be supplementary.

Ms. Galvez: As far as the curriculum is concerned, but which is aligned to the SMILE curriculum, do you have a kind of manual which you give them, these are the prescribed materials.

Ms. Sta. Maria: Yes, we do, because we need to take care of the quality of the lesson and activities that Engineering for Kids entrusted to us so the SMILE teachers and the Engineering for Kids teachers are trained and of course we follow a set of requirements.

Ms. Galvez: You don't have a kind of kit where you have all those materials say for example lesson one, these are the materials.

Ms. Sta. Maria: We do have that, we have lists of materials and even alternative materials that can be used by the teachers; in fact some of the activities from the US Engineering for Kids we already altered so we could use easier-to-find materials in the Philippines.

Dr. Domingo: One more question? There are no more questions, so at this point I'll give the floor to our vice-president.

Dr. Hidalgo: Of course we realize that in every session we have we try to bring together new ideas, efforts, new initiatives, anything new. We'd also

like to see how it jibes with the given curriculum in both public and private institutions that we have in this country. This is an imported idea but Filipinos are also very creative so we try to marry what we have with things that are coming in and of course things that are really related to the context in which our children are operating. I've seen a lot of new creative ideas not only in STEM but in other subject areas. I hope you will continue to come and to invite new people to bring in these ideas so that our curriculum can be enriched and we can have more ideas that are contextualized. Creativity is purposeful; if we keep on talking about creativity the purposeful activities that we have should be in context. Maybe in one of the coming activities all speakers that we have invited can come together at some point and really talk about these new things that we have drawn from several areas from several countries and see how we can make use of them within the context of our curriculum. I'm not saying it's bad to import, it's good to import but it's also good to look at how creative our children are in the different subject areas that they're interested in and to begin them early is very important. FUSE, as it is, needs to continue to upgrade the standards of education and that's what we are here for. If you know of any more ideas or any more programs by all means please let us know so that we can continue to have sharing sessions, general assemblies that we have once a month. We're lucky that we have FUSE where we can put together all these ideas and see how we can make use of them at any point in time in our particular schools. I wish to thank everyone for coming this rainy day sana pag-uwi ninyo wala namang baha, I think the rain is pouring still so I hope to have you off soonest so that you will not encounter any problems on the road. So once again thank you very much.

Education Programs of Microsoft Philippines and Worldwide

Ms. Clarissa Segismundo

Education Program Lead, Microsoft Philippines

(September 26, 2017)

It's an honor to be here and to meet all of you educators. Thank you to the people behind FUSE for giving me and Microsoft the opportunity to share with you our programs in Education.

I want to start my talk by asking you this question. Let's rewind to 12 years ago, maybe we were 10 pounds lighter 12 years ago. What were the jobs maybe we saw in the movies or some imaginative students shared with you in your class that didn't exist but now are happening, any idea? Or any industry, jobs, businesses, unimaginable 12 years ago, anyone?

Member: Uber.

Uber, very good, ma'am. Yes anything else? Online selling, correct. It's not a hard audience, I'm very impressed. Twelve years ago we didn't think that bloggers could actually make a lot of money just by posting what they were wearing, what they thought of a certain make-up, right? Posting food, creative pictures of how bagoong rice is cooked, and they have so many followers, and some bloggers or some Instagrammers actually get paid, one peso per follower, and if they have millions of followers how much can they earn?

If you talk to the kids now 90% of them dream of becoming YouTubers when they grow up. Of course you have to be articulate, you have to be passionate about what you put in your video but YouTubers can range from ages 6 years old to 100 years old and they post videos of unboxing a gift, unboxing a toy and talking about how this toy works and how much this toy costs and for every 100,000 followers if I'm not mistaken, don't

quote me on this, YouTube gives them 100 dollars and that's separate from the ads from the sponsored commercials other companies put on their pages.

What else? Chief Happiness Officer. Some companies actually have Chief Happiness Officers because before parang ha? ano yun? Who cares about the happiness of the employees, but now companies have shifted into making sure that their employees are not just paid well, it's not just about the benefits, but it's also about the happiness index in their companies -- are they happy with their workplace, are they happy with the design, are they happy with the free drinks and coffee being served in the pantry, are they happy with the workplace culture? Things have changed now. What else?

App designer, right? I mean you use your smart phones, you have Viber, you have Facebook, you have different apps to book appointments, reservations in restaurants, these are applications designed by people who actually foresaw what people would need a few years from the present time, right? And the app has to be user friendly by interface, it has to be beautiful, it has to be visually appealing, so we have app designers now. A few years ago our focus was only on reading, writing, accounting, engineering, math but the demands on the skills of students and graduates have actually changed and evolved.

Big data analyst, what is that? When we talk about big data it's not just about looking at accounting files, you know, marketing data for you to come up with graphs and charts but it's also about understanding human behavior and it's based on the data that you pull out from certain tools that you use. Telco companies like Globe or Smart or even Jollibee or McDonalds when they come up with certain programs and they change every 48 hours. Who uses Spotify here? Spotify is one of the best things that happened in the music industry. By the way, I grew up with cassette tapes and my boyfriend would give me cassette tapes if he had a song for me but now it's different, we share music online, so Spotify is an app where I can create my own playlist -- I don't even have to wait for the DJ or the radio announcer to announce the title of the song and the singer and

the artist of the song, all I need to do is to search for it on Spotify or use an app that records the song and it will automatically tell me what the title is. I go to Spotify, I type it and save it on my playlist. That's how easy it is now to have your own music, hindi na tulad dati. Now you share it online and if I have my playlist and you have a Spotify account you can follow my playlist, you know the songs that I save, you know the songs that I listen to and it depends on my mood right now based on all the songs that I save on my list. Spotify has what we call business intelligence, it's called machine learning. Spotify is able to study the rhythm and the beat of the music that I listen to and Spotify gives me suggestions, similar songs that I want to sing and for me it's so good, that is my style, these are the songs that I listen to. It suggests similar songs, similar artists, similar genres that I could save on my playlist.

Big companies come up with different promos that are based on business intelligence, they're all based on machine learning and they use those data to make informed decisions. Doon pumapasok yung artificial intelligence - it's not a bad thing because through that, through the use of technology, we are able to decide faster. At the same time I call them informed decisions, they're not based on gut feel, they're not based on "feeling ko pwede yan, suswertihin tayo diyan," no, because the human population is growing, the workplace is changing. When we make decisions, when we want to make programs, everything has to be based on data that we've collated carefully and gathered properly.

Now this is the life of a typical young professional. Okay I will start here, at 5 am. This is John, he's 40 years old, at 5 am he wakes up. What does he do first?

He grabs his phone, checks his Viber for messages or maybe checks his Facebook, if people like some of his posts or if there is news about the government or anything. Ok, at 6 am he leaves for work, books his ride through Uber. At 7 am while he's stuck in traffic, what does he do? He brings out his phone watch, his videos on YouTube. At 8 he arrives at work, checks his calendar, not the thick notebook calendar but he checks his calendar on his phone and he's using Outlook. At 9 am, he wants to

review the minutes of the meeting so that he will be prepared for it, he puts up and gets his phone or probably his device, uses OneNote, it's a collaborative tool that you use to record the minutes of the meeting that you can share with your officemates. After that he heads to the pantry for coffee, watches YouTube again, parang wala yata siyang kaibigan no? Parang YouTube na lang, just kidding. Ok and then at 11 he saves his work not in the USB drive anymore but in the Cloud and it's SharePoint. Why the Cloud? Because it's anytime anywhere, while he's in the pantry, he's in the car, he doesn't need to bring tons of USBs, it's in the Cloud. At 12, he wants to check out a restaurant, he goes to Booky or Zomato or Click the City, you know it's in the app. Of course before eating he will take a picture of his food and post it in his Instagram, right? and then every two minutes he checks it, sino kayang nag la-like ng food post ko. Around 2, he heads back to his office because he has a video conference with some of his colleagues, he's probably stuck in traffic but there's a Skype option to communicate with his officemates, it doesn't have to be face-to-face. Or maybe he's Skyping with his colleagues outside of Manila or outside of the country. Then before 3 pm, he grabs a cab and heads for his 3 pm meeting and checks out Waze because he wants to know kung may traffic ba or wala. Then at 4, he goes to the gym, warms up, listens to Spotify. I hope after 4, kumakausap na siya sa kaibigan niya wala na siya sa technology.

It should be a balance but what I'm presenting to you, what I'm showing you is actually the Internet of things, that's the behavior now of the current workforce and of course your students, the millennials, the digital natives. This is how a 22 year old millennial behaves as well, not very far from John, the 40 year old worker that I shared with you.

What does it mean? I want to present to you the new world, the new workplace order in Asia. I limit the discussion to Asia first. We are truly a mobile first Cloud first region mobile first Cloud first meaning everything here now is towards being mobile and if you look at the kids now in school or when you observe the behavior of people that we see around they have a smartphone but I'm sure they also have a tablet stashed in their bag, pag punta sa opisina may PC din, in their house they have a

laptop. There will come a time when there will actually be more devices than the total human population. That's because an average human being actually has more than two devices already. Yung iba pa nga more than two phones eh. So like me, I have my smartphone, I have this and I have another one at home, but it doesn't mean that my work is always here. If something happens to this device I can still use this file because I saved this in the Cloud. If I decide to go out and because this is too heavy I want to go to Starbucks and have some coffee and my boss looks for me, I can reply to him through email because my email is also here. When I turn this off o nag low bat na ito, ilalabas ko ulit ito when I connect to the Internet. The same file is here in my device and that has changed how people behave in the workplace, employees who are seeking work-life integration.

Seven out of 10 working professionals actually spend at least one day outside of the office to work. Hindi tulad dati, for us to be productive, the boss has to see us working and sitting at our desk and that's the orientation that I also grew up with. In school, kailangan masipag ka, kailangan nakikita kang nag ta-trabaho, kailangan pumapasok ka ng maaga at kapag ikaw yung pinaka late nang umuwi sa office, you get the recognition. Don't get me wrong, those are virtues that we would want the youth to still have, to value hard work, patience, perseverance, and determination. However now there are so many options and people are expected to do so much, right? If you're a mom, you have to be a hands-on mom, but you have to have your career, you have to look good, you have to have time with your friends, you have to take care of your parents, you have to take care of your siblings, ang dami, etc., more so kapag teacher, correct?

And technology is a tool that helps us and everyone else regardless of profession to do more, achieve more, so that's what we're trying to do. Ibig sabihin, now, employees care about work-life balance. Employees now especially in Microsoft are not expected to stay in the office until after 6 -- we value work-life balance so much that after 6 if you don't reply to your boss, you don't answer phone calls, that will not be taken against you. But for me, work-life balance is subjective. I prefer to work on a Sunday evening because all my kids are asleep, and so on Monday, I

can have breakfast with them, I can help them prepare for school, then go back to sleep again and I can go to work at 10, but it's because everything that I needed to submit by 9 am I've done already Sunday evening. Sometimes if I have no meetings on a Friday, I just work from home or I go out of town, I stay at the beach, I work from the beach because I have the Internet. It's subjective, but for some people work-life balance is 9 am till 6 pm only.

But my point is ganun na yung behavior ng mga tao ngayon and it doesn't mean that they're not effective and they're not efficient in the workplace, so it's not traditional anymore. The millennial effect? Who are millennials here? Marami pa ring mukhang millennials dito. They say by year 2050 50% of the workforce globally will be comprised of millennials and of that 50% of the global workforce 58% of them will be coming from Asia, bata pa kasi mga Asians, di ba? We have young generations, more so in the Philippines, ibig sabihin, by then the 58% of those millennials from the 50% workforce are actually the digital natives, these are the students or the young ones who grew up with PCs, with laptops, with devices, so that having a phone is really just so normal to them na kapag wala, parang life-threatening talaga. Wi-Fi is really an essential part of the hierarchy of needs already for this generation.

People, place, technology all play an important role in shaping the digital workplace. Obviously people -- they are part of organizations, they need to adapt to the changes but they are supported by great leaders in the organization. Place - a lot of companies have now changed and adjusted to flexibility in the workplace, even how furniture is set up in the offices. Gone are the days when an employee, kapag nag ta-trabaho ka sa office ganoon kataas ang cubicle mo, so no one can hear you on the phone. And you can do your own thing and you have your own room that is so big that for someone to talk to you kailangan ka pang katukin, mag se-set ng appointment nang matagal, etc.

The new workplace now is more open and collaborative and you might want to check out the definition of more open and collaborative workplace but one example I will give is Microsoft. In our office we don't have our

own desks, we call it a virtual workspace, I could sit anywhere and our desk is actually open, we don't have dividers, the desks are open. I could sit beside anyone, I could sit beside our general manager, I could sit beside the director, I could sit beside one of our assistants, it doesn't matter, it's more open, more collaborative because you get things done faster through communication. Do you get my point?

Technology helps us work faster and better but we're not taking away human contact because it all boils down to that. Technology, you know, maski gaano kasophisticated ang technology natin it's actually up to the user and the people implementing the technology in the school or in the organization. So ganoon po sa amin, our general manager doesn't even have his own room, but of course we have booths or meeting rooms that we can book if we need privacy. If I'm in a conference call and it's confidential, I can book our meeting rooms. But in general we are allowed to work in the pantry and our pantry is designed in such a way na may saksakan siya and it's still open and collaborative, right? You know one of these days, I'd like to invite everyone for a visit at our office. Maybe we could hold the next meeting at the Microsoft office in Makati for you to have a better appreciation of what I'm saying.

So having shared all these changes and the new stuff that is happening now in the digital workplace, yung mga customers ngayon namin sa Microsoft like to talk about the financial services, manufacturing, retail, telco, they continue to invest in technologies and tools that cater to the digital workforce today kasi ito na yung trends. But the big companies and the SMBs and those who follow, what are they doing? Of course they're also investing because they want their business to continue to evolve and grow. That's what we call transforming while performing, Some people transform but it's hard for them to perform because they try to adjust, some people perform but they find it hard to transform kasi paano mo sila pagsasabayin, di ba?

But if you want to still be in the game and if you want to stay ahead of the game you have to transform and perform. The companies that we talk to continuously invest in technology, they continue to invest in their people,

they continue to invest in their culture, so my question to you is, as educators, as school leaders, as owners of the institutions, as the ones who are in charge of implementing these policies, how are you preparing your students for the digital workplace? I am not an educator, I'm from Microsoft, but I advocate the use of technology for teaching. Technology is only a tool and it should never replace a teacher. I truly believe that and personally whenever I come up with programs that we want to roll out in Luzon, Visayas and Mindanao, I always prioritize the principle that the technology we're introducing to the teachers is not meant to replace them but is meant to enhance what they already have.

Technology is meant to help teachers become more productive and educators and school leaders more focused on the more important things rather than worrying about operational tasks, like computing grades. What takes the teacher three days, Excel will actually help her finish in one hour, right? There was a teacher who sent us a message of thanks because she said previously she couldn't concentrate on her love life sa kaka-compute niya ng grades, 10 sections, and she said because of the training she got she was finally able to plan her wedding, so she sent us an invitation. Some teachers told us that they now have more time for their kids when they go home. Because teachers actually bring their work home – it's not a 9 to 5 job, it's a 24 by 7 job.

In our own little way how can we help you use the tools that you might already have in your ICT lab? What is needed is training. We are focused on outcomes, so it's always making sure that whatever programs you want to implement, it's not just about the technology but the outcomes that we're looking for. It depends on what our priorities are as a teacher in a classroom, or as the head of a department, or as a curriculum developer -- are we being deliberate regarding the specific skills that we want our students to have when they graduate? It could be as simple as when you teach math, is it really mastery of the multiplication table you're after? My son for example -- is my interest really for him to memorize the multiplication table? Actually not, my interest is for him to understand the concept of multiplication so that he will be able to apply it in real life and if we make it more complex, I want to enhance his computational and

critical thinking because those are the skills that he will need when he leaves school. It's not really how fast he can answer 9×7 or 20×13 , things like that, but it's understanding the concept, it's the thought process and it's enhancing the future-ready skills.

For me, the skills could be the five C's -- communication, critical thinking, computational thinking, creativity, and collaboration. That's how we want to help educators. In Microsoft when we introduce technology, it's not really the mastery of technology but we give the child collaboration tools, Word, Excel, PowerPoint, for example, Office 365, teaching them how to communicate through email. But it's really targeting communication skills, business communication skills so those are two different things. Based on my observation and my feedback, when I interviewed applicants, fresh graduates, they speak English so well, they're so articulate, yung iba slang pa, they sound like they're from Cartoon Network, when they speak in English. But when you ask them to write an email they fail when it comes to business communication because it's different or when they type it's different, the choice of words that they use so those are two different skills eh, so communication and collaboration.

And when we talk about collaboration this also entails digital citizenship, collaboration through the Internet. If we have Facebook then we can collaborate, I create a page and all the students can talk in Facebook we exchange notes. But students should also be taught proper online behavior. Those are the different facets when we bring in technology to our curriculum and to our school because there's such a thing as online etiquette. Think before you click, right? Whatever you share, whatever you comment on, whatever you put there is in your digital footprint, correct? So those are the things that we teach the kids as well. Our mission also is to make sure that when we enable educators that we bring programs to the students they are based on the 17 sustainable development goals of the United Nations member states. Are you all familiar with this? These are the defined sustainable goals globally where Microsoft is actually a partner and technology is one aspect that they're looking at but of course there are other programs and technology is just one of them. But we are conscious that in Microsoft when we introduce programs, when there are learning activities,

when there are lesson plans they should be based on these 17 sustainable development goals.

Okay, our focus, quality education, decent work and economic growth, industry innovation, sustainable cities, life below water, peace, justice, and strong institutions. But really, if you look at education tinatamaan niya lahat, di ba? ICT in education is one portion of that but we are not education as a whole. So what does it mean? Microsoft alone won't be able to do all these things, we need partners like you, through the proper implementation and proper use of technology in your institutions we will be able to achieve this.

The ICT skills that children acquire in their computer classes -- actually now grade 2 may computer classes na, pinapag Word na sila, pinapamemorize na sila, it's building their foundation so that when they go to high school their use of technology is more sophisticated, when they go to college it's something else, when they graduate mas higher level. I mean that's how I simply put it but it's beyond technology, equipping your student and your teachers, right? The ICT skills will lead to employability, economic development, and entrepreneurship. For example, three years ago, kapag sinabi mong Microsoft, pang IT course lang yan, correct? Tsaka dapat pag IT teacher, College of Computer Science, sila dati mga 10 years ago ganyan talaga. But now, when you say Microsoft, when you are studying accounting, you need to have skills on spreadsheets and that is Microsoft Excel, that accountant is not an IT student, not an IT professional, but an accountant needs to have a certain level of proficiency in Microsoft Excel because that's the spreadsheet that you use, no more manual ledgers, no more abacus, no more adding machine, correct? It's Microsoft Excel, it's the ability to process and analyze data with Excel as your back-end and then you convert it into graphs, you convert it into charts, and you pass it on to the marketing person.

Now the marketing person hindi rin naman siya IT but the marketing person should have some level of proficiency in Microsoft PowerPoint, Word, Excel because pre-present niya yung case eh. Kailangan din pag marketing, marketing isn't just about talking and presenting; the skill that

you need heavily when you are a marketing person is the ability to analyze data because that's how you come up with marketing programs and campaigns when you have the right data and that's through Microsoft Excel also and Microsoft PowerPoint.

So that is the journey that we have in education, it's called the Digital Transformation, just like in other companies, sa eskwela naman Digital Transformation is making sure that in education, how are you engaging your students? How are you empowering your educators, what are the tools that are available in your institution and how are you transforming learning? Okay. Let me move forward, some examples, anyone who doesn't use Microsoft Office?

It's okay, so is it safe to assume that you are all using Word, Excel, PowerPoint in your classrooms? Okay, may I ask Dr. Esther, how are you using PowerPoint?

Dr. Esther Moguer: The easiest way, you go to Slide Share -- there are ready made PowerPoint Presentations to save time and energy.

Ms. Segismundo: Thank you. So I guess for most of the teachers ang paggamit nyo ng PowerPoint is to project the lesson on the board, correct? Okay, good, but PowerPoint is beyond that. I want to share something with you. In PowerPoint there's a free tool which we call Office Mix, downloadable, it's an add-in. Now what can Office Mix do? Sa Office Mix, kung ako yung nagtuturo, ako yung teacher, I can actually record myself, and while I am talking about history, for example, slide number 1, this is the history of World War 1, slide number 2 this is how it started, so your face appears in every slide. And you can record it. And after that you turn it off you save it in the Cloud and your lecture is actually saved and it becomes standard, hindi yung paiba-iba ng version. What does it mean? For those students who were absent, they don't have to wait for you, they don't have to ask their classmates, they can just check your work online, panoorin nila ng paulit-ulit. I know most of the teachers now just give the PowerPoint slides to their students and post them somewhere. My son

actually gets confused because they're all graphics, there are no notes. Who among you give notes in PowerPoint? My son needs someone to explain. PowerPoint comes to life when you're able to explain the content of the slide.

If you notice my PowerPoint slides are mostly pictures, small text. I don't put long sentences because children have a short attention span, children who grew up on YouTube, where a three-day lesson can actually be watched in two minutes on YouTube. How can we give them PowerPoint with text-heavy slides with paragraphs and sentences? Through Office Mix you can record something and you can even conduct online quizzes, so pag may Internet yung mga bata pwede silang sumagot and then you get real time feedback on how much they have learned today, you don't have to wait for a quiz the following week. That's how I would want to measure if the students are listening, I deliver a lecture today, I do an online quiz through PowerPoint, naka connect sila sasagutin lang nila and then ayun natuto ba sila o hindi?

And then as a teacher I am able to come up with ideas na 50% pala hindi naiintindihan yung sinabi ko, so maybe it's the content, maybe it's my voice, maybe it's how I deliver it, maybe I have more students who are visual and not auditory, maybe the students here are more kinesthetic so kailangan na may konting activities rather than them sitting down and you doing the talking all the time. So that's Office Mix, I'll share it with Ms. Helen, I'll give you the names so you can play around it and pwede nyong i-download.

How are we empowering teachers? We have a program called the Microsoft Educator Community. It's a global program, you can sign up, it's free, easier than creating your Facebook account and once you're inside the portal you can have access to thousands of online trainings, lesson plans that were uploaded by teachers from different parts of the world, video tutorials, simple one, two minutes, three minutes that will assist you. For example I want to understand more on how to use Office Mix, meron siya ditong tutorial and simple, we can be creative about it, it's free for all teachers. This is how the portal looks like, yan siya, so the

website is education.microsoft.com. Share ko rin po yan mamaya through Ms. Helen and then she can just blast it to all of you, education.microsoft.com.

So here you see the different programs for teachers, meron mga iba-ibang lesson plans. So here, all you need to do is sign in, just create your account and then from there you can navigate, check the different tabs, makikita niyo yung mga webinars, videos. My suggestion is don't try to do everything, just pick something that interests you and you start from there. Some of you are implementers, there are some not necessarily teaching in the classroom, but feel free to share this for example with your education technology coordinators, principals, even Math teachers. I think most of the members that we have here are not IT teachers eh, math teachers, Filipino teachers, science teachers, those who focus on STEM, you can share this with your STEM coordinators, so these are different learning tabs, may mga budget siya, you have Skype in the classroom etc.

Now, I want to share this with you. Who uses Skype? We use Skype to communicate with relatives outside of the country, right? Skype is a product of Microsoft and we have a program which we call Skype in the Classroom. How does this work? Skype is Skype but if you're part of Skype in the Classroom we allow classrooms to connect and it's facilitated by the teacher. We've had activities where a classroom somewhere in Mindanao was able to connect with a classroom in Ireland and it's because the teacher wanted to expose her students to other cultures, other languages. It's because the children in Mindanao, according to my teacher contact, hindi pa talaga nakakalabas sa city nila. Their world is really just there and their definition of employment is what they see from their parents so kung lumaki sila sa lugar na ang trabaho ng mga magulang ay tricycle driver, security guard, that's what they want to become also. So what we're trying to do is open their worlds and minds to different opportunities. We allow them to Skype-connect with other classrooms and one time we allowed also their classroom to Skype-connect with me and with some of our leaders in Microsoft. We do that and we're open to do that with your schools also, we deliver career talks, inspirational messages

so these are like grade 11 students from Lanao del Norte and they have a 45-minute talk with the director for public sector in Microsoft Philippines.

They weren't in the technology track, and we didn't talk about technology things, and he delivered the talk on how he started, sa probinsya siya nanggaling, our public sector director, and what made him aspire for a better life, he took his chances, he committed mistakes but it didn't stop him from dreaming big. And the students actually gave feedback na parang oo nga ano pwede rin akong magtrabaho sa Makati, kasi hindi nila ma-imagine yun eh. Anong itsura ng office nyo, so we did the tour through Skype, pinakita naming ang itsura ng office, employees saying hi to them and you'd be surprised it made a big difference to them because for them it's unimaginable na tutungtong sila ng Makati, unimaginable na aalis sila sa probinsya nila eh more so umabot sila ng Makati. So we're saying, mag pursige kayo. If there's a chance for you to become a scholar, study computer science, don't be afraid. So those are the types of things that we do that's part of Skype in the Classroom.

Another thing that we can do in Skype in the Classroom is virtual field trips. This is free and you can do this, you can actually hook up, we have virtual field trips where you can actually hook up with the speaker depende kung ano yung theme nila. But our speakers range from holocaust survivors to resources from NASA. Your students can actually Skype with the real astronaut, we book their time, we schedule that and it's free, we can give your students a chance to hook to Skype with one of our resource persons in the Arctic Ocean kasi dun siya nag-aalaga ng mga polar bear and he has Skype and he does this for education. At least the students can be more exposed to that, parang ano ba yung ginagawa ng polar bear, what do you do there, what's the temperature there, what do you eat, how do you dress, how does your bathroom look like. We do that for the students, we can do virtual field trips -- meron kaming isa na it's a hospital for sea turtles, for example, that's to increase their awareness of the environment and endangered species, that's in the US and they take care of sea turtles because they're an endangered species or we show them rescued gorillas. It's a zoo, di ba it's refreshing, it's different and it's exposing our students now to other opportunities so these are the things that we have.

We'll be more than happy to conduct training for FUSE members on the different apps for productivity, for example Word, Excel, PowerPoint, I'm happy and glad that you are all using it for your productivity but I'd like to share with you the 80% more functions that probably you have not discovered yet, and then you can share it with your fellow teachers. Skype like I said is a collaborative platform that allows you to talk to your teachers and your students using one platform, so I mean it's also a nice tool for collaboration.

Who of you has played Minecraft? Who has kids who play Minecraft? Okay di ba na para sa akin ano ba ito sakit sa ulo, pixelated, nakakahilo, di ba? That was before, that's the pre-edition of Minecraft, but Minecraft is also a product of Microsoft and we can use it for education, we call it Minecraft in Education. It really looks like a simple game, para kang nag le-lego sa machine, it's pixelated and you know what, my son just keeps on building his own world, but I discovered that when he builds his world, in Minecraft, if that's his world he has the option, he can build a restaurant, he can build an army force, di ba, or he can build a house, he can build a castle, whatever he wants to build, he can build a prototype of an entire school, an entire barangay, it doesn't matter. So in Minecraft you can be as creative as you want. But a five year old child who does that actually needs to understand how to build a castle, what are the materials that he needs, bricks, iron, wood, hammer, different types of tools.

My son is also knowledgeable about the different gems, diamond, sapphire, lapis lazuli, whatever; he has memorized all those things and he knows functions and he knows the color and he knows if he needs fire, he needs water, he needs dynamite, he knows all those things. When we studied this, we surveyed this in students, Minecraft actually enhances the child's creativity, obviously, computational thinking, because when they build their world they need a certain level of understanding of math and measurement and physics. It's not just doing anything and everything; you need design, visual design because you have to have an appreciation of different colors, correct? Collaboration because Minecraft allows multi player collaboration and you have to be conscious when you're

collaborating online hindi ka pwedeng mang-away, you have to respect the other player so it fosters also collaboration, communication as well.

So how's that being used in classes? There was a project in Xavier University, Ateneo de Cagayan wherein we used Minecraft, nag-collaborate yung language, science, and values education departments nila for the performance task of their grade 6 students. They were asked through Minecraft to build an ideal barangay, something like that, build an ideal barangay and what they think are the critical components to have an effective barangay considering the urban planning, the irrigation system, and the components of the proposal to the government, something like that, and it's amazing how different ideas came up the students grouped themselves to do the task, they did it online, and they submitted their project.

It's also about literacy and communication because they're asked to present it while navigating, so that's how technology comes into play. It's not an isolated case na Minecraft maglaro ka lang but my point is Minecraft is the tool that Microsoft shares with teachers. It has a complete kit where the teachers are guided with the tutorials kung paano siya iimplement sa klase but at the end of the day it's the leadership of Xavier University that mattered. Nag-usap-usap yung mga teachers, inisip nila kung paano ito ma-iimplement because children are playing Minecraft anyway. If they give these kids cartolina and scissors and boxes and all, they can be as creative because they're used to that, you still can do it, why not. Ako mas gusto ko pa rin ang arts and crafts and everything handmade but why not try another method for these kids. If you can spark creativity, you can spark interest, why not? You really open their heart, walang tinamad, walang nag-absent, walang nag-excuse, they really submitted their work and this example is being followed also by other Microsoft schools.

So if you're interested about Microsoft, I'll be more than happy to present it to your school, show you how it can work. Aside from Minecraft we also teach coding. Coding can be taught to kids as young as grade 3 or grade 4 through games. This is what you call games-based learning and by

doing all these things, and empowering the teachers, giving them the training and helping and giving the students the chance and the opportunity to code, we are helping them towards achieving employability, economic development, and entrepreneurship. In a recent study in 2016, there were top 20 skills that were mentioned that are most in demand; out of those 20 the only technology skill that was mentioned is Microsoft. Of the top 20 most sought after employability skills, number 3 is Microsoft Office, number 9 is Microsoft PowerPoint. SAP is a financial software but having shared this with you it only means that when we transfer these skills to our students the younger generations are setting their paths towards employability.

Again, my experience as someone who hires fresh graduates or employees with one or two years' experience, hinahanap talaga ngayon ng companies, marunong ka ba gumamit ng Word, Excel, PowerPoint? Marunong ka bang gumamit ng Office 365? Importante yun eh. If there are two applicants from the same school, same grades, same everything but the difference is this kid is more knowledgeable on Microsoft skills, mas siya yung ma hi-hire because it cuts the training time of the employers. If we implement this in school, when we incorporate this in our lesson plans, then when they deliver their projects, we actually help them already by increasing their employability rate.

So with the implementation of K to 12 and there's an information technology strand, accounting strand, business management strand, saan pumapasok yung IT skills ng mga bata? Like I said, if you're an accountant, it's not enough that you know only accounting, kailangan meron kang proficiency in the use of spreadsheets sa Microsoft Excel. This is the learning path and certification path that we offer to students. Here is something for you to ponder -- this is the way to go, certification. I've spoken to a lot of employers and they said, yes we want to hire senior high school graduates, why not, we could give them a promise of employability, but between someone who has a diploma and another kid who has a diploma and a certificate I would hire kid number 2. Certification gives him an advantage, so Microsoft Imagine Academy is a certification program. We make it accessible, it's not free, but the rate is

70% cheaper compared to the rate that we are giving to non-students and it's the same quality, just so you know we have the certification program that we offer to senior high school and to college graduates.

Ok, I'm about to conclude my presentation. Another priority that we have in education is accessibility in education, meaning we have a lot of programs, a lot of tools that promote inclusive learning. It's for SPED centers, it's for SPED students and SPED educators, but at the same time, if you are not in SPED but you notice that there are some students in the early years who have difficulties in reading or in writing, how do we help them? We are not experts, I mean we can't detect and say na may dyslexia itong bata na ito, because we are not medical practitioners. However as a teacher you see it, you observe it. Microsoft has a tool, it's called the Learning Tool, it's free and I will do a very quick demo. This is really my favorite, so yung Learning Tool allows the student to read text at his own pace; some children who have print disabilities find difficulty reading because they have a different way of looking at fonts. You may have observed that some students have difficulty reading books but if you give them something on the Internet they can read fast. It's because they can adjust the font size, they can adjust the color of the background; some students are actually sensitive to glare, some students want it darker, some students want it syllabicated. That is the key, that is based on studies, it's the syllabification, it's the spacing of the fonts.

Here's an example. I'm a grade 2 teacher pinapabasa ko sa mga estudyante ko The Lion and the Mouse. Now all I need to do is transfer this to OneNote, here you go, and then through the Learning Tool immersive reader this is how it will appear. I can slow down the sound, did you notice there's a focus on the word, what else? I can either make the fonts tight, make the letters tight or loose, mas madaling basahin ng bata. What else? I can increase the text size, I can change it to white but if I'm sensitive, yung ibang bata mas gustong magbasa kapag black yung background, I can do this, for the color blind. This works according to some of our consultants working with the vision impaired. Syllables, I can syllabicate it, it's easier for the child to read. If there are pronunciation challenges, the child can just play it over and over again para

ma-pronounce niya ng tama and it stays here, this is in the Cloud. Actually even if I go online this works still.

Ibig sabihin in every device that you buy or in every device that's deployed in your school it comes with Office 2016, basta lisensyado, not the pirated one. In Office 2016 there's Word, Excel, PowerPoint and OneNote. Now Learning Tool is another add-in that you download for free, and this is what we want to introduce to schools, very simple, very straightforward. You could start with this for some kids who really have difficulties in reading. This works -- we've got several studies already where there was a kid who could actually just read six words per minute but in a matter of weeks he improved to 27 words per minute. He was grade 2, just six words per minute from a traditional storybook but when they did this there was real comprehension. You can also do this, by the way, where are the nouns so the nouns are in violet, where are the verbs, verbs are in red, see, where are the adjectives, let's see, they are in green. There you go, that's OneNote learning to the immersive reader, so that's just one of the things that we are doing for accessibility.

In conclusion, we have many programs for the visually impaired, hearing impaired, for those with speech, mobility, and learning challenges. We are working closely with the Department of Education and different NGOs to help move this forward because when I talk about digital transformation in education it's inclusive to all, meaning digital transformation is applicable to everyone regardless of their ability. I want to end my presentation by showing you a video that we just recently launched and this talks about the journey of Crystal, who's visually impaired, and how she's using technology in her studies. Enjoy the video. [Short video shown at this point]

So thank you. I hope you enjoyed the video. It's really true that technology empowers us all. I've had the honor of meeting Crystal, Brian, and Mark and I was there when the script writer was interviewing them. I've been in Microsoft for more than five years now and we've always talked about how technology empowers everyone, how technology makes lives easier for us. But it became more real to me personally when I met them because

imagine how much they depend on technology just to get information. I depend on technology to get things done, I depend on technology for my job, for my schedule but the three leads in the script and even Carol the trainer and Antonio the president, they depend on it for everything. Meaning when they communicate, when they want to access communication it's so amazing and it's so magical. When I look at my device and there's a narrator function that you press because I read but they can't write, so when they can't read the fonts, there's a narrator function that is builtin, in any Windows and device to make it accessible for the visually impaired. They just listen to what's being sent to them, so I don't call them. I communicate with them through email and then they reply to me within 10 minutes through their email also because they have the dictate app. Kapag sumagot ako may sasagot na, and there's no one typing for them. Just go to the Atrieve office, the only sighted person there is their finance lead, everyone is visually impaired, but they're able to function, they're able to train other people, they're able to go to Palawan, ganun yung lifestyle nila and it humbles us it makes us want to do more for education.

In the Philippines we have about 300,000 students in SPED schools, recorded about 650 SPED centers in the Philippines, about probably less than 20,000 visually impaired recorded data that was given to us. Kung si Crystal nakakapag programming siya, nakakapag HTML, she's in grade 9, we want to do that for the kids and even those who have graduated already. By doing that we reduce the unemployment rate for the disabled and we address the underemployment issues for the disabled so that's one of the things that we are doing for inclusion and accessibility.

Thank you very much for your time and thank you for inviting me.

Dr. Vivian Buhain: Thank you, ma'am Clarissa. That is such an inspiration, so if Cyrstal became empowered through technology, why not

us? Let us allow ourselves to be empowered too by technology. Any questions? Yes Dr. Dahlia Domingo.

Dr. Dahlia Domingo: Good morning. Right now we are handling senior and junior high school and one of their subjects is preparing them for communication for work purposes and we find that our students are already digital natives and they are faster than their teachers. Is it proper to include something on cybercrime? Because I myself was hacked on my Facebook and they have their web résumé, some of their résumés were hacked also. What can you suggest for that?

Ms. Segismundo: Thank you for raising that. In Microsoft we take data privacy and cyber security seriously. In fact when we give talks to schools, we teach them digital citizenship and online etiquette and cyber security. Cyber security is a broad topic; it can mean many things. The IT manager of the school ang interest niya is making sure that your servers are secured, all the information of the school, financial records, documents, etc. are secured. But for students it means something else -- it means how can they be more protective of their password, ano yung online behaviors na dapat ginagawa nila to prevent hacking or ano yung hindi dapat ginagawa, may mga sites na dapat hindi pinupuntahan.

What specific functions in Windows can they turn on to make sure that when they visit a certain website they are protected right away. So those things we can share with you, we promote that; Microsoft advocates Internet security, cyber security, data privacy. I can share some materials with you that's easy to present, easy to communicate with your students; in fact pwede ngang i-post lang siya sa Facebook. Pwede rin siyang i-share para lang it increases awareness among the students. If the initial concern now is hacking of their Facebook account, what are the different tips that we can share with the students to make sure that it's protected. Kids can be very careless, minsan pa nga alam ng kaibigan yung password or mag-boyfriend iisa lang yung account nila. Some kids are actually very naive, minsan pwedeng hindi naman siya hina-hack deliberately but some kids can just be careless, they leave their computers unlocked. Pag-upo mo, kita mo na lahat. That happens to my son all the time, nakikita ko

yung mga messages niya because he doesn't log off. Importante yun, so simple lang, hindi nag-lo-logoff or yung password pare-pareho, hindi nagpapalit.

It's advisable that you change your password every six months or so – we're going to have an Internet safety day in the next two months and we will do a webinar on that to share with you the Skype ID because you can dial in and you can actually host it in your classroom, so the children can see it. We do that once a year and we invite all the schools. We did it last year when we held the Internet safety day; we delivered a talk on how to be more careful and more Internet safe, and the teachers who connected actually just flashed our talk to their classes. So it's not just the teachers but also the students. If you would like to invite us and we have the right resources we can visit your school and give a talk to your students. I hope I answered your question, ma'am.

Dr. Buhain: Yes ma'am.

Member: Thank you so much, FUSE and Ms. Clarissa. These are very urgent training concerns that we're addressing now. Actually besides the cyber etiquette that you mentioned, educators are also worried about this frequent cancellation of classes. Now about your Office Mix, the one you presented earlier, we wish we could have more on this so we won't need to schedule Saturday classes any more. The teachers can do online lessons, so this will be very helpful if FUSE can also provide us with this kind of training.

Ms. Segismundo: Thank you for that. We'll be more than happy to host a training session, give you a half-day session for Office Mix. I'm volunteering our office in Ayala; if it's ok with you, we can hold it there. My only request is for you to bring your own device so that we can install your Office Mix. Kasi kapag sa amin na-install, pag-uwi ninyo wala pa rin kayong Office Mix. We will help you install it and we'll be more than happy to help you with that, dapat may Office Mix. Tama si ma'am eh, that is also the concern of some of the schools. So, for example, De La Salle Zobel practices blended learning and flip learning, so Office Mix is

the most used tool for them. Even without the cancellation of classes I think importante rin yung kasi nabibigay yung lesson in advance so that when you are already in the classroom it's about sharing insights and processing what they've read instead of opening the lesson just on that day, di ba? Because they need the time to process it. So that's our commitment; we can schedule it with Ms. Helen, we can have the training at our office.

Dr. Buhain: We welcome other questions, other concerns? If none, I give the floor to Dr. Alonzo.

Dr. Rosario Alonzo: It's always worth our time to attend GAs. Let's give a warm applause again; this has been a very good session for all of us. We can look forward to training that will help us in our work, even with the concerns heard now. Are there other matters? So we're looking forward to our training in Microsoft, more technology techniques. Again, thank you so much.

Adopt-a-School Program

Dr. Margarita Consolacion Ballesteros

Director IV, External Partnerships Service
Department of Education

Mr. Rolly Soriano

Project Development Officer III, External Partnerships Service
Department of Education

(February 27, 2018)

Dr. Margarita Ballesteros: Good morning, everyone! It's good to be home. When I say home, it's a place where people with the same interests are gathered. I am feeling so blessed this morning because I'm seeing the people I worked with in my past life on the Commission on Higher Education and at the same time mentors when I was still in my mid-30s. Dr. Dionisia Rola is here, Dr. Bee Ching Ong is here, of course Father, and he was of course younger that time.

This morning there will be two of us who will be sharing what the Adopt-a-School Program is. If I may read a short introduction: We have in schools potential engineers, scientists, mathematicians, and artists but they may not have the chance to pursue their dreams due to economic difficulty. Parents dream of a better life for their children and they strive hard to provide well for them, but in many cases even just the provision of food for each household's table is already a struggle. The government allots the biggest share of the national budget to basic education, but the amount still cannot keep up with the increasing student population. If I remember it right, we now have around 27 million students, almost 28. There are even more children who are out on the streets and who have to be shepherded into the schools, but government resources are simply not enough to provide them the free, quality, inclusive education to which they are entitled. We need generous hearts in the private sector.

Republic Act 8525, otherwise known as the Adopt-a-School Act of 1998, was enacted for the very purpose of providing a venue for the strong and dynamic private sector to participate in nation-building through investments in the education of Filipino children. The rewards of such investments come through an educated generation that will succeed ours, run our enterprises, and steer this nation to greater heights. Over the years, DepEd has introduced interventions to reduce student dropouts and keep the youth off the streets. It has sought to increase student achievement levels and improve teacher performance. It continues to bring the issues and needs of public education to every Filipino who cares, in an effort to invite everyone to help boost education opportunities for our young.

Through the Adopt-a-School Program, DepEd sincerely invites you all to accept the offer of active partnership in the noble goal of educating Filipinos. Your membership at FUSE shows that indeed you have the spirit of volunteerism. The Adopt-a-School Program, if we try to look at it in one big circle, is actually a private venture of people who've got the heart and the determination to help DepEd to push its mandate to provide quality education to all. We are all under the ambit of education, so lahat po tayo we have our own role to play. I did the introduction, the office takes care of a number of things -- private and public partnership, Rolly here heads the private partnership and someone else heads the government partnership, but overall he looks at the implementation of projects and programs. We have different interventions which he will present before he goes into mentioning the number of things you can provide, be it your time, your service, your treasure, meron po siyang equivalent in a package. Yun po yung i-she-share ni Rolly in a while.

We also have the International Cooperation Office under the same office wherein we take care of a number of things. One is our stand for the education sector for the Asia Pacific Economic Community or the APEC. DepEd takes care of the APEC HRDWG secretariat wherein nine agencies are members. We have the education network and now until November there are a series of meetings for education and economics and a number of other things. Another one is ASEAN, SEAMEO you're all familiar with this. For SEAMEO you might want to become a member, that means your

students, meaning your pre-service, yung fourth year, your school can be a member and one of the benefits will be your students together with whoever is coordinating their practice teaching can have an exchange program within and among the ASEAN member states. Just let us know po if you wish to become a member but you can check the website. Now let me call on my colleague here, Rolly Soriano, who will be presenting the gist of the Adopt-a-School Program. Thank you very much, ladies and gentlemen.

Mr. Rolly Soriano: Thank you very much Director Marge. Good morning to everyone present here. I am intimidated standing in front of you because you are the leaders of education and what we are doing right now will be the future of education. Thank you, Director Marge, for introducing the Program and I will be presenting to you the technicalities of the Adopt-a-School Program. This program of the Department of Education is based on Republic Act 8525, an act establishing the Adopt-a-School Program providing incentives therefor and for other purposes. Now, in line with the policy of the state to provide quality and relevant education to Filipino youth, eto pong Adopt-a-School Program was created acknowledging that the government has limited resources to finance all the requirements for providing quality basic education. The Adopt-a-School Program was created to give authority or a gateway for the private sector to help in the delivery of quality basic education, actually not only basic education but education as a whole, so the coverage of this law is elementary, secondary, and tertiary.

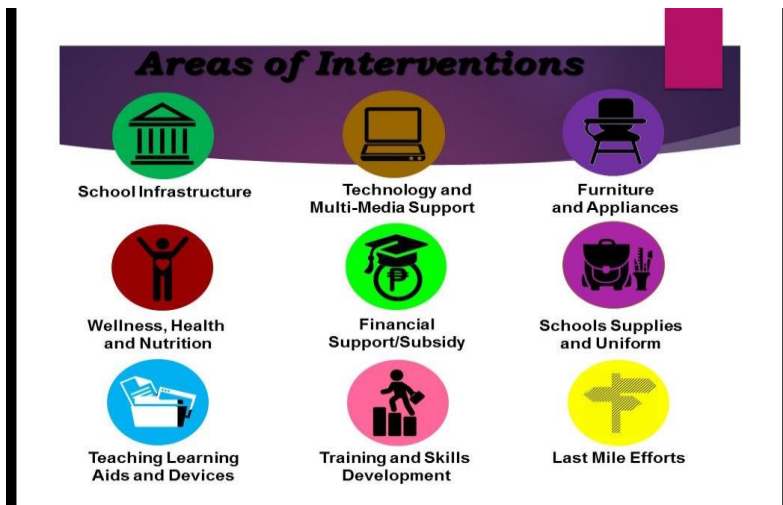
Now Adopt-a-School Program in the Department of Education is the one that really benefited from this law because the DepEd secretary is the chair of the National Coordinating Council together with the chairs of the Commission on Higher Education and TESDA. But in 2008 when we convened the National Coordinating Council of Adopt-a-School Program, the chair of CHED and the director of TESDA left the implementation of the Adopt-a-School secretariat to the Department of Education.

What is the rationale of the Adopt-a-School Program? It allows the private sector to assist public schools including elementary, secondary, and

tertiary schools. Before, the concentration of the assistance of Adopt-a-School was preferably for the benefit of the 20 poorest provinces as identified by the Presidential Council for Countryside Development. Sila Sen. Tessie Oreta, Dr. Lucio Tan, and other philanthropists, ang nagsulong nitong Adopt-a-School Program para maisabatas actually and they are the first personalities who implemented the program. I remember that when I joined Adopt-a-School in 2004 Kapitan Lucio Tan was one of those pushing for teacher training. With the programs and projects offered under the Adopt-a-School Program, we provide incentives for private entities to participate in the program.

In order to operationalize the Adopt-a-School Program law, the BIR issued Revenue Regulations No. 10-2003 on January 27, 2003, providing the guidelines on how the private sector can take advantage of the tax incentives under RA 8525. So ang scope po nito is pursuant to section 4 and 244 of the National Internal Revenue Code of 1997, and regulations were promulgated to implement the relevant tax provisions.

So as USec Ballesteros mentioned, the Adopt-a-School Program is the mechanism for private institutions to assist public schools, not just in terms of donation, but in other ways. The following slide shows the areas of intervention:



Basically the law wants to encourage the private sector to really help improve education service delivery in the Philippines. So sa elementary and secondary, we have approximately 67,000 schools including private schools, but the coverage of this law is for the benefit of public schools only, and that includes training centers and learning centers in DepEd, CHED, and TESDA.

Who are the private entities as defined in this law? A private entity refers to an individual engaged in trade and business or the practice of his/her profession or a business organization like corporation, partnership, cooperative, either resident or non-resident, which teams up with DepEd, CHED, or TESDA towards providing needed assistance and services.

So ano po yung document na kailangan so that this partnership with DepEd, CHED, or TESDA will be effective? The memorandum of agreement is one of the requirements for the private entity to enter into partnering with the education institution, so before we formalize our partnership we need to identify the agreements, the terms of reference for the engagement of the private sector. Ito po ba ay limited lamang to providing financial assistance to certain programs and projects? A private institution which has a specialty can right away implement programs and projects. Currently we have a partnership with some institutions like FoodShop, which has the technology in food handling -- tinuturo naman yan ng mga teachers natin but the concentration and the expertise and the technology are with them, so we partner with them para yung mga itinuturo natin sa school mas ma-reinforce. They have provided trainers to train our teachers how to teach the basics on food handling and food storage. May mga ganun pong partnerships na ngayon, so yung assistance po, according dito sa nakasulat sa law, assistance may be in the form of infrastructure, teaching and skills development, learning support, computer and science laboratories, and food and nutrition, but actually hindi po limited dito sa mga nakalistang mga assistance na tinatanggap po natin sa ating mga educational institutions.

We in the Department of Education have developed packages where the private sector can already identify in which area they want to intervene. So

ito po yung mga packages na ready na for the partners if ever they have the funding but they don't have a specific project in mind. For example, we have a package for infrastructure which includes classroom building, toilets, laboratories, fence, learning kiosk, covered court, and other facilities in the schools. Yung teaching and skills development ay ito po yung medyo talagang nangangailangan po kami ng mga partners na marami. I think FUSE is partnering with us in teacher training and many in the private sector also are willing to finance teacher training. For that matter hindi lamang po naman teacher training yung package na ino-offer ng Adopt-a-School Program, but it also includes scholarships for the advanced education of teachers like masteral, or PhD pag qualified po sila. So we have partners who sponsor scholarships for our teachers, medyo strict po yung pagpili ng mag-a-avail nitong mga programs kasi they need to go through a series of qualifications.

Yung learning support naman includes mga teaching and learning materials. May mga authors po akong na-mi-meet po dito today and some of your books are already accredited by the Department of Education, so we have partners who want to finance the provision of learning materials in schools. Lahat po nung mga libro na nakalista under DepEd list of accredited books, yan po yung pine-present namin sa mga partners na pwede nilang gamitin. May mga partners din kami na medyo advanced na and their learning materials are in electronic platforms, so sa ngayon po meron tayong mga platform na ready na for use by our teachers so partnership will be provision of that platform plus the teacher training on how the teacher will use the platform.

If that intervention has hardware, minsan nag-fo-fall siya under the computerization and equipment component, so depende po dun sa package na binibigay ng mga partners. Sa ngayon po, we have a total of 500 partners in the Department of Education, we have something like 10 who help public state universities and colleges. May taga PNU po ba dito? Yes, PNU has a lot of partners and some of their partners are availing of the tax incentive provided under the Adopt-a-School Program. So far po PNU yung public university na pinakamaraming ka-tandem na partners na naka-register under the Adopt-a-School Program. We encourage all state

universities and colleges to also take advantage of this law kasi it will help us a lot talaga, especially na ngayon po ay fully subsidized na yung tuition fee ng mga estudyante natin sa state universities. This Adopt-a-School Program is one of your tools in securing additional resources for your school kasi that's what DepEd is doing right now to take advantage of this law. Even if our budget is the largest among the departments, in reality, it's not enough to cover all the required services that students need from public schools, so some of the resources and services have to come from the private sector.

For example, Petron Foundation, aside from providing computers and teacher training projects, provides scholarships for public school students and gives them financial assistance para sa pamasaha ng mga bata from home to school at saka yung bayarin sa mga projects, uniforms, and mga contributions.

The Adopt-a-School Program is our mechanism to support the mission of the Department. We partner with different organizations to provide necessary intervention like for example may mga bata po kami na nakatira sa mga bundok o di kaya tatawid pa sa mga ilog para makapunta sa school kasi hindi naman tayo makapag-establish ng school kaagad dun sa mga areas kung saan sila nakatira. So we have partnered with Bikes for the Philippines to provide bicycles for the children para hindi na sila mahirapang maglakad from their house going to school. We have partnered with Yellow Boat Foundation to provide us with bancas kasi marami pa tayong mga estudyante na nakatira sa mga islands without schools so wala pa rin tayong magawa kundi i-transport yung mga bata from the island going to the mainland para makapag-attend po sila ng school.

The country really wants to improve our performance in science, math, and English so we partner with different institutions, like Metrobank Foundation, which is one of our partners for math. Yung MTAP (Mathematics Teachers Association of the Philippines) is our partner to improve students' performance in Math. Sa science wala pa po kaming masyadong partner except for DOST na may mga programs and projects

for science. FUSE can develop materials which we can offer to the private sector for funding sources and we also acknowledge the expertise of FUSE in teacher training para ma-improve yung performance ng teachers at ng mga estudyante. Food and nutrition is also one concern in public schools kasi base sa pag-aaral hindi po nakakapag-concentrate yung mga bata when they are hungry, so yan po yung isa sa mga needs for partnership with funding institutions.

So yan po yung mechanics ng Adopt-a-School and another item for discussion is the tax incentive. We can discuss this one siguro by question and answer na lang later para mas may interaction po yung discussion natin sa tax incentive. It's important for us to know the mechanics of this so that if we partner with a private institution we know how to explain the tax incentive being offered to them para yung kanilang investment ay may kapalit. We're offering this tax incentive para naman po win-win yung partnership natin with the private sector. Here are sample slides to show how the tax incentive works:



Conditions Full deductibility from gross income

- ▶ Section 34(H) (2) (a) of the Tax Code of 1997 as implemented by Revenue Reg. No. 13-98 states that donations to **Government, its agencies, or political subdivisions** are deductible in full from the gross income of the donor.
- ▶ Provided that the donations are in accordance with the National Priority Plan as certified by NEDA.

Requirement for full Deductibility

- ▶ Taxpayer shall secure Certification from NEDA that the contribution /donation to the Government through the DepEd, CHED or TESDA is in accordance with the priority programs, projects and activities included in the NATIONAL PRIORITY PLAN.

PNU is taking advantage of this at ang mga partners nila ay nakakapagavail ng tax incentive. Yung tax incentive sa ngayon ay pino-process sa Department of Education since the secretary is the chair of the National Coordinating Council na pumipirma ng mga endorsement para sa tax incentive. But USec Tony Umali has already instructed us to convene the Coordinating Council so that we can propose revisions to the existing IRR of the Adopt-a-School Program in terms of devolving yung ibang function ng National Coordinating Council sa secretariat para ma-lesen yung mga processes. We acknowledge the limitations in the process at saka yung mga private sector partners namin palaging nagmamadali because they are catching up on their time. Sa government sector kasi ang dami-dami po nating proseso na pinagdadaan and we cannot skip steps in the process dahil makakasuhan naman tayo ng non-compliant administrative case.

Sa ngayon po we have developed a partnership framework sa tulong ni Director Marge at sana magkaroon na ng secretariat na binubuo ng tatlong agency. Kokonti yung mga partners na na-i-invite para sa CHED at saka sa TESDA kasi hindi pa masyadong refined yung mga programs and projects

noon. Pero this time with the experience with PNU baka maconvence ulit yung council at saka yung pag-create ng Adopt-a-School secretariat sa tatlong agencies so that we can take advantage of this law. Sayang naman kung hindi natin ma-operationalize ito. Sinasabi namin sa mga partners, kayo po you have the resources that you can give right away to students in need of this intervention. Meron din naman po tayong budget but if we wait for that budget, you know naman po ang accounting process dito, ang tagal niyan. So kindergarten nangangailangan ng classroom, i-bi-bid po yung classroom ng kinder, kelan kaya matatayo ang classroom ng kinder? Siguro nasa grade 4 na o nasa grade 6 na yung kinder ng nangangailangan ng classroom saka pa lang pwedeng pasukan yung classroom na itatayo. But the private sector as the adopting organization can build classrooms right away para mapakinabangan kaagad ng ating mga estudyante.

Maraming salamat po. If you have questions we can discuss them later. Thank you very much.

Ms. Elizabeth Co: Ok thank you so much, Mr. Soriano. Now the floor is open for questions, any questions?

Dr. Dahlia Domingo: I'm from New Era University, a private school. Is there a big difference between Adopt-a-Community and Adopt-a-School because we are also undertaking our outreach. Can we have some learning experience on how a private school like us can do it?

Mr. Soriano: Yes ma'am. Actually may mga partners tayo from private schools and some of them use their outreach program as the mechanism for going to public schools. Under the Adopt-a-School we can formalize our partnership so that mas targeted po. A brief example, meron pong mga school improvement plans yung ating mga public school and makikita po ninyo sa school improvement plan kung ano talaga yung needs ng school. Another example, if your outreach is on reading -- we have the data nung mga non-readers so we can actually help you map out kung saang area po tayo makakatulong in order to boost yung reading sa mga public school.

Wala naman pong diperensiya yung Adopt-a-School at Adopt-a-Community. Mas targeted lang po siguro ang Adopt-a-School. Sa experience namin, sometimes may mga private schools pupunta sa school, they want to conduct outreach on reading, eh ang problema po minsan kokonti na po yung non-reader sa school so may tendency na ang principal ay tatanggi because they already have their own reading program. But if you will coordinate with us or at the division office po, we can identify a school na mas maraming non-readers at walang reading program initiated by the school principal. So importante lang po dito sa ating program yung pag-uusap po muna ng adopting institution at ng Department of Education so that we can map out and we can maximize the potential of your institution to help us improve the quality of education in public schools.

Dr. Domingo: Thank you very much po, we will coordinate with you.

Mr. Soriano: Kami po yung nag fa-facilitate ng intervention. If it has something to do with the curriculum, we set you up with the curriculum people and we talk kasi we want to shorten the process. So mas pi-pickup-in na po namin yung classic intervention na ibibigay ninyo para specialized na, mas mabilis po yung discussion at the same time makakahingi po tayong agad ng guidance in the form of an agreement.

Ms. Co: Sir, we have a suggestion. Probably we can post the needs on the website of DepEd, so everybody can view that any time and it might give us some ideas where we can help.

Mr. Soriano: Yes, actually, kahapon we talked with my team. Kasi we have a section in the DepEd website yung may partnership, sa ngayon yung naka-post dun yung list of partners ng DepEd but we want to maximize that site and we will upload the package interventions for DepEd, so basic siya na menu of packages where you can come in. But the data will be from our office. We have developed a new data-gathering tool and monitoring tool to get the actual data kasi sa ngayon ang available po sa DepEd is yung BEIS. Alam nyo yung BEIS? Yun yung Basic Education Information System but the data there are dated, kasi ang latest ngayon is 2015 so kung gagamitin mo siya na data hindi siya reliable.

With our new system, yung school partnership data sheet namin we capture na yung actual number of needs in the school. So yes, ma'am, we will take that suggestion and i-co-consider po namin yan na mailagay sa website yung mga needs at the same time siguro kahit yung mapping lang per region or per province para at least you get the idea.

Ms. Co: Ok, thank you. Anybody for the second question? Yes, sir, please.

Member: Good morning. What are you doing in reconstructing Marawi? Are you pursuing the similar practice of RA 8525, in view of the obvious need of classrooms and other facilities in Marawi other than the existing rooms that we have now?

Mr. Soriano: Ah yes. Now we are starting the rehabilitation of Marawi. The very first project that we implemented is Brigada Eskwela sa Marawi, Brigada Eskwela is also under my portfolio, and that's the very first project that we implemented. Yung mga schools na hindi naman masyadong devastated talaga during the war ay ma-re-rehabilitate na sila so that yung mga estudyante makakabalik sa school. Yung mga areas po na malayo dun sa ground zero ay ginawan natin ng Brigada Eskwela sa Marawi. Now upon launching the Brigada Eskwela sa Marawi in December we also invited private sector partners to help us rebuild schools. Sa ngayon po, we need to re-design yung site development ng mga school kasi kung titingnan nyo po yung sa ground zero ng mga schools natin sa Marawi ngayon po ay totally devastated sila, may mga debris pa na naiwan and we need to clear that bago po tayo makapagumpisa ng construction. But we had a lot of partners with us who are helping, so Friends of Hope, for example, headed by Ms. Nanette Medved and all the patrons of that organization; kasama po niya doon ay Mercury Drug, Starbucks, Figaro, so yun po sila. I think they have pledged 30 classroom buildings in Marawi, now BDO Foundation is also partnering with us in rehabilitating Marawi, SM Foundation, San Miguel Foundation, Petron and I think meron kaming mga 25 private sector partners who have pledged for the rehabilitation of Marawi. Hindi naman po lahat natin inaasa kasi according to the President he allocated billions din for the rehabilitation of Marawi very specifically for the schools. We

asked for partnership with the private sector para mas mapadali po yung services kasi kung aantayin po natin yung bidding process nung pagpatayo ng school ay palagay ko mga three years pa bago makabalik sa school yung mga bata. Sa ngayon yun po yung ginawa natin na strategy para mas mapabilis yung rehabilitation ng mga schools natin sa Marawi. Nakabalik na po ang mga bata since January sa mga other schools so ang mga wala pa pong school ay tinutulungan po natin ma-place sa mga existing schools at saka sa mga learning centers na prinovide po natin.

Ms. Co: Mr. Soriano, you mentioned a while ago the rehabilitation of the schools, which takes around three years. I come from the Filipino-Chinese community and the Federation of the Filipino-Chinese Chambers of Commerce and Industries, Incorporated is very active in building school houses for remote areas. I know that the members of this organization have built thousands of schools all around the Philippines. At first they were the ones who oversaw the construction and it was very fast. But I heard that there were some local governments who would not like them to do it directly, they want everything to be coursed through them and that made the work, the construction slow down. Sorry ha, I'm very frank.

Mr. Soriano: Yes, that is actually one of the problems. Thousands of classrooms were already built with Fil-Chi but later on, pumasok na yung mga bagong mayors and they insisted that education is part of their responsibility. Sobra naman yung pakialam nila, pati po yung mga pagpapatayo ng mga school ay pinakialaman. Tama si ma'am, nagkaron tayo ng problema with that. Actually nag-form na po kami ng TWC for infrastructure projects under the Adopt-a-School Program. It's composed of our school facilities division and private sector partners who have built schools kasi we want to track yung mga problem arising dun sa pagimplement ng programs. Ngayon po ang bagong problema naman namin is the clearance coming from the Bureau of Fire Protection. May mga partners kami noon na na-di-discourage kasi aside from dun sa mga building permit na i-se-secure dun sa munisipyo, pahirapan din po yung pagkuha ng fire permit sa Bureau of Fire Protection at nagpapabayad. So isa yun sa mga areas na ginagawan po natin ng solusyon and we are meeting with the Bureau and asking for a memorandum of agreement with

them. Sa ngayon po ang immediate response namin is by the TWC who will help us monitor programs and projects with our partners para mas mapadali.

Mr. Soriano: Sino po yung mga taga state universities dito aside from PNU? Kasi ang Adopt-a-School Program hindi naman nag-de-depend sa central office o sa Secretary. The Adopt-a-School Program allows the principal to enter into an agreement with the private sector and in the case of a state university, the president of the university can enter into an agreement with an adopting entity. The university can already enter into a memorandum using the Adopt-a-School Program, so that your partners can avail of the tax incentive. Sa office po namin kami po yung nag proprocess ng tax incentive claims ng mga private sector partners natin for education, so tatlong taon na po yata yung PNU na nagpapadala ng mga claims ng partners nila. May mga pinagawa po yung PNU, I think parang auditorium na pagawa ng isang private sector partner nila so that partner availed of the tax incentives under the Adopt-a-School Program. We processed that and Sec. Briones signed the endorsement to the BIR.

Mr. Jason Maniacop: Good morning, I'm from Cavite State University. If we as a public institution can partner with a private institution and we adopt a school, can we bring that private school to the school that we adopted and can you give them a tax exemption? As a state university, we cannot have a tax incentive because we are not private, but the private institution we will bring to the school which we adopt, can they have the tax exemption?

Mr. Soriano: Yes, all from the private sector can avail of the tax incentive. If you have the technology that is adopted by the private sector partner who will then provide intervention to the public school, that private sector entity can avail of the tax incentive. Ang kailangan lang po dun is they will finance the project that you want to implement through the public school, so yung financial requirements po dun, yun po yung they can avail of the tax incentive.

Ms. Co: Any more questions? Yes ma'am. Can we have this one last question?

Member: Good morning. I am Dr. Victoria Marcial from Batangas State University. This semester I am teaching DepEd scholars in my region Calabarzon. They are at the master's level and are enrolled at the Batangas State University and now this time they are funded by a certain loaning association for the scholarship so that teachers of DepEd will be loaning from them even if they are not scholars so that means it's just a way of giving back by interest on money that they loan. Now this is just the second batch of teachers for the program on the scholarship program and so they told me, ma'am we will be the last batch. Sad to say, this semester or next, they will be the last one. They said, too bad because a lot would like to enter into master's -- of course they're working too, I teach them on Thursdays and Fridays yet they do their functions in school within the week. But then one dilemma that they have and one problem is similar to what ma'am has said about the politicians intervening, the role that they play. And in my group, the principals are the problem, because they have their own favorites, so what is DepEd doing or what can you do in order to solve this problem of scholarships? What are some interventions that the program can do so that the most qualified teachers get the scholarships being given?

Mr. Soriano: Number one, medyo mahirap i-address yung political issues natin lalong-lalo na kung principal mismo yung pumipigil sa improvement ng ating mga teachers. But sa Department of Education hindi po yan talaga dapat kasi we encourage all DepEd personnel to enhance their education and as a matter of fact, hindi po ma-pro-promote yung mga teachers natin kung hindi sila nakakapagmaster, qualification siya for promotion. So siguro we will discuss that, I'll take note of that ma'am at saka i-ano ko po sa proper office sa region 4 kay Dr. San Antonio sa region IV-A. Pero there's a difference in providing assistance na talagang tulong at saka yung assistance in getting loans na i-re-repay afterwards. So pagkaganun po, pag loans po yung pinag-uusapan there is a question of parang ownership of the program, di po ba? But if the assistance is really a grant or parang scholarship na the teacher will not repay afterwards then it can be under the Adopt-a-School but if it's a loan ay hindi siya qualified for Adopt-a-School Program kasi hindi siya yung totoong assistance, tinutulungan nga po natin siyang makapagmaster pero later on pag nagmaster na, tataas na

yung sweldo lo-loan ulit yan so, actually isa yun sa mga perennial problem namin sa DepEd. Maraming mga teachers po ang nag-ra-rally dahil mababa daw ang sweldo pero hindi yun ang totoong scenario. Mababa po yung take home-pay ng mga teacher because of the loan and yung mga scholarship po, that's why we partner with institutions that can provide scholarships para po itong mga teachers who are qualified to undertake master's na may mga talagang talent na pwedeng i-finance ay yun po yung i-u-under natin sa Program para hindi na sila mag-loan. Kasi ang mga teacher nga, tama po yun, napipilitan po silang mag-loan para makapag-aral po sila para ma-promote. So yun po yung difference ng program, there are institutions, halimbawa po private schools, private universities who want to have scholars na mga teachers, now that can be under the Adopt-a-School and if they are paying taxes then they can avail of the tax incentive out of that scholarship program that they are doing for the teachers in public schools.

Ms. Co: Thank you so much, Mr. Soriano. So, my colleagues and friends here, no matter how many hindrances or problems we will be encountering as we extend our help to the public schools, still we should go on because the intention is there. What is important is our intention to really help them. Whoever is becoming a stumbling block bahala na siya, karma na niya yan, as long as we do the right thing to do. Ok, on that note, thank you so much, Mr. Soriano, and thank you so much, colleagues. I hope if we cannot personally extend help at least we can be facilitating or recommending people to help. Thank you so much. Good day.

Constructivism in a Learner-Centered Teaching-Learning Environment

Dr. Fe A. Hidalgo
FUSE Vice-President

(June 26, 2018)

Thank you for a very generous introduction. I was looking around early this morning and I noticed a lot of new faces. I also noticed that most of our participants today come from the tertiary level and I really love that because I've been missing you a lot. Welcome to FUSE. That is an invitation for your continued presence at FUSE activities.

I've been visiting classrooms and that's why I'm saying that teacher training institutions are very much needed today as we keep on presenting and revising our given curricula in basic education as well as at the tertiary level and as we talk about quality assurance and all the things that go with it.

Today I've chosen to talk about Constructivism in a Learner-Centered Teaching-Learning Environment, because we have seen a lot of the implementation, and we have seen a lot of mistakes that we need to improve on. Most of all in a digitalizing world, change has become constant and instant, and when these things happen how do we handle all of these? In 2002 when we revised our basic education curriculum we introduced the idea of looking at the constructivist approach, but if you go to the classrooms, it's my personal observation that it has hardly been operationalized even up to today. I think it's because of the concern for tests at the end of the year and your students have to get high in the test so that your performance rating will be high, and your performance rating in part will determine your raise in salary.

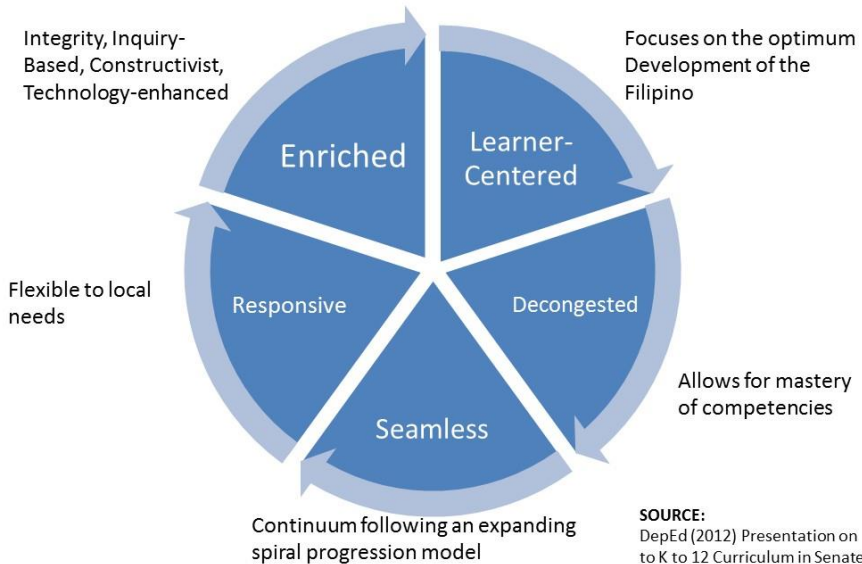
I am not saying this as a negative thing, but we hardly give enough time for our children to learn how to learn and to be more creative. We keep on mentioning and repeating one skill that is needed for the 21st century, critical thinking, but I really don't see much critical thinking happening in the classroom -- it is really still traditional. People may hate me for saying that and maybe I'm generalizing, but I want to say that in order to challenge tertiary level as well as basic education teachers. I wish that there were a continuum of development from elementary through the tertiary level, the tertiary level to inform the field in terms of theory, and the field to inform the tertiary level in terms of the actual practice and problems we have on the ground.

In other words I'm talking about the theory-practice nexus. And today let me condition your mind that constructivism is nothing new but let me also appeal to you in terms of real practice and operationalizing it in the classroom. If it's not discussed at the tertiary level, we will be groping in basic education because that's where it will be operationalized. So let me present this to you as something we have tried out in so many schools, I think more than 14,000 schools in the field, and some of this presentation takes into consideration what we have observed. I want us to be students today, if you don't mind. Let me start not with definitions but with some group exercises. [Editor's Note: The exercises have been omitted due to space considerations.]

I'd like to ask you which is more important, the process or the product? The process, why process? Sasagutin ko na lang ang tanong ko, ako din, process din, because even if you make a mistake in the product, if you know the process you can always correct yourself. But product is also important, because it is where quality is judged. In the K to 12 program, we emphasize the formative stage more than the summative and yet we still give tests at the end to find out who among the classes and schools got higher scores. All of these are necessary but we determine our priorities and for me in this lecture, I'd like to think that the process is very important in the learning and growth of our learners today.

So let's move on. I'd like to look at enhanced pedagogies, at how we enhance the strategies, the approaches, the methods that we have so that children will experience learning growth in the process.

The K to 12 Basic Curriculum will be enhanced.



The K to 12 curriculum, as you all know, I don't have to show this because you know this. It is characterized by an enriched curriculum which looks at integrity, an inquiry-based and constructivist technology-enhanced process, and basically focuses on the optimum development of the Filipino learner, which is Vygotskyan in theory, that is, we need to optimize the development of every learner in the classroom. The rest has been done for us by the curriculum developers. It should be responsive, it should be seamless, it should be decongested. Let me say that at some point there had been problems on the requirement of spiraling; some subjects or disciplines do not lend themselves to spiraling, like Math, when we introduce other aspects of Math as they move up to the secondary level. All of these enhancements, hopefully, will allow for mastery of competencies. And continuing with the expanding spiral progression, as I

have said earlier, is something that they are still testing, to see how it can be done in the different discipline offerings. Let me concentrate now on the learner-centered and constructivist aspects.

Because I knew you were coming, mostly from the tertiary level, I thought of presenting to you a comparison of the ideologies' views regarding the nature of knowledge.

A comparison of ideologies' views regarding knowledge

KNOWLEDGE	SCHOLAR ACADEMIC	SOCIAL EFFICIENCY	LEARNER-CENTERED	SOCIAL RECONSTRUCTION
The nature of knowledge is...	Didactic statements	Capabilities for action	Personal meanings	Intelligence and a moral stance
Knowledge gives the ability...	To understand	To do	To actualize oneself	To interpret, act on, and reconstruct society
The source of knowledge is...	Objective reality as interpreted by the academic disciplines	Normative objective reality as socially interpreted	Individuals' personal creative response to experience	Individuals' interpretation of society's past, present and future
Knowledge derives its authority from...	The academic disciplines	Its ability to perpetuate society through skills provided to its members	The meaning has to its possessor	Individuals' vision of the future good society
The truth of knowledge is verified by...	Finding the degree to which it reflects the essence of an academic discipline	Seeing if it corresponds to society's view of the nature of empirical reality	The personal insights of its possessor	Individuals' beliefs in its ability to improve society

I'd like to ask you kung alin dito ang gusto nyong characteristic nung curriculum natin. If you were asked to choose from this list the basis of our curriculum today in terms of the nature of knowledge, which one would you choose, regardless of the curriculum we have today, in terms of relevance, in terms of what's needed, in terms of what you feel should be emphasized, in the learning and teaching of our students. May I ask what you have chosen.

Member: With what's going on right now, social reconstruction.

Dr. Hidalgo: Social reconstruction, why?

Member: It seems like we need more of it nowadays, intelligence and more of this...

Dr. Hidalgo: For all the reasons here, who has another choice? Yes?

Ms. Leah Salvaleon: If I could put myself in the shoes of the learner I would say it's learner-centered because for learning to happen it should have personal meaning, I should have a stake in the thing that I'm going to do.

Dr. Hidalgo: So there are stakes in the process of learning and the result of that learning. Who has another choice? From the science group...

Member: Ma'am, I think from the point of view of most parents and students, it is social efficiency because they need the skills to survive and to adapt in society.

Dr. Hidalgo: Ok so we look at the capabilities for action, we look at the ability to perpetuate society through the skills provided to its members, we look at seeing if it corresponds to society's view of the nature of empirical reality. In many ways as the administration goes today mukhang social efficiency ang relevant, no? But I'm not saying that to please our president. Another choice? Any more choice? Yes ma'am.

Dr. Lucila Tibigar: For me it's social reconstruction, well actually, I'm not so sure if everything is covered -- intelligence and a moral stance, to interpret, act on and reconstruct society, which is very important now. Then we have individuals' interpretation of society's past, present, and future because vision of the future, so we are not just claiming for today

but we also think of tomorrow, so we are visioning; actually social reconstruction covers everything.

Dr. Hidalgo: What if I say it covers everything except that you ignore the learners?

Dr. Lucila Tibigar: It covers the learners but the learners need to have the moral values because actually in our PQF we always talk of knowledge, skills, and values and then we also develop among them accountability and responsibility which is covered under social reconstruction.

Dr. Hidalgo: Yeah, I realize I should not argue with you, so I leave it to you to make your decision. Because of a given in our existing basic education curriculum which is mentioned to be learner-centered, I will choose learner-centered today and look at constructivist capabilities of the learner-centered kind of curriculum. Thank you for all your responses.

Let me introduce to you my colleagues [audience laughs because she flashes pictures of Socrates, Jean Piaget, John Dewey, Lev Vygotsky, David Ausubel, and Seymour Papert].

I'd like to particularly emphasize the Socratic dialogue as an improvement in the way constructivist educators assess their students' learning and plan new learning experiences. Socrates had questioning sequences which are also the basis of Bloom's taxonomy. The other is Jean Piaget -- these are not new people to you -- but I'd like to emphasize Piaget's belief that humans learn through the construction of one logical structure after another. He says constructivist education is based on the premise of successive knowledge-building that increases in depth and complexity from one stage to another. But today I would like to argue that there's so much in front of us given by all the technological developments all in one instant. John Dewey called for education to be grounded in real experience. Until today we still hear about authentic experience, authentic mathematics and all the things that are authentic or real, and then inquiry is a key part of constructivist learning. Vygotsky, lagi kong naririnig ito sa

mga seminar ng DepEd, the zone of proximal learning, that the children can go beyond their stage of learning. Ang hirap marating nung zone of proximal learning if we have 45 children in a class and I'm not criticizing our system because it's inevitable that we have 45 kids in the class but the smaller the class size siguro the easier for us to achieve that zone of proximal learning.

Regarding David Ausubel, what we want to emphasize here in terms of constructivism, is he examines the relationship between the process of meaningful learning and the learner's existing cognitive structure so today we talk about brain-based learning, we talk about mindset. There are emerging research studies related to teaching and learning, we talk about social-emotional learning, and so forth. Ausubel maintains that learning takes place with interaction. At some point I read something about Ausubel arguing about grade 1 and grade 2, the status of putting the children in stages of learning in grade levels. Seymour Papert, he created LOGO programming language to teach mathematics to elementary school children and children create programs to perform various mathematical calculations and manipulate geometric figures.

I visited a school in Bulacan, and I just blurted out, because the children seemed to be very active, so I said to one child, 5 times 4, Grade 3 ito, 20 sabi niya sa akin, parang gusto niyang sabihin sa akin ang dali-dali eh. Sabi ko, yes, saan galing? Sa utak daw niya, so sabi ko meron ka pa bang ibang paraan para masabi mo sa akin kung papano mo malalaman na 20 ang answer. So he grouped sticks of 5 into 4 groups and then pinabilang sa akin, so binilang ko. Sabi ko meron pa bang iba? Siyempre, sabi niya, then he drew 4 sticks of 5 groups and then he let me count again. And I was so patient with him because he was letting me learn from him. Meron pa ba? And then he started drawing something and I could not understand what he was doing and I was afraid he would realize that he knew more than me. I belong to the old generation so I said pag-usapan natin mamaya. I talked to the teacher, sabi ko meron siyang ginagawa na hindi ko maintindihan, and then she said I will talk to him later and then we sat down the three of us. For me this is the kind of learning process na siguro dapat tingnan din

natin because the children are so creative today and sometimes I realize they know the process better than us. That's why I keep to the learner-centered kind of philosophy or ideology in terms of how children learn today and how teachers teach today.

As you all know, constructivism is a theory about how people learn and construct their own understanding and knowledge of the world through experiencing things and reflecting on the experience. So if you look at the constructivist classroom, learners are active, the teachers are facilitators, as we keep on repeating today, and learning is constructed most especially by the learners themselves so there's a lot of meaning-making in the process. But it takes a lot of time and if we think of the task at the end, yun ang kaaway natin sa process of learning. Instruction is basically interactive between not only the teachers and the learners but also among themselves. Of course assessment and performance are important at the formative stage and even at the diagnostic stage so that we can see how teaching will take. I don't need to discuss this with you kasi alam nyo na yan and we also present to our learners, what our teachers in a constructivist classroom are like -- that they provide opportunities for active engagement, cognitive, kinesthetic, social, and so forth and that the learners use their previous experiences and context, as we all know. The teacher is sensitive to the emotional and cultural aspects of learning experiences and she does a lot of contextualizing.

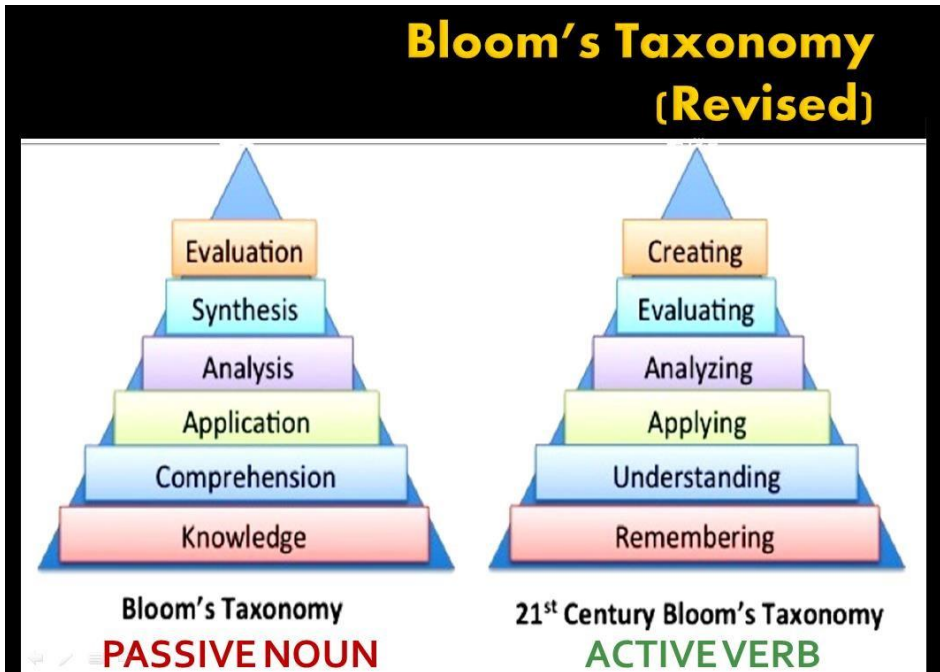
I realized as we moved from one place to another there are still many communities that do not really know their local histories but they know the national history. I think we really should emphasize knowledge of the local histories. We have started contributing to NCCA by bringing them some of the works of our teachers in terms of looking at the local histories. Maski yung history ng pangalan ng kanilang communities can be quite interesting to understand the communities that they live in and even perhaps their own selves. Ako Hidalgo ako pero hindi ako Kastila and I realized that in Spanish times the Spaniards were going around the community to look for community leaders, siguro mga lolo ko were kind of community leaders but our own family name is "tinik" in my language,

I'm from Batanes, Ibatan ako. In my language "tinik" means manulok, tinik, and so kami, our generations said siguro leader ang mga lolo natin, which they were. Yung mga Hidalgo in the Philippines there were two kinds, those who belonged to the ilustrados, kami hindi, we belonged to the local Hideos, local leaders siguro. So it's nice to trace your history because you might want to prove that you are really leaders, pero ako hindi leader, follower ako, so the local histories tell so many things about our families, about our community and it will be part of the social learning environment. We should contextualize the activities with real life examples, like what I just told you.

What about the learners in a constructivist classroom? We'd like them to drive their own goals, to be self-managing, to own the result, and to set the targets. I find it very interesting to sit down with individual learners in the classroom. Even at the tertiary level when we start discussing with the students themselves, there's a lot of learning there. So we give them these sets of criteria: What is constructivism like in the classroom, what are the learners like in a constructivist classroom, what are the teachers like in the constructivist classroom, and what is the teaching-learning environment like?

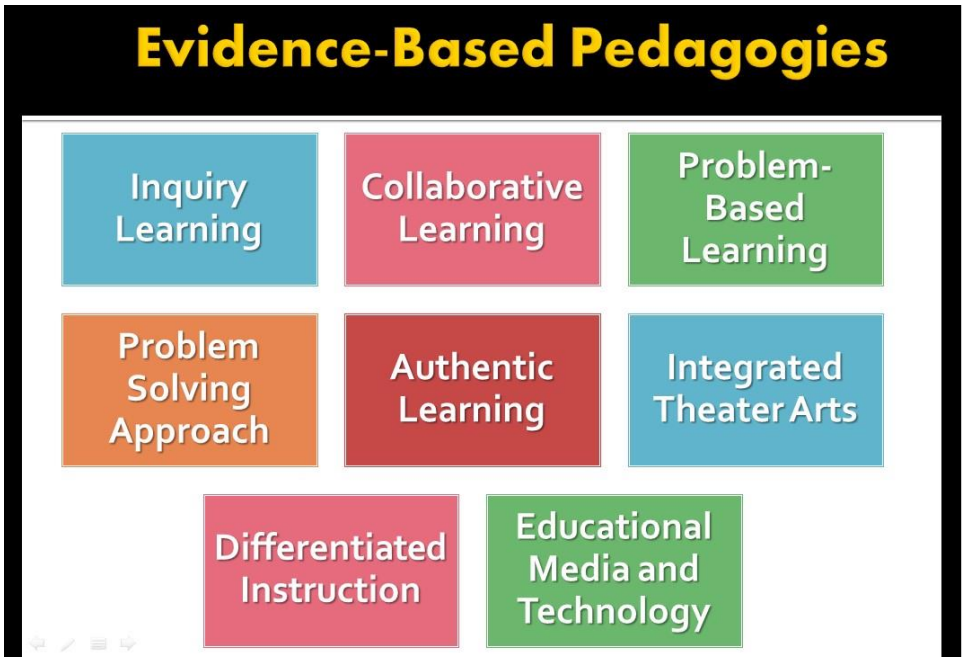
I once went from European countries and other Western countries down to the Asian countries just to look at schools and I saw the structures of classrooms differing one from the other. In Asia it was still just teacher here, rows and rows of chairs there, although today we're beginning to see different ways of arrangements depending on the activities of the children in the classroom.

Bloom's taxonomy is one of the things we always emphasize in relation to constructivism. Here is a slide of Bloom's taxonomy.



We begin with the lower level thinking processes, and I would like to point out the revision of Bloom's taxonomy from passive nouns to active verbs. We go from knowledge to knowledge applied, remembering, and so forth up to creating as the highest form. But as Filipinos I'd like to give my own addition to this, kahit magalit si Bloom. We Filipinos love to have something to share, so let me add at the top, without destroying Bloom's taxonomy, sharing, and I hope you agree with me that sharing is a very big and good part of our culture as Filipinos.

In our going around to classrooms actually applying this, evidence-based pedagogies usually are the same things that we have in the past but with so many additions to the processes because of technology. So these are things that our teachers normally use:



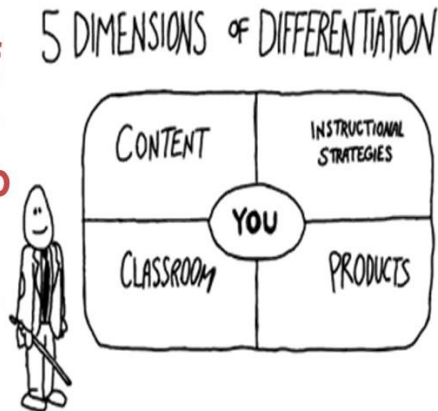
I find collaborative learning most suitable for constructivism in the classroom because students enjoy independent work and they enjoy working together as a group. Two days ago I was in Lanao del Norte and somebody was talking about multiple intelligences, bakit hindi daw

gamitin yan sa constructivism in the classroom? So sabi ko bakit hindi, you know your intelligence? Hindi, so based on intuition na lang, we presented the different kinds of intelligences and they grouped themselves according to their intelligences but we needed a problem to solve. I gave the problem that 18% of the total population really are students, 36 million ang estudyante and the remaining 75 million are not all working because meron mga retired, may non-working, some of us no longer work and some people do not work. Let's assume that 50% are working and will have to support the other 50%. So we asked them using your multiple intelligences, give us solutions to the problem, so they grouped themselves into nine. You'll be surprised about the creativity in our children. They were able to present as many as five different solutions, yung mga good in mathematics they presented data, the ones good in music and kinesthetics they performed so they can earn money to have more projects, the ones in English they developed stories and poems, inspirational poems, and the ones in existentialism they lectured. And you'll find that there are so many ideas if you let them be, so in terms of evidence-based pedagogies, the multiple intelligences concept can be utilized as part of constructivism in classrooms. These are some of the evidence-based pedagogies that we can use, nothing new here, except the educational media and technology has so many varieties today but let's be careful -- this is just coming from me - sometimes today we get so disconnected; we get so connected easily, everybody connects, one second you're connected, but in less than one second you can get disconnected. Imagine a family at breakfast time lahat naka tutok sa gadget, so we get disconnected from one another, that's what I mean. I find the integrated theater arts approach very interesting. We once invited somebody from the theater arts and in his presentation all the subject areas were connected and integrated and not separated, so interdisciplinary ang approach, PETA is one good example of the integrated theatre approach.

The five dimensions of differentiation are lectured a lot by DepEd:

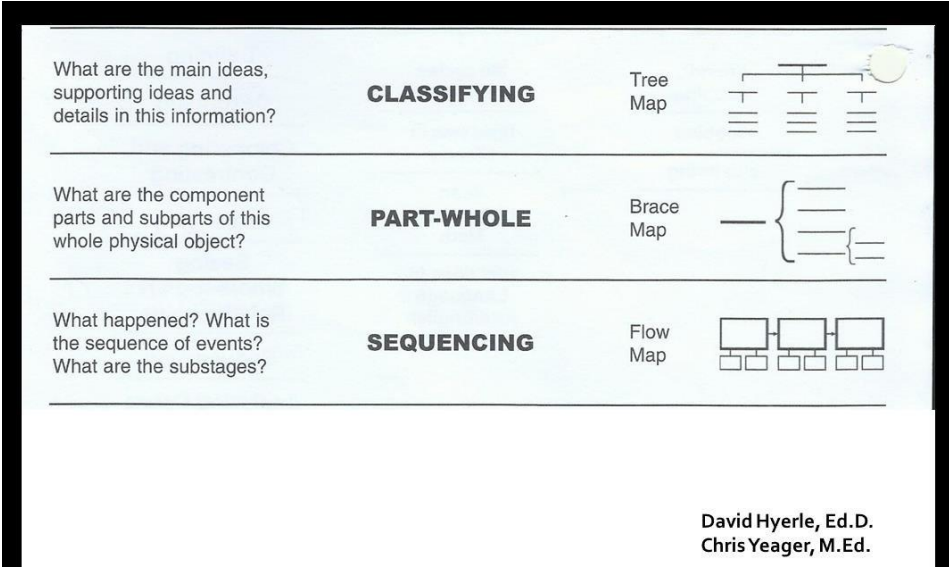
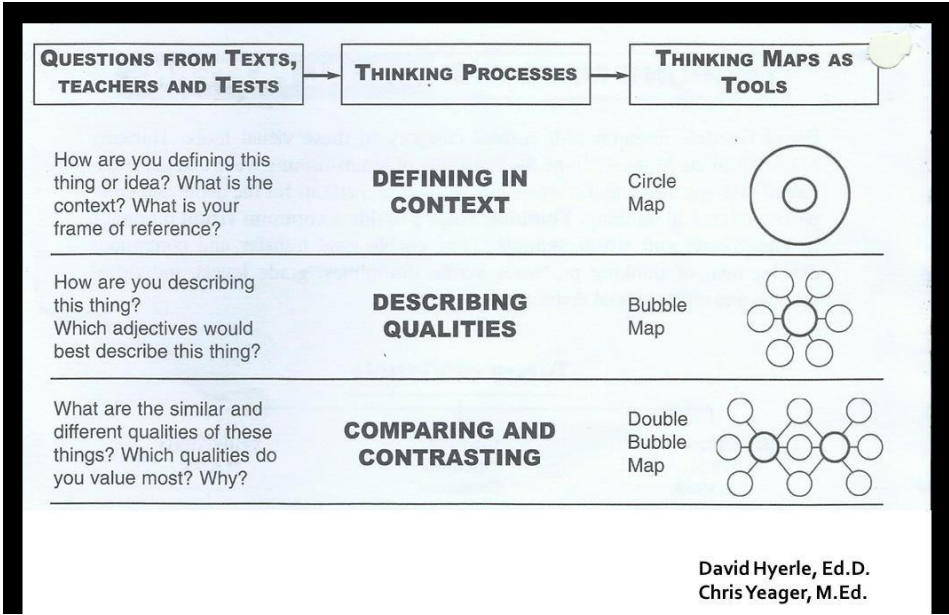
Evidence-Based Pedagogies

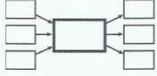
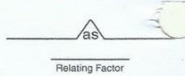
Differentiation consists of efforts of teachers to vary the instruction in order to create the best learning experience possible.



In differentiated instruction, we look at content, the classroom, the products, and the instructional strategies and you at the middle are the meaning-maker. So every instant, every moment, is meaning-making for our learners

Now I'd like to present to you ways by which we can enhance constructivism in the classroom; sometimes we talk about constructivism and we ask, where do I begin? When I started just the other day in Lanao del Norte I asked the teachers, if I write the word "war" here what words can you add to the concept of war? Very easily napuno yung whiteboard with all the words that relate to war. Actually it's concept mapping, and then I asked, if I write "peace", please give me the words that are related to peace. It was easier to talk about war than peace. In the next slide, we have the thinking maps or tools -- these are aids to the teachers in thinking of how children can come up with ideas.



What are the causes and effects of this event? What might happen next?	CAUSE AND EFFECT	Multi-Flow Map	
What is the analogy being used? What is the guiding metaphor?	SEEING ANALOGIES	Bridge Map	

6

THINKING MAPS, INC.
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David Hyerle, Ed.D.
 Chris Yeager, M.Ed.

We have circle maps, bubble maps, we have double bubble maps and for my previous example, we can think of cause and effect. If there's war in Marawi, what do you think are the causes of war and what are the consequences? So they have a way of looking at it in terms of some visual aids, we also have the seeing analogies or the bridge map, so all of these will help in the development of constructivism in the classroom.

I'd like to end here and maybe if you want to ask your questions, you're free to answer the questions of anyone. [Laughter] So may I give you five minutes or 10 minutes, do we still have time?

Dr. Rosario Alonzo: Yes ma'am. So one of the things we look forward to in the GA is the opportunity to be in conversation with experts in the field. This is now our chance; we're opening the forum for questions. Please identify yourself and your institution. Anybody would like to start?

Dr. Hidalgo: If nobody wants to start, may we ask the tertiary level people here if there is a course on constructivism in their university or their college? Can we ask UE? UE kasi ang nakikita ko dito eh.

Member: I'm Eva Callueng from the University of the East, College of Education. In the new curriculum that is now being implemented for the tertiary level, we're one of the colleges that added a specific course entitled Typical and Creative Teaching. We will be offering it to our education major students so we'll be able to discuss constructivism as well as other approaches that will allow our students to become better teachers. Thank you.

Member: Amy Fajardo po from the UP college of Education. We have a course Educational Foundation and it includes educational psychology where the different theories of learning, including constructivism, are being taught. We have been offering courses from way back, yung Teaching Strategies for Developing Creative and Critical Thinking, that's on the master's level. In curriculum studies, which is my area, the theories of learning are indispensable in developing your curriculum and design instructions so that's integrated in almost all of our courses.

Dr. Hidalgo: In response to the two, I wish we can come together one day and develop exercises, real exercises specifically on constructivism that can be used by teachers. The writers among you can probably give us situations and exercises where we can utilize constructivism to help our learners.

Dr. Eden Kelemen: Dr. Hidalgo, I would like to share with you what we're doing in PSEP values education. Every year in PSEP, this is the Pambansang Samahan sa Edukasyong Pagpapahalaga, we look for a model of an outstanding values education teacher. There is the search for the outstanding values education teacher all over the Philippines and I happen to be chairman of this group. The nominees are asked to give demonstration lessons in the classroom. A value like honesty, respect, courtesy etc. becomes the lesson for the day. The class is divided into groups -- one group will prepare an original song, another a dance, a skit, a game -- the theme is the value for the day. Each group has to present their activity before the end of the lesson, where they also have reflective thinking facilitated by their teacher.

Philippine Professional Standards for Teachers**Dr. Gina O. Gonong**

Director

Research Center for Teacher Quality

Department of Education

(July 24, 2018)

Magandang umaga po sa inyong lahat. Masaya po ako na I'm going to share with you the result of our research work, which is now a policy adopted by the Department of Education and also by the Commission on Higher Education. But before I do that let me talk about some logos here.



I'm sure you are very familiar with the DepEd logo. RCTQ, officially that stands for Philippine National Research Center for Teacher Quality, so in short we call ourselves RCTQ. And RCTQ is a partnership between the SiMERR National Research Center in Australia based at the University of New England and Philippine Normal University, the country's national center for teacher education. The research center is funded by the Australian government. We started in 2012, at matatapos na po kami ng June 2019, so yung lahat na kailangan naming matapos before that time yun ang mga pinagkakaabalahan namin ngayon.

We sometimes forget how much things change over time. In 1956, a cargo plane was needed to transfer a 5 MB IBM hard drive. At this time, a 256 GB iPhone is more than 51,000 times lighter. Aren't we happy we don't need a jetplane anymore or a cargo plane to carry our iPhones? So things change, and so much has changed.

Are you familiar with the National Competency-Based Teacher Standards (NCBTS)? NCBTS was good during its time but things have changed and now we have DepEd order no. 42 series of 2017. I'll give you some excerpts. This was signed into policy by Secretary Briones on August 11, 2017. It's called the National Adoption and Implementation of the Philippine Professional Standards for Teachers (PPST). The PPST

- sets clear expectations of teachers along well-defined career stages of professional development from beginning practice to distinguished practice;
- engages teachers to embrace ongoing professional learning for their professional development to enhance their own teaching;
- provides a framework of uniform measures to assess teacher performance; and
- provides a basis for building public confidence in and support for the work of teachers.

DepEd order 42 states that the PPST shall be used as a basis for all learning and development programs for teachers to ensure that they are properly equipped to effectively implement the K to 12 Program. Notice the mandatory *shall*; thus all learning and development programs in the Department of Education shall be anchored on the PPST. Thus the National Educators Academy of the Philippines, the in-service training of schools, districts, divisions, and regions are all based on the PPST, and thus also all continuing professional development programs for teachers shall be based on the PPST.

DepEd order 42 also says that all performance appraisals for teachers shall be based on this set of standards. So the performance-based bonuses for teachers for this year will be based on the PPST. And DepEd order 42 states that the PPST can also be used for the selection and promotion of teachers. Currently DepEd is studying its hiring and promotion policy, so ganun po ang magiging impact ng PPST sa DepEd.

The document is a public statement of professional accountability. Written here is what teachers are expected to know, be able to do and to value in

their profession. So if you ask what a quality teacher is, those qualities are written in this set of standards.

The PPST has four career stages: Beginning, Proficient, Highly Proficient, and Distinguished. It has seven domains, 37 strands, and 37 indicators for each career stage. The K to 12 law was passed in 2013, and naturally we needed to revisit NCBTS on whether it was still responsive to the teacher quality requirements of K to 12. We needed to look at the document that was crafted in 2003 to see if it was still relevant to teacher quality requirements. Our work on teacher standards was approved by the Joint Advisory Board chaired by former Sec. Armin Luistro. So the research work happened for more than three years. We had wide consultations with stakeholders, we reviewed and analyzed teacher standards across 42 international jurisdictions, we analyzed Philippine government and media discourse on teacher quality. We had national validation across 17 regions approved by Br. Armin, and then we finalized everything in a workshop organized by the Teacher Education Council and the participants were regional directors and bureau directors. Our tagline comes from the McKinsey report: “The quality of an education system cannot exceed the quality of its teachers”. Therefore, if we want to promote quality education then we cannot ignore our teachers, in fact, we need to support our teachers.

To support our teachers we need a set of professional standards because internationally teacher quality is articulated in professional standards. It’s not fair for teachers, for example, to be rated heavily on their performance on student scores, yung mga value-added measures na tinatawag nila. I can be a very good teacher but then I have a set of students that have so many problems, that don’t get support from family, that don’t get to eat breakfast. And another teacher might have students that are supported well by families; you know these students will perform better than my students. Sabi nga sa research literature, within the school, the most important factor is the teacher but if you consider factors outside the school then it’s socio-economic status.

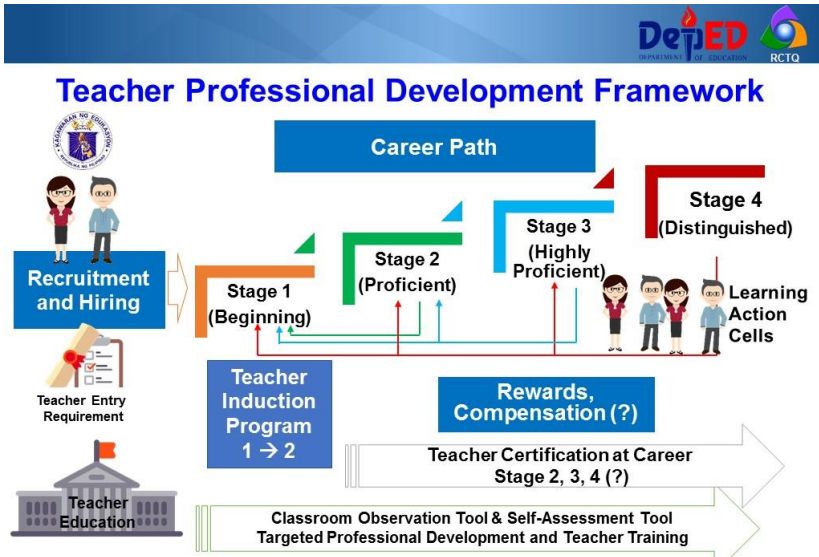
For us to know fairly the quality of teachers, we refer to teacher standards. Are teachers able to manifest, to demonstrate what’s written in the

professional standards for teachers? So the PPST is generic -- to represent practice across grade levels; teachers from K to 12 can refer to this same set of professional standards, teachers who teach English or math or Filipino or social science can refer to this same set of standards. If an English teacher should respond to learner diversity, then a math teacher should be able to do that also, and so with a social science teacher.

I'm going to breeze through the development and validation of the PPST. We had a reference panel or advisory group which started in March 2014 but the research work started in 2013. We had numerous consultations with DepEd; we had a finalization workshop with regional directors and a national validation across 17 regions in the country. We're showing this to the field so that the teachers can have confidence in the product. You know, DepEd teachers feel so bad when something goes to them and then they say, may bago na naman, may magpapahirap na naman sa amin. So we tell this to them so that they feel that this product has gone through a process, a robust process, that actually involved them because we did our best to capture the voice of the profession, particularly the voice of the teachers.

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Therefore in DepEd the PPST is the new framework for teacher quality and professional development.



Earlier I mentioned that the PPST has four career stages: beginning career stage, proficient career stage, highly proficient career stage, and distinguished career stage. Teacher education institutions should refer to the beginning career stage, so the curriculum should be anchored on beginning teacher standards. All training programs for pre-service teachers should be anchored on stage 1. Universities should ensure that students -- before they graduate or when they graduate -- have shown achievement of the standards for beginning teachers. When these graduates enter DepEd, the recruitment and hiring policy is on the beginning teacher career stage, so teachers will be taken into DepEd by meeting the indicators for beginning teachers. When teachers are able to enter DepEd we call them beginning teachers, but for two or three years the induction program should help beginning teachers move to the next career stage, that is, proficient teacher.

What will happen if teachers who are provided the induction program to help them move to career stage 2 are not able to move to becoming a proficient teacher? Wala pa pong policy dun but there are possibilities, there are options. In other countries beginning teachers who are not able to move to the next career stage either go to non-teaching positions or are nicely and politely asked to leave the profession. The Philippines is not yet at the stage of thinking what to do but DepEd of course is doing its best to support teachers. So the induction program is now based on the PPST and is aimed at helping teachers move from career stage 1 to career stage 2.

Career stage 2 is the acceptable stage for teachers, it's the minimum. The teacher should reach this stage in two to three years. But there are teachers who can move to a higher career stage, stage 3, the highly proficient stage. The current term DepEd uses is master teachers but do not be surprised if our master teachers in the field are not highly proficient. I conducted a workshop in one region and I asked them to look at the standards; I asked them to read the descriptions across career stages, and I asked them, what do you think is your career stage? And many master teachers said they were highly proficient and a few of them said they were distinguished. On the third and fourth day I asked them to talk about their practices as teachers, then I asked them to present these practices. After listening to their presentations, I told them nicely, my dear teachers, the practices that you presented were practices of ordinary teachers. But I told them, it is not your fault, this is a new framework. This wasn't your guide as you were going through your career in the past but now you have a framework that tells you that this should be your practice. If you don't practice this way then you have to help yourselves and DepEd should help you to achieve this practice, highly proficient practice.

At this point let me introduce Dr. John Pegg, he's our partner at SiMMER National Research Center and it's his government that spent 80 million pesos for this project. Nung pumunta ako ng Myanmar at saka ng Bhutan, they're having struggles, they want to put up a project, they want to follow the same research process, but they don't have the funds. So maswerte po tayo because we received the funds from the Australian government.

Going back to stage 4, not many people can reach this stage. I always give as an example Manny Pacquiao in boxing, not anybody can be like Manny Pacquiao, very few can be a distinguished boxer like him, so ganun din sa teaching profession. Not all teachers can become distinguished teachers, like not many lawyers can become justices of the Supreme Court. In this framework we see a teacher getting encouraged to move from one career stage to the next. Marami tayong teachers who opt to leave the classroom because they don't find prestige in the classroom. When we did a survey of Metrobank awardees in one region we couldn't find respondents. You know what happened? The Metrobank awardees in that particular region were no longer classroom teachers, they had moved to becoming administrators. So we're not keeping our good teachers in the classroom. We hope that we'll be able to keep them if they stay in the field and they get accredited as highly proficient teachers or even as distinguished teachers. This is a thought, maybe the Philippines can go this way someday -- teachers get certified pag career stage 2, career stage 3, career stage 4. Ok, certification for stage 3 and stage 4 can be voluntary. Compulsory or mandatory is stage 2.

Remember there are 37 indicators in the professional standards for teachers. Let me mention a few here: mother tongue to facilitate teaching and learning, learners in difficult circumstances (you don't find that in developed countries but obviously in the Philippines we need teachers to be able to respond to learners in difficult circumstances), strategies for promoting literacy and numeracy, positive (that is, appropriate, ethical, and responsible) use of ICT, and classroom communication strategies. Communication strategies wouldn't just be about language, it's also nonverbal communication.

You see a beginning teacher entering a classroom with students who are very noisy and then she tries to calm down the students, quiet please, and then everybody is still unruly. The beginning teacher usually gets out of the classroom and then cries in the restroom or faculty room. Did you experience that? Students are noisy, an expert teacher comes in and without saying anything, just the look on her face and just body language,

and everybody keeps quiet. You get that from experience and that's a communication strategy, di ba?

So, this is how the PPST looks like; we have the description of the domain and then we have strands, and then we have indicators across career Stages.

Page 2 of the PPST Booklet



Domain 1. Content Knowledge and Pedagogy

Domain 1 recognizes the importance of teachers' mastery of content knowledge and its interconnectedness within and across curriculum areas, coupled with a sound and critical understanding of the application of theories and principles of teaching and learning. This Domain encompasses teachers' ability to apply developmentally appropriate and meaningful pedagogy grounded on content knowledge and current research. It takes into account teachers' proficiency in Mother Tongue, Filipino and English in the teaching and learning process, as well as needed skills in the use of communication strategies, teaching strategies, and technologies to promote high-quality learning outcomes.

Strands	Beginning Teachers	Proficient Teachers	Highly Proficient Teachers	Distinguished Teachers
Strand 1.1 Content knowledge and its application within and across curriculum areas	1.1.1 Demonstrate content knowledge and its application within and/or across curriculum teaching areas.	1.1.2 Apply knowledge of content within and across curriculum teaching areas.	1.1.3 Model effective applications of content knowledge within and across curriculum teaching areas.	1.1.4 Model exemplary practice to improve applications of content knowledge within and across curriculum teaching areas.
Strand 1.2 Research-based knowledge and principles of teaching and learning	1.2.1 Demonstrate an understanding of research-based knowledge and principles of teaching and learning.	1.2.2 Use research-based knowledge and principles of teaching and learning to enhance professional practice.	1.2.3 Collaborate with colleagues in the conduct and application of research to enrich knowledge of content and pedagogy.	1.2.4 Lead colleagues in the advancement of the art and science of teaching, based on their comprehensive knowledge of research and pedagogy.
Strand 1.3 Positive use of ICT	1.3.1 Show skills in the positive use of ICT to facilitate the teaching and learning process.	1.3.2 Ensure the positive use of ICT to facilitate the teaching and learning process.	1.3.3 Promote effective strategies in the positive use of ICT to facilitate the teaching and learning process.	1.3.4 Mentor colleagues in the implementation of policies to ensure the positive use of ICT within or beyond the school.

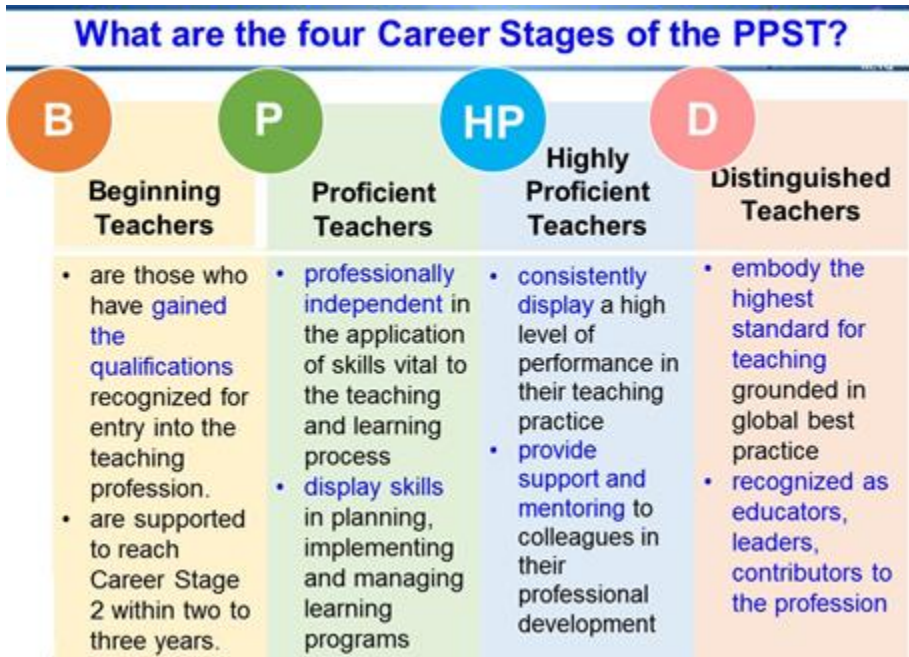
What I'd like you to notice is that the indicators across career stages are all about the same strand. Let's look at "positive use of ICT". Beginning teachers show skills in the positive use of ICT to facilitate the teaching and learning process, proficient teachers ensure the positive use of ICT, highly proficient teachers promote effective strategies in the positive use of ICT, and distinguished teachers mentor colleagues in the implementation of policies to ensure the positive use of ICT. All indicators talk about the same strand but the level of complexity and sophistication varies across career stages. Of course the realistic expectations for beginning teachers are not the same as those for highly proficient teachers. Ok, ito po ang

strands, ito po ang indicators, observable, measurable teacher practices, ito ang ating domains.

The domains include content knowledge and pedagogy -- knowing what to teach and how to teach it; learning environment; diversity of learners, so dito po nilagay na natin yung mga learners with disabilities, learners from indigenous groups, learners in difficult circumstances. Sasabihin ng mga teachers we were not trained on how to handle learners from indigenous groups, kaya nga dapat ang TEI ituro na ito sa kanila. You will not be trained how to handle learners with disabilities kasi may mga nagspecialize lang diyan, so pag-isipan ng TEI dapat yan ang ituro sa mga estudyante. And then we have the domains of curriculum and planning, assessment and reporting, community linkages and professional engagement, personal growth and professional development. So we capture as much as possible the language that is familiar to teachers and that's the language in NCBTS, so we kept domain strands and indicators but made changes in the domains.

So ito po, if we asked what qualities are expected of teachers on this domain on the PPST, so pag nasa field naman kami we ask teachers ito ba ay trabaho ninyo at sasabihin nila ang trabaho nila. But what happens is that sa dami ng ginagawa ng teacher eto na lang ang hindi nila nagagawa. Ok, so we tell teachers in the field your job is written in the PPST, if it's not written there then that's not really your core job.

Let me repeat the four career stages of the PPST.



These are the career stages I talked about earlier. This is the acceptable stage for all teachers in the field. Let me quote from Darling-Hammond: “Teacher evaluation should be based on professional teaching standards and should be sophisticated enough to assess teaching quality across the continuum of development from novice to expert teacher”. That means a teacher at a particular career stage can be outstanding at that career stage, so kung ako ay teacher 3 pwede akong maging outstanding at teacher 3, kasi you don’t expect a teacher 1 for example to perform as a master teacher.

Ok so it’s valuable to have signposts along the way; it’s good to know where you are at a particular stage. So this is developmental, this is about teachers, not about principals. And soon, DepEd will begin developing principal standards and supervisor standards. We need to close the loop, because we need to support the teachers but if the principals are not good,

if the supervisors are not good, what will happen? So the problem is how to support the teachers, and our deadline is midnight of June 30, 2019.

I've talked about this a bit, career stage 1 offers realistic requirements of teachers in training. Some might say we can tackle career stage 2, *ok lang po yun*, if you think career stage 2 is realistic for you, *kasi* when you say to become proficient somebody needs experience, so career stage 2, *ito na yung mga nararamdaman na totoong teacher talaga sila*. So career stage 3 focuses on high quality teaching and mentoring, career stage 4, exemplary teaching and recognition as a leader and mentor in teaching and curriculum.

The PPST was published on October 21, 2017. This PPST policy will be used to tell the teacher education institutions through the Commission on Higher Education if they can look into the pre-service curriculum to ensure that what is being taught to future teachers is aligned with what the system needs. How tragic is it when graduates of universities do not link to the standards of the teachers for the Department of Education. So universities should calibrate their gains and produce pre-service teachers who can show achievement of beginning teacher standards.

Mula po doon sa PPST, we were able to develop teacher assessment tools, *ito po yung mga tools*. We have classroom observation tools based on the PPST, we have RPMS tools for teachers, and we have self-assessment tools.

PPST-based Tools

Classroom Observation Tools



RPMS Tools for Teachers



Self-Assessment Tools



To close, McKinsey reminds us that there are three things that matter most in top school systems: One, getting the right people to become teachers; we need to attract good people to become teachers. Two, developing them into effective instructors, that's why our induction programs, support programs, professional development programs for teachers are very critical. And then, three, ensuring that the system is able to deliver the best possible instruction for every child. The teacher cannot do it alone, the teacher needs to be supported by the system.

Thank you very much.

Aligning the PPST to DepEd's HR Systems

Ma. Lourdes Pantoja

Director

Bureau of Human Resource and Organizational Development

Department of Education

(July 24, 2018)

A very pleasant good morning. Let me start by saying I feel humbled to talk before you because I am not an educator -- my background is human resource and organization development and I carry with me 38 years of experience in the profession. For the longest time I was in Nestlé, in Nestlé Philippines first and then I moved on to Nestlé Middle East and then Nestlé Switzerland. So how did I land in DepEd? Let me tell you a story first. When I was in Dubai and Switzerland, nakita ko doon yung galing ng Pinoy and I say this from the heart, ang galing natin. I am so happy I was given the privilege of working as an expat in Dubai where I had a chance to work with our OFWs. Yung Pinoy, pagka salesman siya, pinakamagaling siyang salesman, pagka nurse siya, ang galing niyang nurse, as a matter of fact yung isang nurse doon pinakasalan nung isang Sheik because of the way we care for the patients. Ang regret ko po doon, we have many teachers who were kasambahay, and one time I visited a house in Lebanon and I heard children in a room singing Christian songs, eh Muslim household yun. I was listening to the children and I concluded siguro yung kasambahay Filipino teacher and I was right, maiyak-iyak ako kasi we have many kababayans na teachers sa DepEd. May campaign kami ngayon pinapauwi namin sila, dito na lang magturo. Marami rin tayong Filipino managers in both Switzerland and Dubai at ang gagaling din, nung nasa Switzerland ako, siguro mga 15 kaming Filipinos doon at parang United Nations yung office ng Nestlé Switzerland. Kapag may mahirap na problema, kanino binibigay? Sa Pinoy kasi matiyaga po tayo, hindi matiyaga yung ibang nation. Tayo kahit na mahirap yung problema sa market i-so-solve yun ng Pinoy. So ano yung conclusion ko? Ang galing ng mga guro natin, so I salute all of you, kayo yung foundation ng ating educational system that sends these overseas Filipino workers

fighting out there in all the nations of the world. So nung nasa Switzerland ako and I was about to conclude my career, I said to myself sana mapadpad ako sa isang government agency. At narinig ng Diyos yung panalangin ko, sa DepEd ako dumapo at yung pinakagusto kong tulongan na sector na teachers ay nangyayari ngayon.

Ano yung ginagawa ko sa DepEd, hindi naman ako educator. Doon sa Nestlé, human resource development yung focus ko and I am a proponent of embedding competencies. Mamaya po ikukwento ko yan -- leadership competencies, functional competencies, and behavioral competencies, so mi-ni-mix namin yan to raise up the business managers of Nestlé in the market, in the region, and in the global arena. So binabantayan namin kung sino ang global managers for Milo, for Nescafe, for Bear Brand, for Maggi at binabantayan. How do we watch over them? Embedding competencies, ganun yung background ko, so eto na ako hinipan ako ng hangin sa DepEd kasi po yung isang USec dati dyan, si USec Lino Rivera, was one of my consultants in Nestlé before. He was in charge of governance and operations and yung HR and OD were under his strand, so doon ako napadpad.

Pero ang entry point ko po diyan, National Educators Academy of the Philippines, so I managed NEAP for two years and they told me in 2016 to form the Bureau of Human Resource and Organization Development. The way we grew talents in Nestlé was through competencies, so ano yung competencies ng teachers dito. My growth as a practitioner in DepEd has a lot to do with my partnership with Dr. John Pegg, Dr. Gina, and Dr. Jenny. Talagang ang Diyos dinidinig yung pintig ng puso. Parang hinihipan ka ng Diyos sa mga gusto mong mangyari, so hinipan ako isang araw sa RCTQ - hindi ko malaman kung sino yung nagturo sa akin basta I found myself discussing with Dr. John Pegg, Dr. Gina, and Dr. Jenny at ang topic po ay competencies. So ang ginawa ko po lumambitin ako sa palda nila at sa pantalon ni John Pegg and we worked together in evolving itong Professional Standards for Teachers that Dr. Gonong discussed with you a while ago. This was more than two years in the making.

So ano yung role ng DepEd ngayon? We are giving life to the professional standards. Let me now start the presentation. I think that background is needed para alam nyo kung bakit ako nakatayo sa harap nyo, hindi naman ako educator. Ayan, alam nyo na kung bakit. We anchored first of all the professional standards on the vision of the agency.

Alignment with DepEd's Vision

Long-Term Vision

We dream of Filipinos who passionately love their country and whose values and competencies enable them to realize their full potential and contribute meaningfully to building the nation.

As a learner-centered public institution, the Department of Education continuously

Team Vision

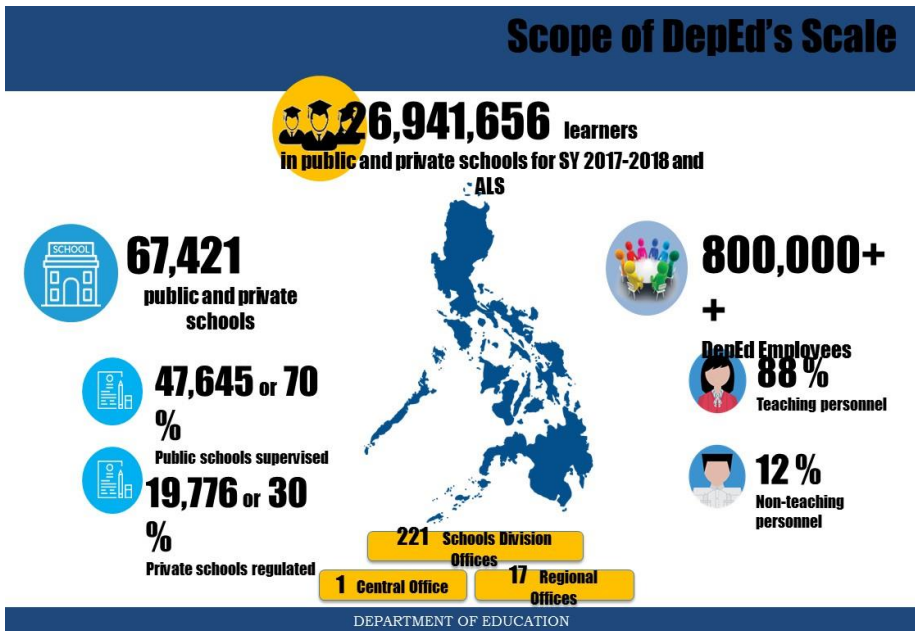
By 2022, we will have nation-loving and competent lifelong learners able to respond to challenges and opportunities through the delivery of quality, accessible, relevant and liberating K to 12 Program by a modern, professional, pro-active, nimble, trusted and nurturing DepEd.

ITS STAKEHOLDERS DEPARTMENT OF EDUCATION

Iyan po yung vision ng DepEd and I would just like to highlight the encircled items in the slide: As a learner-centered public institution the Department of Education continuously improves itself to better serve the stakeholders. Yung being learner-centered therefore, we have transitioned to the K to 12 curriculum and I am very happy with this. Nung nasa Dubai and Switzerland ako natatalo ang OFW natin kasi kulang tayo ng dalawang taon. Totoo po yun. Kaya nung pagbalik ko dito tuwang-tuwa ako na na-introduce na yung K to 12. Ang nangyayari po pagka yung engineer natin nag-compete doon nagiging engineering aide lang, yung doktor natin nagiging nurse lang. Out of my so many years of stay there, kailangan ko pong mag-home leave para magpa-duktor dito, kasi magaling

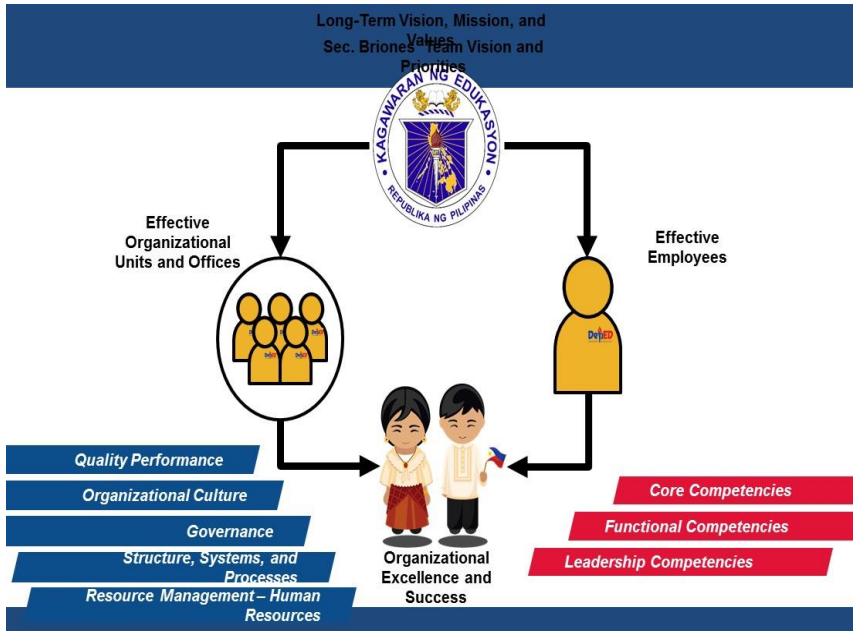
ang mga duktur na Pinoy. Nasubukan ko na yung ibang lahi. Umuuwi kami, nagho-home leave kami, pagdating dito dentista, duktur, nagpapacheck up kami kasi we feel confident with our doctors. So ayun, magaling yung mga educators natin dito sa Philippines talaga. Tapos po, when Ma'am Liling Briones assumed the secretaryship of the Department she added the other encircled item in the slide: she wants DepEd to be a modern, professional, pro-active, nimble, trusted, and nurturing DepEd. So I'll just pick on one of the 10 agenda items that says, undertake capacity building to be responsive to the aspirations and most urgent needs of the nation.

Consider the scope of DepEd.



We have 800,000 employees, 88% teaching personnel, 12% non-teaching personnel. We have 67,421 private and public schools, we supervise almost 48,000 schools now in both elementary and high school, tapos almost 20,000 private schools registered. The question is, how do we evolve? How do we train? How do

we capacitate all the 800,000, ang dami-dami, but it's very possible, kasi yung Nestlé globally, almost the same, there are about 200+ markets of Nestlé nationwide and globally, ganyan din po yung composition nila, 800,000, so pwede. Eh isang market lang tayo, isang agency lang ito, ang question po, papano? When I was new in DepEd I wasted no time to develop this framework, we call it the Bureau of Human Resource and Organizational Development framework. Our mantra is taking care of people while maximizing organizational performance and health.



So this is the framework that we follow. It is aligned first of all with the vision-mission of the Department of Education. We did our internal analysis and on that basis formed the structure. So inabutan ko po dyan yung rationalization plan, nag-rarat-plan sila nung pumasok ako and we were able to transition to the new structure. Then you manage from the entry to the exit, the life cycle of the employees, so from the entry point, recruitment, selection, placement, induction pupunta siya dun sa resultsbased, mag pe-performance management, mag le-learning and

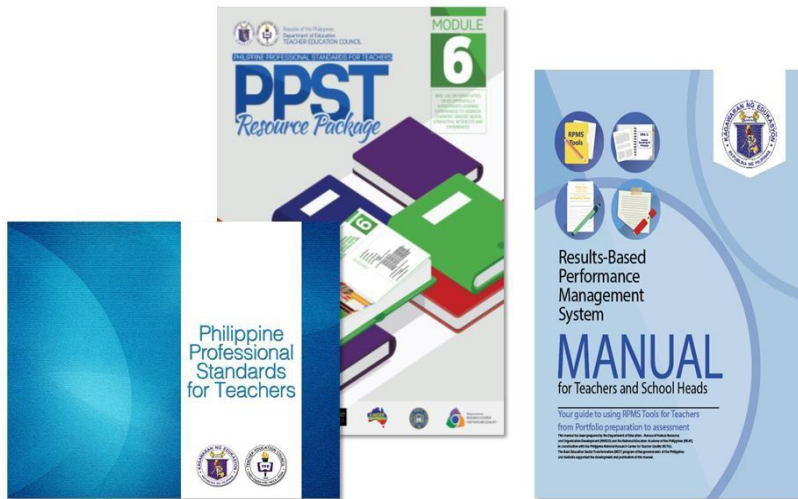
development, mag re-rewards and recognition, may employee welfare and wellness on to succession or retirement.

What is the center piece? Yung competencies, so core competencies, functional competencies, and leadership competencies. So this is how we are managing to evolve DepEd into an effective organization through quality performance, organizational culture, governance, efficient structure, systems and processes, resource management.

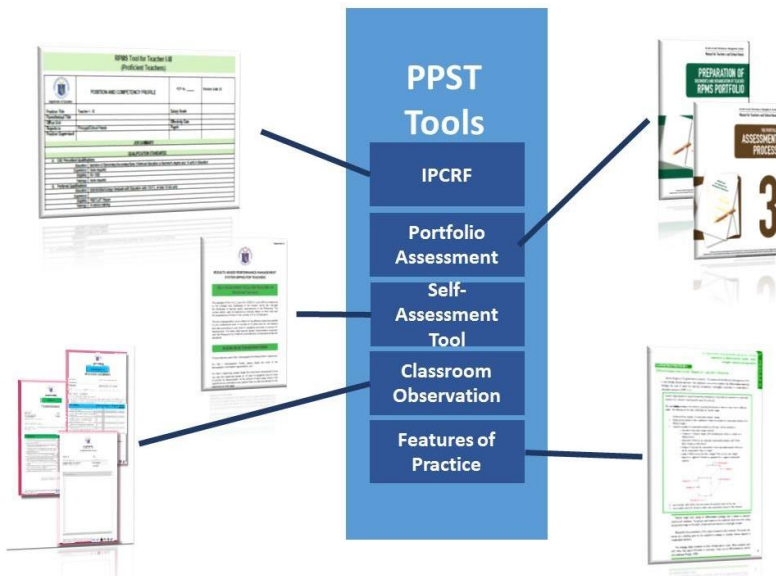
For many many years I have been a proponent of embedding competencies, core, functional, and leadership into the HR systems. So what is the link to the professional standards? The PPST set the standards for teacher practice; it will change the face of Philippine education.

So if you are the teacher you ask this question, how does this affect me? What's in it for me? So we want our teachers to embrace the PPST wholeheartedly and live out the professional standards for teachers. I hope one day we talk one language across the nation when it comes to professional standards for teachers, para mas mabilis yung training. Iisa lang ang standard na dapat sundin, na dinescribe kanina ni Dr. Gonong, ang mga stages are very well defined. This has been subjected to research and many iterations. Nadatnan ko yung mga validations nila and grabe talaga yung pag- embrace nung teachers natin of the PPST, so by ensuring that the PPST is embedded into the HR systems, the standards will become part of the teacher's everyday life. Thus the integration must be simple, seamless, uniform, and universal, so eto yung ginagawa namin ngayon, integrating the PPST-aligned processes and tools into the HR systems.

Kanina nag-showcase si Ma'am Gina ng kanyang professional standards, ito naman ang gusto kong i-showcase. This is the manual now, it will be the bible of our principals and teachers for them to follow through the embedding of the professional standards for teachers.



I would like to underscore this: It is very difficult to launch competencies if they are stand-alone; kahit na maganda yung beginning standards, proficient, highly proficient, distinguished, pag hindi na-embed, hindi pinasok sa HR systems, hindi po masusundan ng employees. This has been my long-time experience, we have to integrate them in HR systems. What do I mean by this? You have to use different kinds of tools.



So eto yung papakita ko sa inyo; I will explain the tools one by one. So yung Individual Performance Commitment Review Form (IPCRF) describes the duties and responsibilities of teachers across career stages, details the Key Result Areas and the objectives to obtain the KRAs, details the Means of Verification as proof of the attainment of specific objectives. So in this manual, naka-state na dito ano yung IPCRF ng teacher 1 to 3, master teachers 1 and 2, so pare-pareho yung IPCRF nila. Nagkakatalo na lang sa execution kasi po ang complaint ng teacher dati sila pa yung gagawa sa KRAs, tapos the principals don't know how to guide them kasi the principals have not been trained in it. So now we are going through the stage with also defining now the competencies for principals and supervisors aligned to the professional standards. But in the HROD we are also evolving rather separately the functional competencies of our accountants, lawyers, admin support, so everybody in the organization gets to be trained through competencies.

And then we have the Portfolio Assessment. Probably you know this very well -- it forms the Means of Verification in the IPCRF. Ano po yung evidences na ginawa nila, na-dinemonstrate nila yung behavioral indicators doon sa strand? The Portfolio Assessment process involves the teacher's self-assessment and rater's assessment of the portfolio. We taught them how to do this, we are teaching them how to do this. The portfolio post-assessment focuses on conducting teacher and rater conferences on the results of the Portfolio Assessment process. So may rater, ratee, discussion po ito. Merong principal and teacher discussion.

The Self-Assessment tool allows teachers to reflect on and assess their own performance, so mag-se-self assess sila and then this will be validated by the rater or the principal. Its results will guide teachers and their raters on which indicators to improve on, and areas for coaching and mentoring.

Then we have the Classroom Observation, dati po wala kami nito, hindi siya organized, but thanks to the efforts of Dr. Jenny Jocson she mastered this and tinuturo specifically to DepEd teachers on how to do it efficiently and well. This tool includes rubrics which show a continuum of level of performance for each career stage.

And then we have the Features of Practice. Here there are sample illustrations of specific teaching practices that show how the standards are put into action. It shows types of expression of knowledge, skills, attitudes, and key behaviors that are elaborative of the standards. So, please note that standards on their own are abstract, let me repeat this, and difficult to assimilate if they are not integrated into HR systems.

I see a lot of organizations use competencies, but if they are not integrated they cannot be successful, they cannot take off, hindi naman pwedeng basta na lang ibigay mo yung manual mo, sabihin sa teachers, kailangan idemosntrate nyo yan. Kailangang ipasok sa HR systems, that’s the way to make them take off, so by integrating them into the systems, they are lived out in everyday practice.

The next slide is a beautiful slide, it summarizes the story of the teacher, yung entry to the profession, ano yung HR system dyan? Recruitment, selection, placement, so nakalista na po dyan kung anong tools yung gagamitin namin.

PPST & its Tools are integrated in the Teaching Lifecycle & Core HR Systems

Entry to the Profession	Performance Management	Career Progression	L&D	R&R
	IPCRF	IPCRF	IPCRF	IPCRF
Portfolio Assessment	Portfolio Assessment	Portfolio Assessment		Portfolio Assessment
	Self-Assessment Tool	Self-Assessment Tool	Self-Assessment Tool	Self-Assessment Tool
Classroom Observation	Classroom Observation	Classroom Observation	Classroom Observation	Classroom Observation
Features of Practice	Features of Practice	Features of Practice	Features of Practice	Features of Practice
Recruitment Selection Placement	Performance Management	Recruitment Selection Placement	Learning and Development	Rewards and Recognition

Tapos po pag performance management these are the tools that we will use, so in other words in each of these stages nakapasok yung professional standards, so nakakulong yung teachers. When we look at them, we look at how they manifest the professional standards in each of the HR systems and then career progression, learning and development, ganun din po. So all the training programs, all the coaching and mentoring, all the on-the-job experiences, we're following the 70/20/10 rule in DepEd also, nakapasok yung professional standards for teachers, so the results-based performance management system, the RSPI system is anchored on this key principle.

So dun sa recruitment form naka-embed dun yung professional standards. When we hire teachers now, titignan namin yung dala-dala na niyang behavioral/functional competencies versus the professional standards. For entry stage pa lang sinasala na namin, tapos pag nag-induction siya, PPST din, pag nag-performance management system siya nandun din yung PPST. So bugbog siya ng professional standards for teachers. Then recruitment, selection, and placement, the PPST is used as the basis of all human resource actions for teachers.

Sa DepEd po, alam nyo naman ito siguro. Yung dun sa regions and divisions, pinapakialaman kami ni mayor, ni governor, ni congressman, kumakatok po yan sa pintuan at sasabihin sa amin, Principal, SDS, RD, pakipasok mo naman tong mga bataan ko diyan, ok naman sila. Pero pag tinignan namin, hindi ok, so ano yung pambato namin? Meron po kaming RQA, sir, at eto po yung sinusunod ngayon, yung professional standards for teachers; pagka yung bata nyo walang ganun, sorry po. Of course we don't win in all the cases, pero in the majority of cases, meron po kaming rason at may concrete evidence din na pinapakita sa kanila. So proposed hiring, promotion, and reclassification guidelines. Dati po baligtad yung aming evaluation, yun yung 70% yung education or training experience. Binaligtad po namin ngayon, 30% yun, tapos yung evaluative assessments 70%, consisting of performance, ano ba talaga ang kakayahan ng teacher na yan, tapos 30% classroom observation, and 10% non-classroom observable strands.

Pagpasok ko po dyan, nag-visit ako ng mga schools, nakausap ko ang mga teachers, tapos ang daming teachers, sampung taon na, dalawampung taon na teacher 1 pa rin, it burdens the heart. Sabi ko ay anung nangyari, eh hindi siya makalaban kasi wala siyang professional standards for teachers. This is the beauty of it kasi ngayon measured na measured dun sa stages na dinescribe ni Dr. Gina.

Recruitment Selection and Placement	<ol style="list-style-type: none"> 1. PPST is used as the basis for all Human Resource Actions for Teachers. 2. The Assessments used will be based on the Demonstration Teaching/Classroom Observation Tool. 3. Performance Data for promotions will be based on the PPST aligned IPCRF. 4. PPST Aligned Portfolio Assessment will be used to ensure teachers meet even non classroom observable indicators.
IPCRF	
Portfolio	
Self- Assessment Tool	
Classroom Observation	
Features of Practice	

Ano ang dapat i-manifest na skills, competencies sa stage 1? Ok na ba siya? Pwede na ba siyang i-elevate sa proficient stage and therefore pwede na ba siyang i-promote? So ngayon po malinaw na malinaw. Ganyan din yung ibang functions, ang taas nung entitlement mentality, sasabihin kapag nag-interview kami ng applicants for promotion, kailangan na akong ma-promote, I have been in the same job for 20 years. Tatanungin ko bakit po? Ano po yung basehan nyo? It's the same routine every day, shuffling papers, stapling papers, putting paper clips, tapos gusto mo nang maging chief? So yun po, this is what we're bringing, we're jolting DepEd, at katakot-takot na changing mindset po itong competency discipline, it's not very easy to embed it and implement it kasi po binabangga natin yung entitlement mindset nila. Hindi po ganun ang usapan ngayon, anong

sinasabi, anung dinedemonstrate mong skills set, nag-i-improve ka ba every year? This is what we tell them, every day kailangan may natutunan kang bago. Nung bago po ako dyan nung nagrat-plan talaga pong inikot namin yung mga department yung mga strands. Kasi people have been seat mates for 20 years, nung nilipat ko po yung bureau ko binulabog ko, talagang pinagpag ko para magkaroon at least ng ibang katabi. Ay nagkagulo po, galit na galit sa akin, sabi nung lilipat na kami sa bagong office sabi nung dalawa kong staff sa akin, eh director, dalawampung taon na kaming hindi nag-uusap niyan tapos pagtatabihin mo kami.

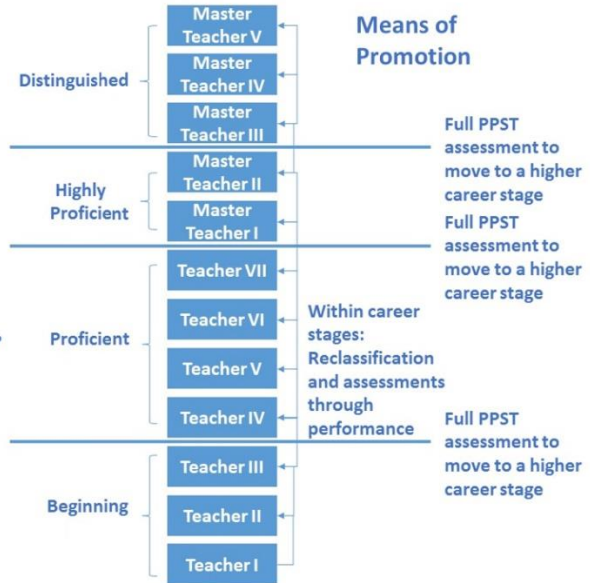
So anu-anong klaseng support naman ang dapat to embed competencies. Yung Nestlé nga po balikan natin, parang dito sa Philippines they rank number 10 in the top 1000 corporations kasi they have very outstanding leaders who demonstrate competencies in all aspects. So lalo na po ang ahensiya ng gobyerno, let us dream na yung the best and the brightest talents of the land magpunta one day sa government agencies, kamukha ng Singapore. The highly paid employees of Singapore are those hired by the government, sana po mangyari rin ito sa Pilipinas. Ang daming panaginip ano, pero natutupad naman po, itong standards natupad po siya eh.

Ito po yung Results-based Performance Management System -- are you familiar with this? Dalawang bagay lang ang pinag-uusapan sa performance management, what you do and how you do it. Doon po sa RPMS, itong manual na ito, naka-embed na yung professional standards wala po silang kawala. So malinaw na malinaw ngayon sa teachers kung ano yung gagawin nila and how they should progress from one stage to the other.

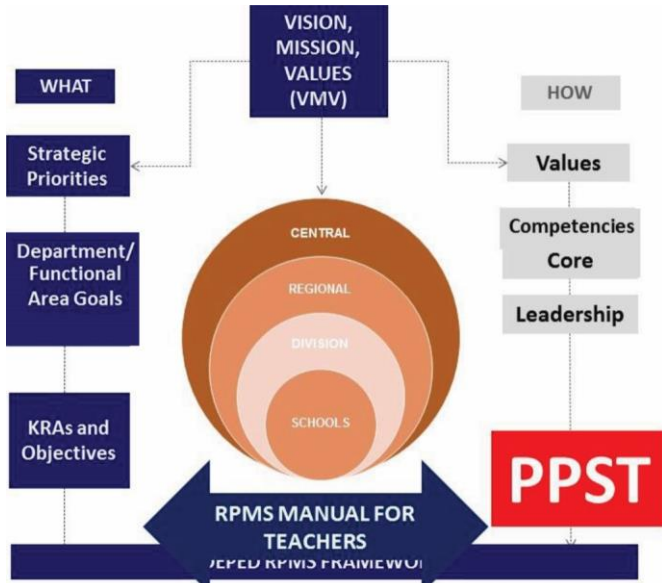
Single Line Career Path Proposal:

PPST as the basis for Reclassification.

Reclassification as sole basis of promotion.




Results-based Performance Management




*The framework aligns efforts to enable DepEd to actualize its strategic goals and Vision

Performance Management	<ol style="list-style-type: none"> 1. Performance Standards are laid out in the PPST. 2. These standards are translated into standardized Individual Performance Commitment and Review Forms per Career Stage. 3. This ensures equality in implementation of Performance Standards. 4. The standards ensure that teachers are measured on how they affect the teaching-learning process, and nothing else.
IPCRF	
Portfolio	
Self-Assessment Tool	
Classroom Observation	
Features of Practice	

**RPMS Tool for Teacher I-III
(Proficient Teachers)**

	POSITION AND COMPETENCY PROFILE	PCP No. _____	Revision Code: 00
Department of Education	Position Title: Teacher I-III		
	Parent/Professional Title		
	Office Unit		
	Reports to: Principal/Sc		
	Position Supervised		

**RPMS Tool for Master Teacher I-IV
(Highly Proficient Teachers)**

	POSITION AND COMPETENCY PROFILE	PCP No. _____	Revision Code: 00
Department of Education	Position Title: Master Teacher I-IV		
	Parent/Professional Title		
	Office Unit		
	Reports to		
	Position Supervised		
	JOB SUMMARY		
	QUALIFICATION STANDARDS		
	A. CSC Prescribed Qualifications		
	Education	Bachelor of Elementary/Secondary Education or Bachelor's degree plus 18 units in Education and 18 units for a Master's degree in Education or its equivalent (MT-I), Bachelor of Elementary/Secondary Education or Bachelor's degree plus 18 professional units in Education and 24 units for a Master's degree in Education or its equivalent (MT-II)	
	Experience		
	Eligibility	RA 1000	
	Trainings		
	B. Preferred Qualifications		
	Education	Master's Degree Graduate	
	Experience	3 years in service as Teacher III	
	Eligibility	Licensure Examination for Teachers	
	Trainings	Relevant trainings	

The RPMS Tool is standard for each career stage.

Ito yung itsura ng mga forms. We have developed all the forms, kaya ready-ng ready na. Tapos yung classroom observation tool this is how it looks like so the observers are being trained right now and then yung L & D cycle very exciting, so doon po sa Results-based Performance Management System, yung last portion doon will capture the strengths and the weaknesses of the teachers. The weaknesses will become the training gaps and then from the HROD kami po yung performance management pi-pick-up-in yan ng NEAP dun sa form and they will become the training programs embedding the standards also. So lahat ng training programs ng NEAP naka-embed yung professional standards. So isn't it beautiful?

Malinaw po ngayon yung story ng teacher ng DepEd, so the teacher herself will develop the plan based on the results of the Self-assessment Tool. The teacher can reflect in the plan as development needs the objectives that rated "Low" in terms of level of capability, or "High" or "Very High" in terms of priority of development. The teacher discusses the development plan with the principal. The teacher and the principal come to an agreement about the final development plan. So ito yung sample development plan nila, reflecting the functional competencies, tapos yung rewards and recognition.

Ito po isang panaginip din, we want to pay teachers for the competencies they demonstrate, pay for performance, hindi lang basta across the board. Isang panaginip din po na sana mapagpag yung salary structure ng DBM. So we're trying to influence it also through competencies. We hope we succeed.

Ok let me end with this quotation from Robert John Meehan, "The quality of an exemplary teacher is demonstrated by their willingness to set and maintain the highest standards for themselves and their students." So this is the story of the beautiful partnership between RCTQ and DepEd. They have helped us evolve the professional standards, and DepEd now is embedding the PPST into the HR systems that will demonstrate later on how we have evolved the excellent teachers of the Department of Education and the Philippines. Maraming salamat po.

Dr. Fe Hidalgo: Thank you Dir. Pantoja, Dir. Gonong, and I also wish to thank Dr. John Pegg here, who came all the way from Australia to make sure that upgrading standards for education is being talked about, which this Foundation stands for. Let me bring you back to how this all started. Maybe 11 years ago, some bright teachers asked by what standards do you judge us or evaluate us, by what standards do you rank teachers when we apply for promotion? Such questions were repeatedly asked and there was no specific answer. The Civil Service Commission had its own standards for performance rating, DepEd had its own, and PRC then came up with its own because PRC came into existence that year, and teacher training institutions had their own standards. But of course we were dealing with the same teachers and so DepEd struggled to come up with competency-based standards and it identified seven domains which up to this time are still the domains except for one, which is social regard for learning. I'm very happy that each Secretary that came to DepEd recognized it but it was never signed into a memorandum. At the time of Br. Armin Luistro and the present Secretary Leonor Briones it was formally recognized as what we need to follow and to use as basis for all the things that we are doing especially in terms of human resource development.

I will now open the table for questions.

Mr. Sotero Malayao, Jr.: I can see a silver lining on the perennial problem of unqualified teachers, for example, for teaching science. I think in some areas there's a lack of HEIs offering majors in the sciences, especially chemistry and physics. In my school, Mindanao State University, we are limited to 40 slots for chemistry, physics, biology and so on, we cannot go beyond that, maybe because we don't have the capacity to pay for professors. We should be assured of input of teachers in the initial stage, otherwise we have to give them a lot of training to be immersed in the field.

Dir. Pantoja: Umpisahan po sa pre-service at yan yung role ng CHED -- dapat naka-embed itong professional standards para pagpasok ng teachers, whether in private or public schools, ready na sila, lalo na sa DepEd, to integrate immediately. Ito yung problema namin sa DepEd ngayon na iba

yung pagkaka-train nung mga teachers sa pre-service kaya nag-re-re-train pa kami. So doon pa lang, i-hit na natin, sa pre-service pa lang, tapos sana pati yung LET, i-review natin yung LET. Ang mga pumapasa po yung hindi education graduate, yung mga graduates of other disciplines yun ang pumapasa sa LET. Something is wrong somewhere, so sana i-align din. So we will push the fences forward slowly but surely to align the entire nation on the professional standards for teachers. I am not saying that we will not change later on, syempre pag nagbago po yung sitwasyon sa Pilipinas and we need a new set of competencies we will go back and review this, but today this is good enough to start improving the quality of our teachers.

Dir. Gonong: Sir, taga Mindanao State University ka? Hinahanap ka namin, sir, si Jenny Jocson will talk to you after this. Kasi po kami sa RCTQ we partnered with 33 centers for excellence sa teacher education, so that included De La Salle University, PNU, FEU, University of Asia and the Pacific, UST, Ateneo de Zamboanga. Gumawa kami ng program called curriculum quality audit, we train centers of excellence on how to align their pre-service teacher education curriculum with the professional standards for teachers. Kasi pag naka-align po yung curriculum nila, talagang yung magiging training nung mga bata eh based on PPST. Available naman yung program namin na yun, hindi lang po namin kayang mag-train ng ibang COEs but the 33 centers of excellence that we have trained can train other universities that are interested to know the process of curriculum quality audit. Si Dr. Jenny Jocson ang project leader.

Dr. Hidalgo: I think what's important at this stage is that we now have professional standards as a guide at whichever point we begin, whether for teacher training institutions, induction training program, HRD program, or pre-service training or in-service training.

Dr. Rosario Alonzo: Mine is not a question but a comment. Here we can see the beauty of combining the competence and talents of people from business and from education for the good of our country. This is how far we can go if we combine our human resources.

Fr. Inocencio: First my gratitude for the inputs, very simple, very clear, and very inspiring, and very directional. I think it will give support to

whatever we would like to do to improve the quality of education. Yesterday I was with the heads of state universities and colleges, they were the presidents, we had a meeting with COCOPEA. COCOPEA is the aggrupation of all private educational associations in the Philippines and we had a combined meeting. Our discussion was on universal access to tertiary quality education and the first question raised in that forum was, do we have a common understanding of what quality is? So this is a very basic question and since there are many ways that quality is understood by so many, what is the framework for defining quality, how do you base quality in terms of the elements that you want to see in a quality institution?

Dir. Gonong: Father, ang sagot ko lang po ay sa teacher quality, si Dir. Pantoja ang institutional quality. Sa amin po, when we define teacher quality currently, it's based on professional standards for teachers, with seven domains including content, knowledge, and pedagogies. The teacher should know what to teach and how to teach it, should be able to provide and to maintain a safe and secure learning environment, should be able to respond to learner diversity, should be able to plan for their lessons, should be able to use a variety of assessments, should know the learning of the children, should be able to engage professionally with others, and should be able to link with the community to achieve various educational needs. So that framework of teacher quality of course is embedded in career stages, we're looking at teacher quality growing from beginning teacher to proficient teacher to highly proficient teacher to distinguished teacher. And to complete the loop of teacher quality it should start with pre-service teacher quality linking with in-service teacher quality. So ganun lang kasimple yung definition namin ng teacher quality. Si Ma'am Malu ang institutional quality.

Dir Pantoja: Ganun din po yung sagot ko. How do you say that these employees are quality employees, it may not be teachers alone, ano yung definition ng quality accountant, quality lawyer, quality HR, ganun din yung sagot ko kamukha nung sagot ni Dir. Gonong na the individual should match the standards per stage of their career, so teacher 1 and 2, first three years of the teacher, is this teacher already manifesting the

competencies of a beginning teacher? Siempre yung highest quality yung distinguished na siya, nag ko-contribute na siya sa society and things like that. But you really cannot evolve a quality practitioner without measuring that person versus competencies at every stage of the development of this person. My mantra is use competencies. We have to set standards, we have to set measurements. I am a proponent of the saying that what gets measured gets done. So yun po, to evolve quality teachers, the measurement should be the professional standards or the competencies.

Mr. Jason Maniacop: I'm from Cavite State University. I'll be focusing on the pre-service teachers because I heard that you are targeting centers of excellence to train the curriculum developers. Since this is now the first year of the implementation of the new curriculum for all programs, my question is how is it aligned with the new curriculum for the new teachers' education program? If you consider this PPST in the development in the curriculum of CHED I don't think that we need to talk about, for example, the entry of teachers in DepEd because if you are a graduate of education with the PPST or the NCBTS as the basis of the curriculum, there would be no problem in alignment. My belief is that once you pass the licensure examination particularly LET it means that you possess the competency of a teacher. That's how I look at it.

Dir. Gonong: That's a very difficult question; can I give you a private answer later on? This is the public answer: the PSGs are set to be aligned with the PPST and you find that in the CHED document, so we hope that indeed CHED PSGs are aligned with the PPST, but if they're not then universities will have to make sure that they can do the mapping themselves. If you follow the PPST there's no problem because you have 21st century indicators there, you have research-based indicators, and if PSG claims that it is aligned with the PPST then universities are safe to align their curriculum with the PPST. Ok we'll talk later.

Ms. Leah Salvaleon: As a member of the FUSE training team, we go out to schools and then conduct training and we see to it that we consider everything, we give exams, we assess them, and we expect trainees to demonstrate pedagogical content, knowledge. Pero may mga master

teacher doon, sa content assessment namin, halos ma-zero sila sa test. Pwede kayang magkaroon ng possibility na yung pinapagawa namin sa mga trainees namin at saka assessment namin become part of the portfolio that becomes part of their evaluation? So ang tanong ko is, ano kaya yung arrangement ng FUSE at saka DepEd para yung aming mga evaluation sa mga trainees namin becomes part of their portfolio and used in their advancement?

Dir. Pantoja: Let me answer it this way, ma'am, pag-aaralan po natin yan kasi hindi namin alam yung content nung test ninyo. Perhaps we can take a look at it and if we can embed it, we will do that, so hindi po ako makakasagot definitively. I have to talk to NEAP. I have another perspective na lahat po ng service providers who are approaching DepEd eh kailangan malaman yung professional standards for teachers so that you can align your programs. We should admit that when we capacitate NEAP heavily today to roll this out in all the regions and divisions we cannot do that alone. We have to allow other service providers to come in but siguro yung criterion now is that the learning service providers should be grounded on the professional standards so that again we talk the same language. Mahirap kasi na nag-PPST kami sa DepEd tapos yung training providers eh iba yung tinuturo, malilito po yung teachers natin. So when I was in NEAP when I handled NEAP for two years, that was in my agenda, to gather all the relevant training providers and ground them on the direction of DepEd and the kind of training program that our teachers need. So we will sit down with NEAP to also look into this. Kailangan po isisigaw mo ulit, yung isang standard lang sa buong Pilipinas, kahit nasa DepEd ka, kahit nasa private school ka, nasa pre-service ka, learning service provider, isang standard lang po ang titignan natin. Ok po ba yun?

Dr. Hidalgo: If I may add to that. I don't know about specific requirements of NEAP at this point, but if you attend a training in any discipline, make sure that the one giving the training is a training provider accredited by PRC.

Fr. Inocencio: Maybe one very particular issue when we talk about quality is the role of the vision and mission of the school, which the accrediting

agencies will always use as a basis for evaluating the school or the institution. The vision and mission, because they can characterize the quality of teachers also. For example, when we talk about teachers in Don Bosco Schools we have a particular profile of teachers, they should manifest those characteristics which are very much in the vision-mission of the school. So how do you incorporate that as another dimension of evaluating the quality teacher with the particular strand on the vision and mission of the school?

Dir. Pantoja: Let me talk in the context of DepEd because I cannot speak for the private schools. One shock that I experienced when I entered DepEd and started visiting schools was each one had their own vision and mission. So I went to Br. Armin and USec Lito: how come we have a thousand and one vision-mission statements? So that was immediately corrected. Br. Armin, together with his executive committee, came up with one vision and mission for DepEd and this has been the anchor of all our initiatives. If you notice I started my presentation by anchoring the professional standards with the vision and mission of DepEd and the vision of Secretary Briones and picking on one of her strategic priorities. So in DepEd we are moving towards talking the same language because we only have one vision and mission. So the vision and mission should be the anchor of everything that we do; whenever we have a question or a doubt in our decisions, we refer back to the vision and mission of the agency. In DepEd we're working towards enhancing the school-based management system, we are enhancing school improvement plan and embedded in that school improvement plan is the AIP. Now what we did is to align the school improvement plan because it carries also the KRAs and objectives that the school will implement with the Results-based Performance Management System and since, as I was mentioning a while ago, the results-based performance management system carries the professional standards for teachers, it goes without saying the SBM (school-based management) and the SIP will carry the professional standards also so kahit na saan ka bumaling sa DepEd, professional standards ang makikita mo ngayon, this is the ultimate dream. We are not yet there but we have taken small steps, very relevant steps at this time to work towards producing not only quality teachers but whole and effective

schools. So the next project is to also align the professional competencies of principals and supervisors as education leaders managing the schools and leading teachers. We have to have very clear competencies for them so I hope next time you invite us again we'll be able to present the competencies for principals and supervisors. Next year pa po ito, and then we will move on to also align the competencies for superintendents and regional directors and central office directors so this is in the bag also. Tinitignan din po namin yung school; there is another unit, the school effectiveness division, looking after all the interventions inside the school. We are also receiving help from RCTQ in this direction.

Member: I'm so happy hearing Dir. Pantoja and Dir. Gonong talk about these professional standards. I believe as long as the teacher will have the passion and the commitment even if she was trained to be a music teacher she will be able to teach grade 1 learners to read and write -- 60 pupils at that, because of the love, because of the dedication of the teacher. I hope that we will really see a better output in our children with our teachers having been subjected to this PPST. Let us all be positive.

Dir. Pantoja: Spread the gospel of professional standards po. The best and the brightest talents that we have tinatapatan po namin ng mentors and coaches so as I stand here na-se-sense ko yung wisdom that is in this room. Sana mag-form tayo ng mentoring circles, coaching circles kasi nga we believe in this. Doon po sa development ng mga young people talagang kailangan ng mentors, yung mga millennials very bright sila, pero sumasabit dito sa EQ. Kailangan natin yung wisdom ninyo so I hope it can be the agenda of this group to form mentoring circles at saka coaching circles and we will see how we can invite you in DepEd one day to coach our principals, to coach our master teachers.

Dr. Hidalgo: With that, we close our session this morning. We'd like to thank our speakers for an excellent presentation.

Philippine Qualifications Framework

Dr. Reynaldo B. Vea

Chairperson, National Referencing Committee for the Philippines
President, Mapua University

(August 28, 2018)

Magandang umaga po sa inyong lahat. I'm glad to be speaking before FUSE on the topic of referencing the Philippine Qualifications Framework (PQF) to the ASEAN Qualifications Reference Framework (AQRF). Our committee is composed of Dr. Chito Calingo, the President of Holy Angels University; Dr. Maria Cynthia Rose Banzon Bautista, the VPAA of the UP System; Dr. Danila Lachica, president of the semi-conductor industry sectoral organization; former executive director of TESDA Irene Isaac; Dr. Paraluman Giron of the Professional Regulations Commission on the board of the licensure examination for teachers; Dr. Mellinda Garcia of the board of dentistry of PRC; Ms. Ana Maria Bongato of the business process outsourcing organization; and I chair the committee.

The context of why we're doing all this is because first there is a persistent critique of the mismatch between educational qualifications and the needs of industry and the economy. These comments are mostly coming from industry, saying that we're not producing the graduates that they need in terms of qualifications. Second, there is also the fragmented system of qualifications in the country; for example, we have not defined the pathways and the equivalencies in our system which an individual can navigate to get the qualifications that he wants or needs in the presence of regional economic communities like ASEAN. Third, there is the pressure of regional economic communities (e.g. ASEAN economic community) and issues of comparability for a significant number of skilled workers and professionals working in other countries. So there's this aspect about mobility: if we're able to agree as ASEAN on common standards for the qualifications then that makes it much easier for people to move around the various ASEAN member states.

So what is the Philippine Qualifications Framework? It is a quality assured -- and that is very important, the term is very important -- national system for the development, recognition, and award of qualifications based on standards of knowledge, skills, and values acquired in different ways and methods by learners and workers educated or trained in the Philippines. Note it does not exclude other means of education and training outside of classroom training; this is very inclusive.

One objective of the Philippine Qualifications Framework is the adoption of national standards and levels for the outcomes of education; it is an outcomes-based system. Most of the qualifications are couched in the language of outcomes-based education and training. Another objective is to support the development and maintenance of pathways and equivalencies. The third objective is to align domestic qualification standards with the international qualifications framework. These are the main objectives and PQF is meant to benefit individual persons, employers, education and training providers, government authorities and regulatory bodies, and the public at large.

For the individual, it encourages lifelong learning, allowing the person to start at the level that suits them and then build-up their qualifications as their needs and interests develop and change over time. So ideally that should happen; he can start with a technician level, for example, he can go to technologist level and then over time plot his way to become a professional engineer. And there are other such levels, for example in dentistry, she can maneuver or negotiate the path towards becoming a fullfledged professional dentist. Therefore, the individual can accumulate certificates and licenses that may be part of the qualifications registered under the PQF.

For the employers it assures that the standards and qualifications are consistent with job requirements and demands, so we all just refer to a register of qualifications. Let's say it's level NC III, a certain type of qualification; you will know exactly what competencies the individual will

have if she presents an NC III certification on that particular competency. So the employer is assured of the standards and it provides a common understanding of standards, qualifications, and levels.

For education and training providers, it ensures transparency in training provision, conformance to standards, and preciseness of accountability for learning outcomes. It catalyzes reforms towards quality programs, and it provides a common understanding of policies and guidelines on credit transfers, articulation, portability, bridges pathways, and recognition of prior learning.

For the authorities, it provides the standards, taxonomy, and typology of qualifications as bases for granting approvals to providers and stakeholders, and it harmonizes qualifications in education and training across the Philippines. In other words we'll all be talking the same language, we'll all be referring to the same thing, understanding the same thing, and we'll harmonize the fragmented system of qualifications that we have right now.

For the public, it provides a change in the mindset that undermines technical education because technical education becomes part of the entire system and there are pathways and equivalencies which a person can negotiate.

So what are qualifications? These are all formal 'awards' which signify that the bearers have some knowledge or competencies, or have successfully completed some learning program. Qualifications are translated into statements of learning outcomes and associated requirements for awards. This statement of learning outcomes is very important for us because imagine if you're trying to determine equivalency between the Malaysian and the Philippine framework, how will you do that? Comparison of outcomes will be the simplest way to do that, but of course just the statement of outcomes is not sufficient. There has to be trust by Malaysia that the Philippine system indeed leads to such outcomes and also on our part we trust that the Malaysian system leads to

the attainment of outcomes by their system of education and training. But you start with the statement of outcomes.

Actually we've been at it for quite sometime. And TVET or TESDA is the most articulated system. Here is the timeline of the origin and development of the PQF:

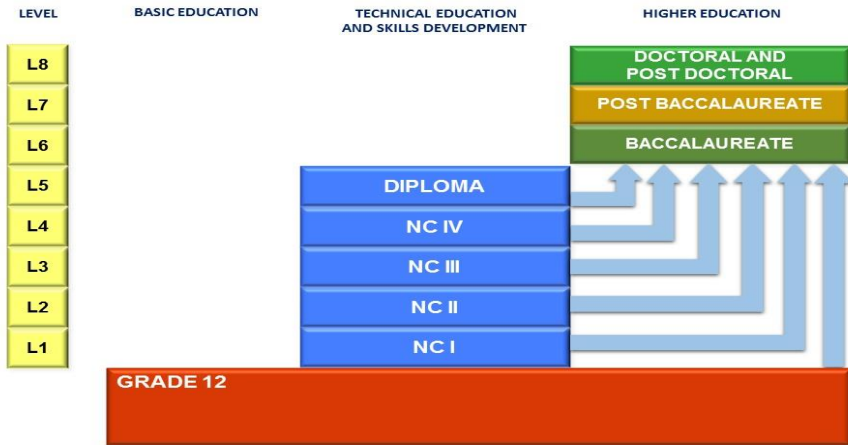
PQF: Origin and Development



Until this year we were lacking something, we didn't actually have a law that says that this will be the Philippine Qualifications Framework. Now that we have it, our system is much stronger and more acceptable to other countries. So it's a national policy. Levels of education standards are defined, outcomes are defined; it's competency-based, it's labor market-driven, it's assessment-based qualification recognition. So this is the framework:

as per PQF-NCC Resolution No. 2014-03 adopted on December 11, 2014

THE PHL QUALIFICATIONS FRAMEWORK



We have eight levels; many countries have eight levels but some don't; for example New Zealand has nine, I think Australia also has nine; in our case, we have eight. Level 1 is equivalent to National Certificate I, then NC II, NC III, NC IV and then we have a diploma at level 5. Level 6 will be baccalaureate; level 7 will be post-baccalaureate so we'll have a master's degree there and maybe even a diploma program, pareho ang tawag natin leading to some confusion. You have 18 units beyond the baccalaureate, so diploma program, which is not the case for other countries, so we have to explain that to them. And then level 8 is doctoral and post-doctoral. Now, I have to say there are some issues related to this diagram, for example, you may want to question why grade 12 is at the bottom of the diagram with a straight line towards baccalaureate. If you take a look at the website of DepEd, you will see that they have courses in senior high school that lead to the attainment of NC I, NC II, and NC III so now, it's not just TESDA that will be offering this but there are elements in senior high school that can give NC I, NC II, NC III. I think even before grade 11 there could be courses that will lead to NC I. I don't know if they have changed that; it's my personal view that this has to be revamped somewhat to reflect what we have but that is easier said than done. There are agencies involved, DepEd and TESDA, and they really have to resolve this at the level of the National Coordinating Council of the PQF.

But this framework is what we have officially at the moment, and we just submitted the report yesterday afternoon to our international consultant in Australia. We in the referencing committee want to make some changes in this, but unless it is changed through official processes, we have to stay with this, so this is how it is as of now.

We define the levels in three domains -- knowledge, skills, and values; application; and degree of independence. So let me just go through this. For example, baccalaureate degree, the descriptor for knowledge, skills, and values is that the graduate must demonstrate broad and coherent knowledge and skills in their field of study for professional work and lifelong learning -- as short as that, that's the descriptor. For application, the individual must be able to apply the knowledge, skills, and values in professional/creative work or research in a specialized field of discipline. For degree of independence, the individual must show substantial degree of independence, individually or in teams of related fields with minimal supervision. From all these descriptors, for example in CHED, the CHED administrative order number 1 gave guidance to the technical panels on how they were going to write the new outcomes-based Policies, Standards, and Guidelines (PSGs), and among the requirements is that it must incorporate the descriptors of PQF level 6. That's what they proceeded to do, so yung pagsusulat ng outcomes, nailalagay ba itong mga items na ito, in the statement of the desired outcomes of the various degree programs covered by the different CMOs of CHED. So on the ground that is how it works and you have to demonstrate that that is the case.

Sa ASEAN level naman, we have to demonstrate first of all that our level 6 is equivalent to the level 6 of Malaysia, probably to the level 7 of New Zealand because of these descriptors, that's all we have to go by, these descriptors so that in essence, the baccalaureate degree here becomes comparable to the bachelor's degree of New Zealand. So all the levels have their descriptors. The slides below show all the descriptors from Grade 12 to Level 8.

PQF Descriptor

LEVEL	GRADE 12
KNOWLEDGE, SKILLS AND VALUES	<ul style="list-style-type: none"> • Possess functional knowledge across a range of learning areas and technical skills in chosen career tracks with advanced competencies in communication; scientific, critical and creative thinking; and the use of technologies. • Have an understanding of right and wrong; one's history and cultural heritage; and deep respect for self, others and their culture, and the environment.
APPLICATION	<ul style="list-style-type: none"> • Apply functional knowledge, technical skills and values in academic and real-life situations through sound reasoning, informed decision-making, and the judicious use of resources.
DEGREE OF INDEPENDENCE	<ul style="list-style-type: none"> • Apply skills in varied situations with minimal supervision

PQF Descriptors

LEVEL	1
KNOWLEDGE, SKILLS AND VALUES	Knowledge and skills that are manual or concrete or practical and/or operational in focus.
APPLICATION	Applied in activities that are set in a limited range of highly familiar and predictable contexts; involve straightforward, routine issues which are addressed by following set rules, guidelines or procedures.
DEGREE OF INDEPENDENCE	In conditions where there is very close support, guidance or supervision; minimum judgment or discretion is needed.
QUALIFICATION TYPE	NATIONAL CERTIFICATE I

PQF Descriptors

LEVEL	2
KNOWLEDGE, SKILLS AND VALUES	Knowledge and skills that are manual, practical and/or operational in focus with a variety of options.
APPLICATION	Applied in activities that are set in a range of familiar and predictable contexts; involve routine issues which are identified and addressed by selecting from and following a number of set rules, guidelines or procedures.
DEGREE OF INDEPENDENCE	In conditions where there is substantial support, guidance or supervision; limited judgment or discretion is needed.
QUALIFICATION TYPE	NATIONAL CERTIFICATE II

PQF Descriptors

LEVEL	3
KNOWLEDGE, SKILLS AND VALUES	<p>Knowledge and skills that are a balance of theoretical and/or technical and practical.</p> <p>Work involves understanding the work process, contributing to problem solving, and making decisions to determine the process, equipment and materials to be used.</p>
APPLICATION	Applied in activities that are set in contexts with some unfamiliar or unpredictable aspects; involve routine and non-routine issues which are identified and addressed by interpreting and/or applying established guidelines or procedures with some variations.
DEGREE OF INDEPENDENCE	Application at this level may involve individual responsibility or autonomy, and/or may involve some responsibility for others. Participation in teams including team or group coordination may be involved.
QUALIFICATION TYPE	NATIONAL CERTIFICATE III

PQF Descriptors

LEVEL	4
KNOWLEDGE, SKILLS AND VALUES	Knowledge and skills that are mainly theoretical and/or abstract with significant depth in one or more areas; contributing to technical solutions of a non-routine or contingency nature; evaluation and analysis of current practices and the development of new criteria and procedures.
APPLICATION	Applied in activities that are set in range of contexts, most of which involve a number of unfamiliar and/or unpredictable aspects; involve largely non-routine issues which are addressed using guidelines or procedures which require interpretation and/or adaptation.
DEGREE OF INDEPENDENCE	Work involves some leadership and guidance when organizing activities of self and others
QUALIFICATION TYPE	NATIONAL CERTIFICATE IV

PQF Descriptors

LEVEL	5
KNOWLEDGE, SKILLS AND VALUES	Knowledge and skills that are mainly theoretical and/or abstract with significant depth in some areas together with wide-ranging, specialized technical, creative and conceptual skills. Perform work activities demonstrating breadth, depth and complexity in the planning and initiation of alternative approaches to skills and knowledge applications across a broad range of technical and/or management requirements, evaluation and coordination.
APPLICATION	Applied in activities that are supervisory, complex and non-routine which require an extensive interpretation and/or adaptation/ innovation.
DEGREE OF INDEPENDENCE	In conditions where there is broad guidance and direction, where judgment is required in planning and selecting appropriate equipment, services and techniques for self and others. Undertake work involving participation in the development of strategic initiatives, as well as personal responsibility and autonomy in performing complex technical operations or organizing others
QUALIFICATION TYPE	DIPLOMA

PQF Descriptors

LEVEL	6 <i>(as per PQF-NCC Resolution No. 2014-01 adopted on 22 July 2014)</i>
KNOWLEDGE, SKILLS AND VALUES	Demonstrated broad and coherent knowledge and skills in their field of study for professional work and lifelong learning
APPLICATION	Application in professional/creative work or research in a specialized field of discipline and/or further study
DEGREE OF INDEPENDENCE	Substantial degree of independence and or/in teams of related fields with minimal supervision
QUALIFICATION TYPE	Baccalaureate Degree

PQF Descriptors

LEVEL	7 <i>(as per PQF-NCC Resolution No. 2014-01 adopted on 22 July 2014)</i>
KNOWLEDGE, SKILLS AND VALUES	Demonstrated advanced knowledge and skills in a specialized or multi-disciplinary field of study for professional practice, self-directed research and/or lifelong learning
APPLICATION	Applied in professional/creative work or research that requires self-direction and/or leadership in a specialized or multi-disciplinary professional work/research
DEGREE OF INDEPENDENCE	High substantial degree of independence that involves exercise of leadership and initiative individual work or in teams of multi-disciplinary field
QUALIFICATION TYPE	Post-Baccalaureate Program

PQF Descriptors

LEVEL	8 <i>(as per PQF-NCC Resolution No. 2014-01 adopted on 22 July 2014)</i>
KNOWLEDGE, SKILLS AND VALUES	Demonstrated highly advanced systematic knowledge and skills in highly specialized and/or complex multi-disciplinary field of learning for complex research and/or professional practice and/or for the advancement of learning.
APPLICATION	Applied for professional leadership for innovation, research and/or development management in highly specialized or multi-disciplinary field
DEGREE OF INDEPENDENCE	Full independence in individual work and/or in teams of multi-disciplinary and more complex setting that demands leadership for research and creativity for strategic value added. Significant level of expertise-based autonomy and accountability
QUALIFICATION TYPE	Doctoral Degree and Post-Doctoral Programs

In terms of governance, the law establishes a national coordinating council with a technical secretariat, this is right now led by TESDA. We have Ms. Imee Taganas of TESDA, who is at the helm of the secretariat, together with the OPST of CHED, they work together and some PRC personnel. And then there are the PQF working groups under the NCC and the members of the NCC represent all these agencies and sectors, DepEd, TESDA, CHED, PRC, DOLE, and a representative from the economic sector and a representative from the industry sector who I understand still have to be appointed. There are five working groups: for the qualifications register, TESDA is in charge of this; pathways and equivalencies, CHED; quality assurance, CHED; information and guidelines, DepEd; international alignment PRC; so ito yung mga working groups ng Council.

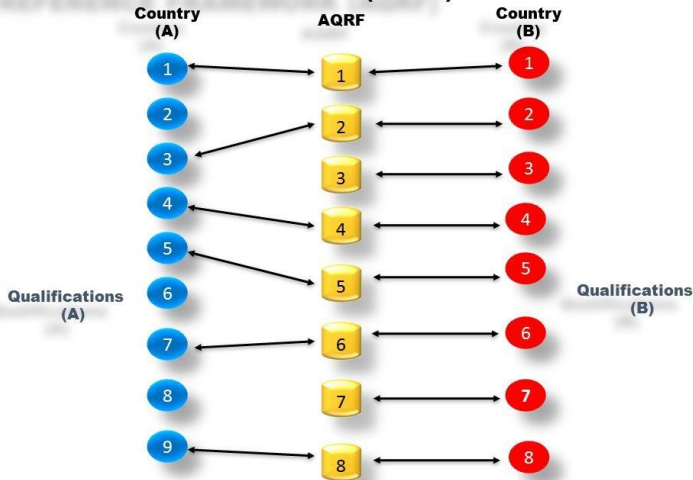
And then we're now in the process of referencing the PQF to the AQRF. As you can imagine this is a tough job for ASEAN; for ourselves it's been a tough job because we have to come up with the report to submit to them. For example when we wrote the part for quality assurance, this was written by Dr. Chito Calingo, of course all of us helped write it, but we

had to describe the quality assurance system for DepEd, for TESDA, and for CHED, and we tried to see the universe of the quality assurance system in the Philippines. So, if anything, this document will be a good reference if you want to understand how we quality-assure our qualifications.

We've been concerned about this because we do things differently here in the Philippines. Unang-una, malaki ang role ng private sector and sometimes the other countries don't understand what we are trying to do. And there are so many accreditation bodies, PACUCOA, PAASCU, ACSC-AAI, AACCUP, PICAB, PTC. When I entered Mapua, this was all new to me so I jokingly told PACUCOA, if I can tell you what all these acronyms stand for, can you accredit us already? We have to explain everything in clear terms because other countries will read the report. We have to assume zero knowledge on their part, the same way when we read about Malaysian and Singapore frameworks, they're so different from ours. And you have to keep an open mind and see that there are different ways of doing things to the same effect. So yun yun. The only thing is that they are comfortable that our quality assurance system actually quality assures the qualifications, yun ang pinaka importante na maintindihan nila, and we have to do that.

So this is the way it works, and this is the framework. It has this AQRF; the ASEAN Qualifications Reference Framework has eight levels and for each of these levels there are descriptors and that is all we have to go by. Now Country A says oh my level 1 is equivalent to the level 1 of AQRF, my level 3 is equivalent to level 2 and so on. And then Country B will also try to see how they can match your levels of the AQRF so the principle is much like the transitivity property in Algebra: if $A=B$ and $B=C$ then $A=C$ so yun lang ang concept dito. So that's how the referencing basically works, it's a common regional reference as a device to enable comparisons and addresses the education and training sectors. And a wide objective is actually the promotion of lifelong learning, how one navigates through the system of qualifications.

ASEAN QUALIFICATIONS REFERENCE FRAMEWORK (AQRF)



Ok, it's a translation device. Later on, they're thinking that if it's possible to do this in ASEAN then we can link to the national qualification frameworks outside of ASEAN. Even as this referencing process is being done, Malaysia already completed the comparison of its baccalaureate degrees with those of New Zealand and we're doing this right now also with New Zealand. Ideally pag naka-reference na lahat sa ASEAN then all these countries, New Zealand, Australia, and the Europeans can reference themselves to the AQRF and that will cover all ASEAN member states. In fact they have a unified framework where Europe already has EQF, the European Qualifications Framework.

It's an autonomous national process. They want us to be as independent as possible, they don't even give guidance about how we are going to do it, walang straight jacket, we find our own way to reference to the AQRF. So it will vary from country to country, how we create a link between the NQF, the national qualifications framework, and AQRF will vary from

country to country, and to respect national traditions there can be no single way to reference to the AQRF. For example how will you do this if you want to link level 1 of PQF to level 1 of the AQRF? Actually we have to do this per qualification so nandito yung outcomes nung qualification, level 1, tapos by some means i-co-compare mo yun dun sa AQRF yung mga descriptor niyan, you have to break it down into its elements and see where there is a link between the outcomes of the qualification and those of ASEAN based on the descriptor. Tapos i-co-compare din yung qualification na ito yung outcomes with the outcomes as you can derive them from the Philippine Qualifications Framework, so masasabi mo na this qualification is both level 1 AQRF, level 1 PQF, then if you can get enough examples of that, qualification by qualification, you may say that, well, based on this analysis by qualification then we submit that AQRF level 1 is the same as our PQF level 1. We try to support that by some means, by some argument, by some logic that the AQRF level 1 descriptors are equivalent to PQF level 1 descriptors. But sometimes it's not straightforward.

Ang damping matrices na gagawin, you can just imagine there are around 230 qualifications under TESDA, and CHED has 130 plus I think, bachelor's degrees na merong PSG (Policies, Standards, and Guidelines) and there are more bachelor's degrees without PSG, umaabot ng a little over 200 plus and you have to deal with all these qualifications. Of course it helps that these are managed by different government entities and you have people who can look into the nitty-gritty of everything. That is the magnitude of the task in just trying to link ASEAN level vs. Philippine level and that is what we are doing. That is the way by which we have decided to do it. I'm not with the group that goes to ASEAN but I've read the Malaysian framework and they do it a little bit differently. So that is actually the meat of the report, yung matching, how you show the link between the levels of ASEAN and the Philippines, that is the gist of the report.

The referencing process aims to link the levels on the national qualifications system to those in the AQRF in a consistent, trusted, and

transparent way. Trusted and transparent -- we really have to do all of this in good faith. You show how you did it and you have to consult the stakeholders, saying that in the Philippines we have held two consultations already and we will hold another one shortly.

The referencing process involves setting up appropriate committees at the national level, making a defensible proposal that links the levels, consulting national stakeholder groups, writing a referencing report, and then presenting it to the AQRF committee. We are on version 7 of our report already and we've held two consultative conferences, one in February and the last one in June, and we need an international expert to go over this. They want us to have an international expert, ang gusto nila ay parang comfort for the other countries na may ibang tumingin, and they also want an observer from ASEAN to join the next consultation that we're going to have. At the regional level, there's a national AQRF committee and there's an ASEAN-wide committee that goes over all the reports of the member states and it goes to the ministerial bodies and so on. Later on I guess when all member states have referencing -- I don't know what document they will come up with -- but it should state that the referencing process has been successfully conducted among ASEAN member states and the equivalences have been established.

Our report actually consists of a description of 11 criteria. In **Criterion 1**, the structure of the education and training system is described. In **Criterion 2**, the responsibilities and legal basis of all relevant national bodies involved in the referencing process are clearly determined and published by the main public authority responsible for the referencing process. Even though I'm not a lawyer I did this part, anyway I can read laws, so I just know this is the PQF law, this is the CHED law, this is the TESDA law and so on. We just had to show that we had a legal basis for this part of the referencing process, then we had the lawyer to take a look at it. In **Criterion 3**, the procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualifications system are transparent, and dito there's a newly established Philippine qualifications register and there's a registrar for this, so when CHED for example comes up with the

new PSG on some discipline they have to give that to the registrar of its qualifications register for it to be entered into the registry. Therefore, yung nasa registry lang, yun yung maaring i-recognize na at the ASEAN level. When TESDA comes up with a new training regulation for one of its qualifications they have to put it into the register as well, ganun din yung PRC. When you have the table of specifications or qualifications then you have to submit that to the register so we have one single unified register of qualifications in the Philippines. Bagong bago yan na na-establish. In **Criterion 4**, there is a clear and demonstrable link between the qualifications levels in the national qualifications framework or system and the level descriptors of the AQRF. This is what we have just discussed. In **Criterion 5**, the basis in agreed standards of the national framework or qualifications system and its qualifications is described.

In **Criterion 6**, the national quality assurance systems for education and training referring to the national qualifications framework or system are described. All of the bodies responsible for quality assurance state their unequivocal support for the referencing outcome. We had a consultation on criterion 6 alone because we thought that they might have questions about it. When we sent the framework sabi namin what we are writing is what is and not what should be; a lot of people have ideas about what should be and we are not after that. ASEAN will not accept what should be; they will accept what is, so pag dinescribe mo lang what is, then walang masyadong controversy dun because we all know what is, with all the problems, with all the issues, but regardless this is what is existing at the moment. And we took note also of all the comments about what should happen to our quality assurance system; there are a lot of good comments but that is not for this time, that is for the near future. In **Criterion 7**, the process of referencing has been devised by the main public authority and has been endorsed by the main stakeholders in the qualifications system. They appointed us to the reference committee and this has been endorsed by the main stakeholders in the qualifications system, there should be an endorsement by the end of all this. In **Criterion 8**, people from other countries who are experienced in the field of qualifications are involved in the referencing process and its reporting. In **Criterion 9**, one

comprehensive report, setting out the referencing and the evidence supporting it, shall be published by the competent national bodies and shall address separately and in order each of the referencing criteria. In **Criterion 10**, the outcome of referencing is published by the ASEAN Secretariat and by the main national public body. In **Criterion 11**, following the referencing process all certification and awarding bodies are encouraged to indicate a clear reference to the appropriate AQRF level on new qualification certificates, diplomas issued.

Actually maganda, you can show that to companies, Singapore, Malaysia, etc. We try to list down all the stakeholders here, broad categories, one is those who award qualifications and the other one is those who use the qualifications, meaning the employers and the students. They use the qualifications. Those that award of course, CHED, the universities, the colleges, the TESDA training centers, and so on. They're quite particular about this, to list down government ministries, education experts, social partners, employers, trade unions, professional bodies, licensing bodies, those awarding qualifications, those responsible for qualifications permission, government bodies responsible for qualifications, NGOs including volunteering organizations, charities, education and training, funding agencies, qualifications agencies, quality assurance agencies, research community, especially international experts and technical consultants.

We tried to invite everybody but not everybody came to our consultation, so what we showed are those who were invited and those who attended and I hope in the next one we really have a large assembly of people to take a look at the report. So the status of the AQRF, we are trying to do this together with Indonesia, Malaysia, and Thailand, so sabay-sabay na nag-reference. We started in May 2018 for criterion 1 to 6, just a few months ago, and we're going for criterion 7 to 11 in the coming months.

That is a description of what we have done and what we still have to do. Thank you very much.

Ms. Mildred Jimenez: Thank you for sharing with us valuable information and insights, Dr. Veal. Now we open the floor for a few questions.

Member: I'm Dr. Teresita Barcelo, the Dean of the graduate school of Centro Escolar University. You mentioned that many were invited to attend the consultations but few came. Was this a public invitation and when is the next one because I'm quite interested to attend such conferences?

Dr. Veal: Ok, it's not really public but we invite organizations, we do it through the various organizations but maybe it's a good idea to open it up to individuals who may be interested. I don't know how it can hurt the process, maybe it will add value to the process. If you want to attend I'll suggest to the committee to open it up to individuals that may be interested to attend. You know, we want to be transparent and we have to gain public support for it and, so yes that's what I'll do, I'll suggest to the committee that we open it up to more participants.

Dr. Barcelo: You mentioned something like you've written up the report; is this available now for public consumption?

Dr. Veal: No, not for dissemination yet but after it comes back from the consultant, September 2, she will already give us her feedback on that report, then that draft will be for public circulation because that will be the subject of the consultation and we'll give out copies.

Dr. Barcelo: Thank you, because I know that nursing for example is already in the mutual recognition agreement but when I Googled the website there was no update. I am teaching in this program, I'm interested in this. Thank you.

Dr. Fe Hidalgo: I'm vice president of this organization. I'm a bit concerned with what you mentioned about what is and what should be. Will there be a mechanism for recognizing what should be in the process, since change is more constant now.

Dr. Veal: Yes, but that will not be in this referencing process because what essentially the ASEAN member states will submit is the snapshot of the process as it is right now. What should be, it would be internal to us, the most that we can mention are things that are already on-going that will lead to a certain outcome. But if there's still a lot of debate about what should be, we cannot and I think we should not really include it there, because it will cloud the report from the point of view of the other ASEAN member states. Sa atin na lang yun kung may disagreements but I think that that should be another process, the debate on what should be, but not in this referencing process.

Dr. Hidalgo: Which means it doesn't stop any institution from effecting changes within their systems but it's not recognized.

Dr. Veal: Well I wouldn't know what the mechanism will be kasi if the AQRFC committee at the level of ASEAN says ok at this point in time, this is the output of the referencing process, but there's a certain dynamic still going on. I mean not only in the Philippines but in the other member states, then at some point in time maybe they want to take another look and see how things have evolved.

Fr. Onofre Inocencio, Jr.: I've been going around the country, trying to present this diagram of the PQF, and a lot of issues have been raised about it. I'm talking about TechVoc education and TechVoc education interfaces all levels, DepEd, TESDA, and CHED and these interfaces have brought a lot of questions. TESDA operates only after high school, as a post-secondary program, and now DepEd has taken in the aspect that TESDA has been in charge of. In this transition there has been a lot of chaos in terms of how the programs are to be actualized, who will assess what, who will give the qualifications, and all of this. Even now DepEd is in a panicky mode because they cannot produce the output that they are supposed to, based on industry standards and acceptability. We need to ask CHED, DepEd, TESDA, industry, the agencies responsible to put some kind of alignment to all the directions in the educational landscape.

Now we are encountering a lot of problems with technical vocational schools because there are no more students, they're getting fewer and fewer, because now they go to the public school. But then when they graduate from high school they are not accepted by industry because they don't have the right qualifications needed as trained by the TechVoc schools. Unless the coordinating council as envisioned here sits down and puts their hands and heads together and provides direction, the chaos will continue.

Dr. Veal: Yes, Father, we'll wait for your comments. As you said, the national coordinating council, which is composed of the secretaries, could really be the one to resolve this with some finality. But we'd like to be able to help in the process of clarifying this although we don't have the authority to really solve the problem but we can convey these concerns to the NCC.

Member: I'm Maribeth Bernardino, the director of an international school. I can understand the problem of choosing between what is and what should be, between being realistic and being idealistic. But the instructions are to describe what is, not what should be. I think we have to be honest in saying what our education system is even as we are trying our best to meet a global standard, to be at par with ASEAN and eventually the world.

Dr. Veal: Yesterday I got an email about the submission that we're going to make and it involved that diagram. They were saying, shouldn't we already modify it a bit? I said no, because it will conceivably lead to an embarrassing or awkward situation, because we have to present what is our official diagram as of now, and let the expert tell us any recommendation that she will have regarding this diagram. If it looks reasonable then maybe we can even use that to have a change in the diagram so yun yun. In reporting we are really restricted to that right now but it does not prevent us from pushing for some changes that we want.

Member: I'm Sotero Malayao, Jr. of Mindanao State University. DepEd has opened a lot of senior high schools but we have to worry about the

qualifications of teachers. In some regions, ang daming HEIs which provide proper training, but there are regions with only a few such HEIs.

To be specific, in Mindanao, region 10 and Davao have many HEIs but other areas parang blank yun. And HEIs right now are also revising their curriculum but these HEIs are making revisions without national guidelines, dapat naka anchor doon.

Dr. Veal: Well, yung sa CHED naman, all the PSGs will be entered as part of the register. I think the PSGs were a bit late in coming and that added to the problem. I don't know how many more they have to issue out, in the format of a CMO, but all this year it should be informed already about the PQF because that was in the administrative order that guided the technical panels in writing these PSGs.

Ms. Jimenez: Dr. Veal has to attend to a very important matter and has to leave. Let us all give him a round of applause.

Fr. Inocencio: We were honored today to have Dr. Veal in spite of the hectic schedule that he has. I think this input to the assembly is very, very important, very critical at the moment as we are trying to develop this PQF. I am sure this will not be the last time he will talk to FUSE

Quality in Education: Concepts, Contexts, and Contentions

Mr. Karol Mark Yee

Research Fellow, University of the Philippines
Center for Integrative and Development Studies Program

(October 30, 2018)

Good morning, everyone. Thank you for joining us in this discussion. The topic that they gave me is Quality in Education: Concepts, Contexts, and Contentions. But before we begin with the discussion, I just want to say why I am really here. It's primarily because I know that FUSE is very close to Sen. Angara's heart. He was the reason why I got into education policy to begin with, because of the opportunity to work with Sen. Angara, I went into education policy, higher education, and teacher education in particular.

The second reason why I'm here is Dr. Rola. Tita Dan, our national treasure, as Sen. Angara called her 10 years ago, was really my mentor alongside Sen. Angara and without both of them I could not have stayed in educational policy nor could I have found my way here. And of course Fr. Jun and Dr. Fe. Dr. Fe whenever I see her, would say, Mark, the FUSE General Assembly is last Tuesday of the month. So I'm here because of these people who, as the prayer said, mentored, taught, and helped others to be able to find their own way and be able to contribute to the sector. As we continue the discussion, that will be the recurring theme, how we need to build a critical mass of people, of champions, who will work with us on these reforms because the task is too massive to take on just by ourselves. We are still very few, the people here and the small world of education in the Philippines, to really succeed in overcoming the challenges that we still face.

Let me begin the discussion but I'd like to reorder the title. Instead of discussing concepts, contexts, and contentions, I will discuss contexts first and move on to concepts and then finish with contentions. But I also want to say that when you speak of concepts, contexts, and contentions, they are not in a vacuum, we are not saying that we want to understand concepts

just so. We are not here to understand what concepts are only to find out where we are. When we speak of contentions there's a reason why there are contentions -- because we have aspirations, we have something in mind, we have a vision, and so I feel that these three are predicated on the collective aspirations that we have for Philippine education.

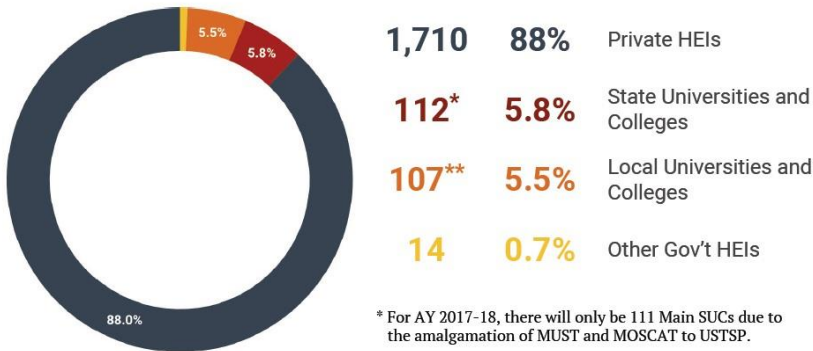
And I propose three for this morning's discussion -- what are these collective aspirations? I hope you will agree with me. The first is inclusivity. How inclusive is the Philippine higher education system in its ability to expand access to tertiary education regardless of socio-economic background. Is it able to provide opportunity for those who can? Second, what is the quality of education that our students have access to? And third -- in particular because teacher education is the profession or discipline that impacts the entire sector, the entire continuum from early years all the way to basic ed, all the way to higher ed -- what is the quality of the preservice education that exists today and of teacher education in general?

Because my experience in the past few years has been with the Commission on Higher Education, our discussion this morning will be on higher education mostly. And I believe that this aspiration is encapsulated in RA 7722, from 1994, which I'm sure Tita Dan remembers. The declaration of policy says, the state shall protect, foster, and promote the right of all citizens to affordable quality education at all levels and shall take appropriate steps to ensure that education shall be accessible to all. So given this anchor, given this aspiration, what is our context, what are the concepts we want to discuss, and what are our contentions especially as we move forward?

Here is the higher education landscape as of academic year 2016-2017.

THE PHILIPPINE HIGHER EDUCATION LANDSCAPE

There are 1,943 higher education institutions (AY 2016 - 2017)



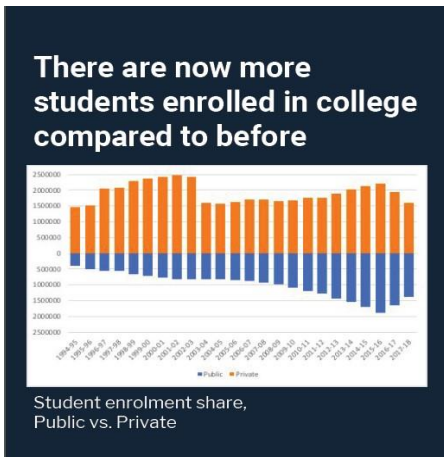
* For AY 2017-18, there will only be 111 Main SUCs due to the amalgamation of MUST and MOSCAT to USTSP.

** Out of 107, 18 are now CHED-recognized (As of 31 August 2017)

We have 1,943 higher education institutions in the country, excluding satellite campuses, and this includes 88% private-higher education institutions. This is not very different from the context in 1994, when EdCom was happening. And then you have 112 state universities, 107 local universities and colleges, and I'm not sure if you have observed this, but yung number ng LUCs po natin parami ng parami. In 2016 it was 107, I believe now it is 113, so every year you add and this is bound to increase because of free tuition. Why is that? Because before, local universities and colleges, by virtue of the local government code, by ordinance, could put up a tertiary education institution and they had to sustain operations from the funding from their LGU and then maybe ask some tuition from students. But because of free tuition which states that if you are a CHED-recognized LUC, free tuition ka na, the national government will pay for the tuition of students enrolled in LUCs. What are its implications? If I were an LGU, I just put up the building, I get some faculty and then get students in, and the national government will end up paying for everything else. So the number of LUCs is bound to increase.

Those of you who work in private schools nararamdaman nyo na ito because when we talk to some private schools they tell us, our problem now is no longer that our faculty members are transferring from us to SUCs, it's actually now from us to LUCs. But later on we will also reflect what their role is in this space. If you have state universities and LUCs, if you have private HEIs, how are their mandates and rules different and how do they complement one another in the higher education sector of the Philippines?

From 1994 until today there are now more students enrolled in college compared to before. In 1994 1.9 million students were in college. As of 2014 -- and we got 2014 because this is before free tuition was implemented -- 3.8 million na po yung nag-aaral ng college. However, private higher education share has declined significantly. Back in 1994 80% of all students were enrolled in private HEIs, today it is only 56%. But I also wanted to show you this.



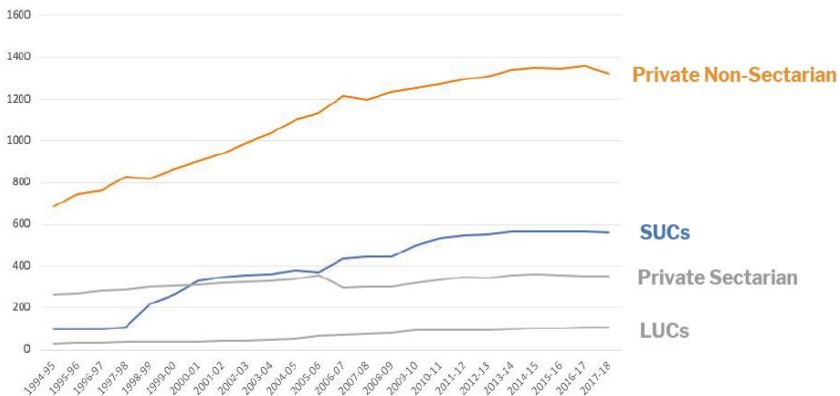
- From a total of **1.9 million students** in 1994, there are now **3.8 million students** enrolled in college in 2014.
- **Private HEI share has declined significantly**, from **80%** (1.5 million) in 1994, to just **56%** (2.1 million) by 2014.

So the orange bars represent enrolment in private institutions, the blue bars represent enrolment in public institutions. Ok, so this is what happened. It is not that public HEIs stole or got students from private, what happened was the sector expanded in terms of its accessibility to students and

therefore if you look at this graph, for private it did not go down to the 1994 level, there are years that it would go higher and there are years it would go lower but more or less it did not go down to the 1994 level in terms of number of students served.

However for public HEIs, look at the expansion, and this is before free tuition, so imagine beginning this academic year, how this will look like. So we are in a crossroads. Where will we be later on, if five years from now we come together and look at these figures again? What will have happened? I guess the question to ourselves now given this, knowing how we will project participation in the next five years, what we should do about it pro-actively.

From 1994 to 2018, the **largest increases** are seen in the number of **Private Non-Sectarian HEIs** (from 866 to 1,348) and **SUCs** (from 266 to 565). Meanwhile, Private Sectarian HEIs increased by only 54.



You know, if you look at the number of HEIs from 1994 until 2018 the biggest jump is actually in private non-sectarian, and who are the private non-sectarian institutions? So before, of course you have the LUCs, you have the SUCs and SUCs honestly take a bit longer to be established

because it's by law, so may congressional approval pa yan, Senate, Congress, but private non-sectarian jumped almost double. In CHED po wala pang data on how to look at private non-sectarian in terms of profit - non-profit kasi you assume that private sectarian are mostly non-profit, private non-sectarian however are a combination of both profit and nonprofit institutions. We do not know yet today how many of these are for profit and if that is a phenomenon that we should try to understand better. We know that in the past few years a lot of universities and colleges have been bought out by companies or a lot of new schools have been put up by big companies also, so education is becoming a very interesting space even for business and we need to understand this phenomenon. In fact CHED even released a CMO a year ago on mergers and consolidations because it was already happening so often. So the increase is mostly private non-sectarian, and the question is what type of private nonsectarian and what are its implications on students in the quality of learning that they get. Once I find out I will come back and volunteer to speak here to let you know.

But where are the poorest? So we are expanding, double na po yung number ng college enrollment, double ang number ng private nonsectarian institutions, expansion, expansion, expansion from 1994 until today, but where are the poorest? Only 10% of those aged 17 to 24 are enrolled or graduated from college, compared to the richest counterpart at 72.3%. So the chances if you are poor vs. if you are rich are very different. The bigger problem for the poor is that half were not enrolled or were not able to complete high school, 50.4%, and therefore were unqualified to go to college. So if you look at those of the poorest who did not finish high school, many were unable to complete elementary, 34.2%, so their biggest problem was not that they could not enter college, it's that a lot of them got stuck at the elementary level and did not even finish.

For us if we reflect on the practice of teaching and the work of teachers on the ground in schools, when our students are unable to finish elementary,

Of the poorest who did not finish HS, many were unable to complete elementary (34.2%), compared to other quintiles.

Table 3. Breakdown of 17-24 years old not enrolled but did not finish HS by per capita income quintile
Source of basic data: PSA's APIS 2014

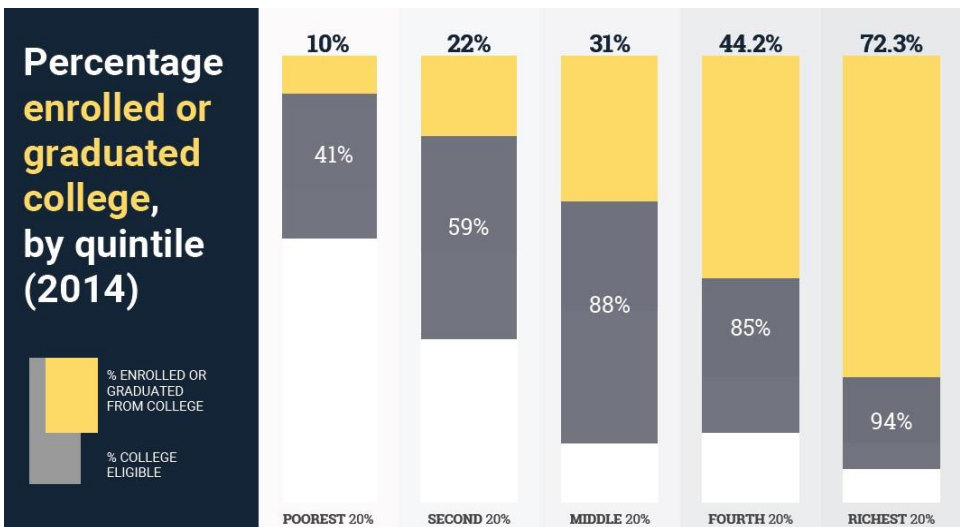
Per capita income quintile	Monthly Household Income Range	Did not finish Elementary	Finished Elementary, did not finish HS	Total	Total headcount
1 (Poorest)	0 – 9,800	34.2%	65.8%	100.0%	1,623,000
2	9,801 – 15,350	24.8%	75.2%	100.0%	1,149,000
3	15,351 – 24,000	21.7%	78.3%	100.0%	697,000
4	24,001 – 41,000	16.6%	83.4%	100.0%	408,000
5 (Richest)	41,001 and up	16.5%	83.5%	100.0%	93,000
Total		27.0%	73.0%	100.0%	3,970,000

what does it mean and what is the role of a teacher? Of course we are tired of hearing that there's this teacher factor, that everything is about the teacher, but I guess some things that we can ask ourselves is how are we teaching to the context, how are we really responding holistically to the needs of students beyond classroom teaching needs? This profile of students really needs much more intervention and support. Are our schools able to give them an environment conducive to learning, conducive to learning resiliency and grit? I think those questions especially for the public school context are too massive to worry about, but these nuances, these small things are what is critical to get them to the next level.

So 34% of the poorest get stuck in elementary and 50% are not even completers of high school. In 2014, what was the percentage of college eligible by household income? I want to show you what we mean by household income.

Yung poorest po, the monthly household income range is a maximum of P9,800, meaning parents are both working, the father and mother are working, supporting the family of five -- if their income is P9,800 combined, they're classified as poorest. The richest is a household where two parents are working and earning P41,000 and up. So if both parents

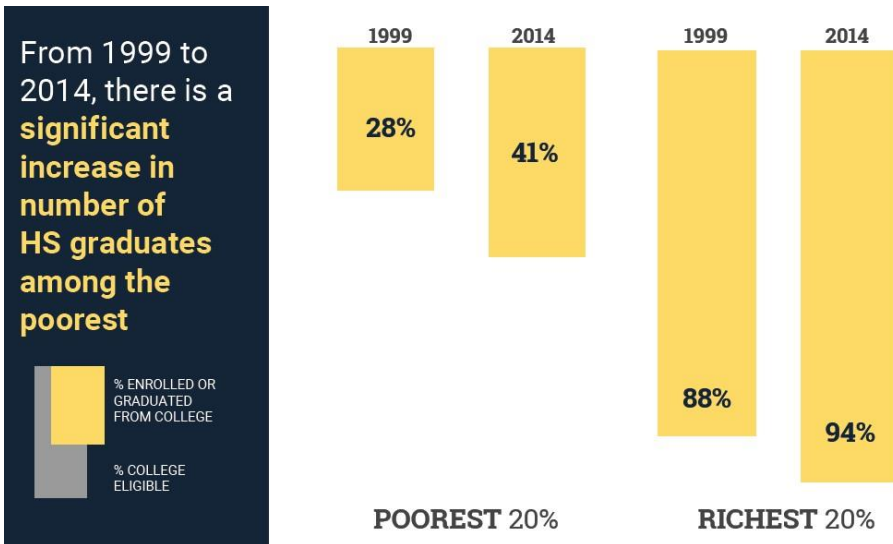
are earning P20,000 each, richest na agad sila. And that is one ironic thing that really skews the interventions of the Philippines because marami sa atin richest, we don't feel it, but statistically we are richest. So when you hear of debates saying we should not support the rich, tayo po yun, alam nyo po ba yun? In one forum or another, even if you feel it or not, you are rich, you should not be supported and your children should not get support. This is one thing that we still have to discuss further and debate about because these are statistics and economic figures accepted elsewhere also but debatable. At least now for the poorest it's those earning a combined income of P9,800 per month. So sabi ko nga pag SG1 ka yata sa gobyerno eh hindi ka na poor, at least ano ka na, near poor. That is what we're referring to, so people like us earning a combined income of P41,000 per month, our college eligibility in 2014 was 94%, pretty good, but those earning a combined income of P9,800 only per month, what is the college eligibility? 42%. But how many end up enrolling in college? Ayun lang po, for the poorest 20%, 41% were eligible pero 10% lang yung nag-e-enroll. For us because we are rich, 72.3% get enrolled. So you see the difference?



What we still have to understand is even if 41% will be college-eligible why only 10% pursue and study in college. One could be finances, so now


with free tuition let's see if this will change, if the relationship changes or improves. The second is the need to work because scholarships are not sufficient and do not replace the income that you could have helped out in terms of your family's needs. So wala pa po tayong pag-aaral sa ganyan and maybe now is the best time to do those studies for further research. Lista lang po tayo ng lista but this is how it looks like, look at how inequitable the distribution is in terms of access, eligibility vs enrollment.

From 1999 to 2014 there was a significant increase in the number of high school graduates among the poorest so what I did was get the graph for the poorest in 1994 tapos tinabi din po natin siya sa graph of the richest in 1994 and then doing the same for 2014. Look at this.

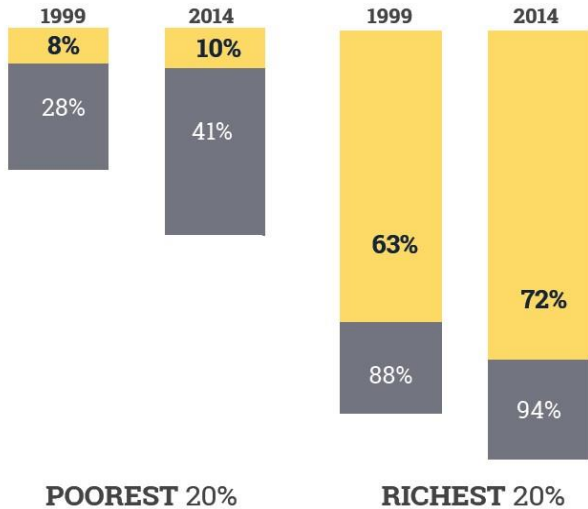


In terms of high school completion from 28% only in 1999, 41% na po yung 2014. It is improving, so I think we should also recognize good things that are happening, from 28% it is 41%, significant increase more or less because it pertains to the poorest. For the richest, 88% to 94%. But how about participation? Between 1994 and 2014, 2% lang po ang increase ng college participation of the poor, compared to the richest 63% to 72%, so despite the increase from 28% to 41% in terms of secondary completion, it did not result in similar increases in college participation.

Despite this, increase in college participation of the poorest was modest

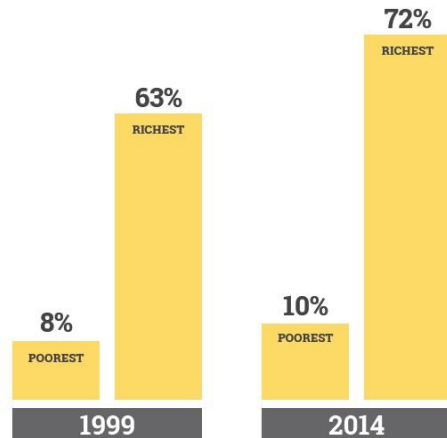


- % ENROLLED OR GRADUATED FROM COLLEGE
- % COLLEGE ELIGIBLE



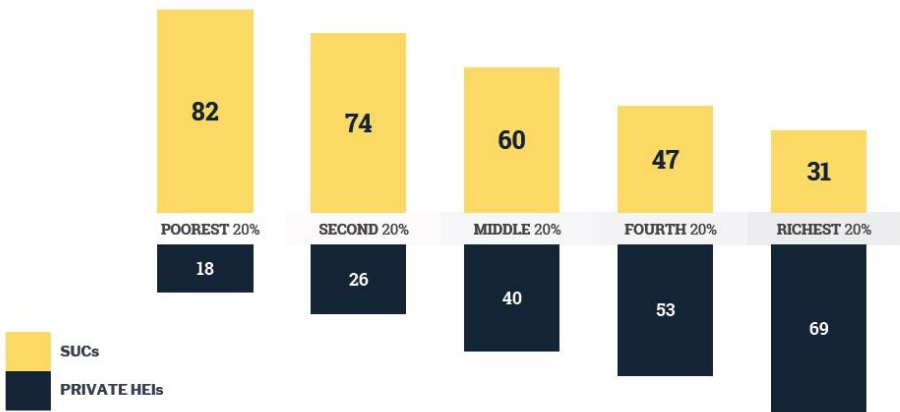
Bakit po kaya? I think it points out two things, one, the need for us to be able to help our students complete basic education, and second, the need for us to encourage and to support them into college entry. Finding schools, selecting schools, application process, writing up those things, and encouraging them that they're good beyond the scholarships, beyond the student financial programs which may exist now. So if you look at it between 1999 and 2014 despite the budget of CHED increasing by so many billions and billions of funds for student support, the gap in access between the richest and the poorest in fact increased. So now that we have universal access, now that there's free tuition, I hope this is not the same in terms of what will happen afterwards, because from 1994 to 2014 despite having billions of funds afforded for student support and access to higher education, the gap between the richest and the poorest widened further.

In fact, the **disparity in access to college** between the poorest and richest **increased from 55 ppt (1999) to 62 ppt (2014).**



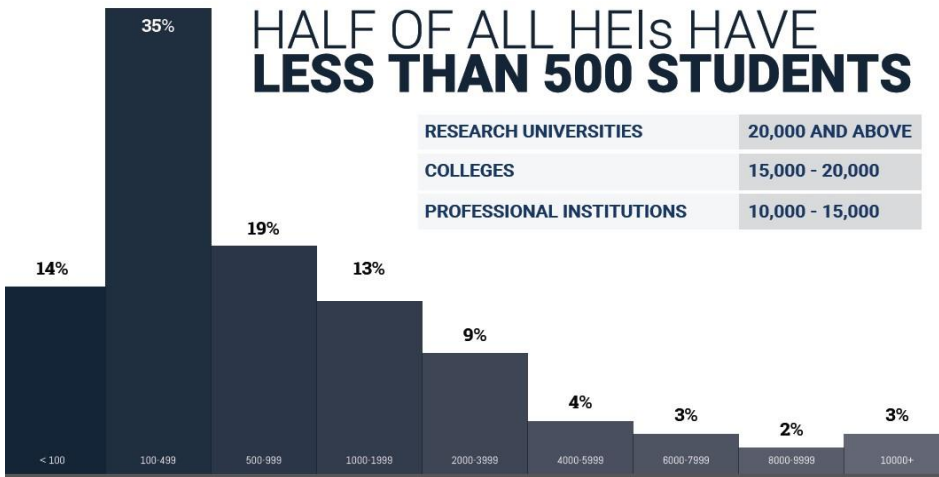
Which ones are the top regions with college-eligible but are not enrolled? Sa region 1 po, 49% of the college-eligible do not continue to college. Region 6, Iloilo, that area 47%. Caraga 47%. Region 7, despite having Cebu, nandyan ang Bohol iba-iba yan 46%. And region 10, northern Mindanao 43%. So we think ang daming schools na wala tayong problema, may competition but 50% at least almost 50% in five regions pwede mag-enroll ng college wala sa college. Is it because there are no schools? Is it because there are no funds? But now there will be funds, why are they not enrolled? Maybe we are so focused on solutions that we know or are fixated on the usual solutions and keep expanding them, but not really asking ourselves, why is this problem not getting solved? Totoo naman, the debate po about who serves the poorest, it is really SUCs. If these are the 82% of the poorest they are in SUCs and only 18% are in private higher education institutions. Meanwhile sa richest meron din 31% yung richest na nasa SUCs but most of them are in private.

SUCs serve the majority of the poorest (82%) who are college eligible, and continue to cater to students from lower quintiles.



Source: UniFAST calculations using APIS 2014 and APIS 2016

I also wanted to show you this. This is the figure that we learned. We ran some figures because of the K to 12 transition program. We did not realize that of the 1,900 higher education institutions 14% had less than 100 students, 35% less than 500 students, so pag dini-vidе nyo po yan by year level 100 lang yan per year level, pag dini-vidе nyo by section, mga three sections lang yan per year level. Combined, this is 50%, almost 50% of our colleges and universities have less than 500 students.



My first job was working in Xavier, which is a basic ed institution, and we have more students than that. Ateneo High School, just in senior high, may have more students than that and yet we call them colleges and universities. What does the literature say about the relationship between the size of institutions and the level of institutions that they should be? They're saying that professional institutions should have at least 10,000 to 15,000 students, colleges 15,000 to 20,000, and for you to really have economies of scale to support a research university, you need 20,000 and more students. Those in the Philippines with more than 10,000 students, only 3%, professional institutions pa lang po yan. So how do you support the requirements of a research university in terms of publications, in terms of investing in faculty, in terms of deloading your faculty, in terms of investing in resources, in terms of your access to journals, books, libraries, facilities? Half of all of our institutions are trying to survive with 500

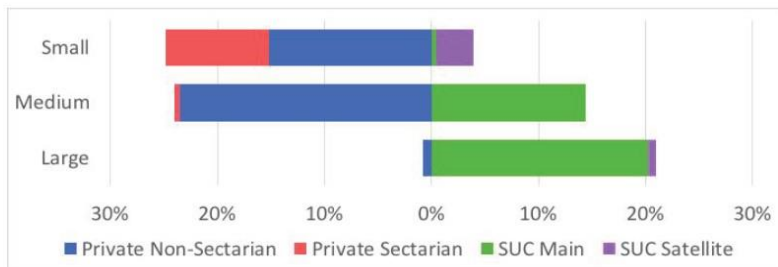
students enrolled. Those of you who are running schools or work in schools you know how hard it would be to do that with 500 students, so how do we do this?

Let's find out, let's ask questions together, we have a long way to go. But where are the poorest? Where do they graduate from? And later on you will see why this is important. Most of the poorest graduate from small to medium private non-sectarian HEIs.

When you say small ito po yung less than 500, when we say medium, less than 2,000. Most of the poorest graduate from small private sectarian, so these are the mission-oriented institutions, yung mga Catholic schools, Catholic institutions who are in the most far-flung areas. When you go to region 12 most of the ones that you will find na nasa mga bundok, nasa napakalayo after four hours of travelling you will find Catholic institutions, private sectarian institutions serving the poor. This is that figure.

Most of the poorest graduate from small to medium Private Non-Sectarian HEIs, and medium to large SUCs.

Figure 10. Distribution college graduates from the poorest HH per capita income quintile by type and size of HEI from which graduated (% share in total)



A good number however are enrolled in private non-sectarian small and medium. Sila po yung mga for-profit institutions paying for the education that they are receiving and then I would suspect the most competitive among the poorest or the recipients of CHED's student grants for Pantawid Pamilya or Filipino beneficiary families are in SUC main campuses. So if you divide the pie of the poorest accessing colleges some of them are served, siguro a number, served by Catholic mission institutions, a big chunk served by the for-profit institutions private nonsectarian and then the most competitive ones being able to get a slot in the state universities and colleges -- the main campuses are there and this is how it looks like today and I will tell you later why it is important.

Now we look at teacher education. As you all know teacher education is one of the most popular programs on offer in the Philippines. It's top three in terms of student enrollment, in fact it accounts for 17% of all students enrolled in college in the Philippines. Of total enrolment, 17% are studying teacher education, elementary or secondary education. And 54% of enrollment is in public HEIs and 1,500 out of 1,900 are offering teacher education. It is one of the most accessible, affordable, and prolific programs out there but price still determines quality. What we did was to get 2014 data on licensure exams and then binangga po natin with data on program fees charged by higher education institutions. What does it show us? Institutions that charge tuition of P20,000 to P99,000 -- this is for the four years -- have an average passing rate of 42.7% for elementary and 46% for secondary. Meaning to say, if this is what you can afford you're essentially buying this passing rate. If you cannot afford a very expensive education pwede ka na sa 40%. If you can pay more, the institutions that have a combined program fee of P200,000 and above, the passing rate is 70% and 68%. If you want an additional 30 pts in your passing rate, you pay P100,000 more.

Price is correlated to quality. More expensive programs, on average, have higher passing rates in licensure exams

Table 12. Summary of Average Passing Rate, by Program Fee

Licensure Exam	Average Passing Rate, by Program Fee		Percentage point difference
	P20,000 to P99,000	P200,000 and up	
Elementary Education	42.7	70.4	27.7
Secondary Education	45.9	68.6	22.7
Electronics Engineering	28.4	42.3	13.9
Electrical Engineering	54.8	63.1	8.3
Civil Engineering	33.5	47.8	14.3

Therefore, for both elementary and secondary, those who can afford better schools get higher passing rates and the poor get lower passing rates. What are the implications today? You see, under Republic Act 10931 or the universal access to quality tertiary education, the price cap of tuition is P20,000 annually. If you are poor you receive a tertiary education subsidy. Tertiary education subsidy annually is P60,000: P20,000 for tuition and P40,000 for allowances. Yung P20,000 na yun what type of education does it give you access to? The most available programs in the country at P20,000 or less are criminology, then elementary, then secondary. Pinakamarami po ang education. If tertiary education subsidy sticks to this price cap, we will produce even more teachers, enroll even more college entrants into teacher education than ever before because it is the most accessible. But it will bring them into the programs that only have 30 to 40% passing rates. Look at this, kung ikaw mahirap nagsimula ka sa elementary, kalahati lang sa inyo makakatuloy ng high school, mas konti lang sa inyo sa high school makakapunta ng college. Pagdating ng college bibigyan ka ng education subsidy in this universal system and then sasabihin sa iyo look for schools na P20,000 lang ang tuition fee and then either babagsak ka or maximum passing rate mo ay 40%. For someone who has persisted all the way to be limited to those chances only -- I think that is something we have to reflect on, to discuss with UniFAST, with CHED, with the Senate, with the Congress to make this different.

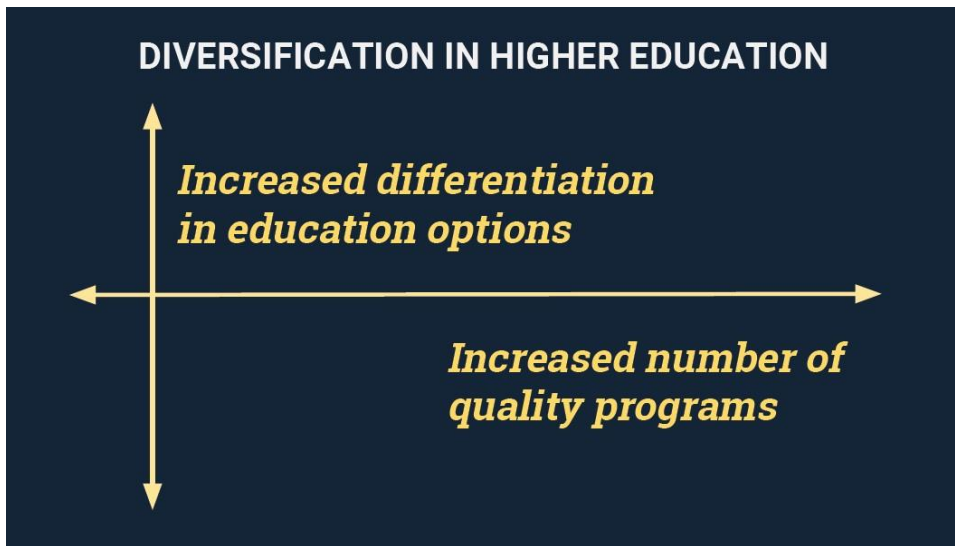
Look at this, the passing grade of HEIs at P20,000 or less is 45% for elementary, 50% for secondary, but if you pay a bit more, make that P40,000, 20 pts at saka 14 pts., look at how much an additional P20,000 can get you and this is additional P20,000 for the four years.

The significant improvement in LET performance as one moves up the price point (20k to 40k): Elementary (20 ppts) & Secondary (14 ppts).

Profession	Passing rate of HEIS at P20,000 or less	Ppt difference	Passing rate of HEIs at PhP20k to Php40k	Ppt difference	Passing rate of HEIs at Php 40k+
LET Elementary	45%	20	65%	11	76%
LET Secondary	50%	14	64%	13	77%
Mechanical Engineering	59%	-2	57%	16	73%
Electronics Engineering	28%	3	31%	18	49%
Electrical Engineering	50%	-1	49%	20	69%
Civil	36%	2	38%	16	54%
Accountancy	29%	5	34%	15	49%
Criminology	27%	2	29%	37	66%
Nursing	35%	14	49%	23	72%

Now we go to the concepts and I want to discuss diversification in higher education. The readings I'm doing now are on this and they describe two ways of diversifying. The first is vertical and I think a lot of you are acquainted with this in the context of the Philippine Qualifications Framework. We can see or propose that when we speak of vertical articulation we speak of certifications of degree levels from 1 to 5; possibly we speak of bachelor's degrees level 6, and then graduate programs levels 7 to 8. In a lot of massifying higher education systems, those with increasing student enrollment, one tool that is cited around the world in terms of how they have been able to expand their system but still keep it equitable is by simultaneously differentiating the programs that are available so there's student choice based on what they want to pursue and based on what is doable to them where they are. It is vertically and then also horizontally there is this, the quality of education, the selectivity of admissions and the prestige of institution and program. So the test is how many of this you have. And I guess if we put together the vertical and the

horizontal and that is the point of the paper that I asked them to distribute earlier, my question to you is what does it look like for Philippine higher education today, particularly for teacher education? Can you get the piece of paper and draw where you think we are in terms of diversity, vertically and horizontally, if you put them together. Just draw quickly where you think we are, how differentiated are we vertically and where are we now in terms of our institutions horizontally? So you can move the X and Y around. Scaffolded ba enough itong ating activity? I just wanted you to reflect on this, is our system differentiated enough vertically, do we have enough options and in terms of quality saang side tayo mas nag-li-lean towards?



Does anyone want to volunteer to share? Hula lang. I think there are various ways of doing it, any ideas? I think that at least as to how I approach this, it looks like this. There is very low differentiation and most of our programs are not very selective, not very prestigious, not very high quality, so low in differentiation. Anyone wants to share? We did our activities differently, we approached them differently, just feel free to share where you think we are and why, any volunteers? Yes ma'am.

Ms. Leah Salvaleon: I thought that was the X and the Y axis so I drew my slope somewhat like skewing like that because of my experience in tertiary education institutions. Yun bang focus natin na doon sa getting a degree but not so much on the education, so kaya ganun yung analysis.

Mr. Yee: Ok, anything else, one more, who wants to share?

Mr. Sotero Malayao Jr.: Probably sir, let's say with respect to your data presented earlier, there's one missing data point I'd like to see -- like how you plotted the specializations in teacher education vis-à-vis every region of the country. By the way I'm from Mindanao State University, Iligan City, I'm a CHED K to 12 recipient, the first batch. The perennial problem we have is that they think region 10 has enough schools offering teacher education but there are certain regions where there's a vacuum, there are some offering mathematics and biology but zero for chemistry and physics. For teachers to have upgrading there, there are certain places where they can have that, in Marawi and Iligan, Cagayan de Oro and Davao, and probably General Santos, but somewhere in the middle of that is a big vacuum. I would also say that there's so much concern on having a degree but little monitoring on the quality of education.

Mr. Yee: Yes, thank you. Later may hugot din ako dyan, so I have slides for you later. Therefore we go to contentions -- maybe your sharing is a good transition towards the contentions. For me there's still a need to increase differentiation in educational options and then to increase the number of quality programs. For me this is the direction, sana ito yung pupuntahan natin. I put forward a few things. First there's an opportunity to reflect on the discipline of education as a whole in the context of the Philippines from a ledge of post-secondary ed or tertiary ed. We keep looking only at the bachelor's degree programs, we keep looking at the four-year degrees, but we lack differentiation vertically in terms of the programs that are available to us, at least levels 1 to 5. Fr. Jun and I share this advocacy and I ask you guys if we reflect on our needs as a country, if we reflect on our schools, if we reflect on our bachelor's programs, what local gaps are we unable to fill consistently because we are trying to stick to this system of only four-year degrees, mostly elementary and secondary

yun. And second, among our bachelor's degree programs which ones do not necessarily have to be four-year college degrees? -- how many of our four-year college programs are in fact not really four-year programs elsewhere? We know what they are so why don't we do something about it?

And at the top level, at the graduate level, and beyond teacher education, alam nyo when we did the scholarships for the K to 12 transition program, one realization we had was, ok we were able to secure funding from government to support scholars, but where are they going to study? And when we mapped out all graduate programs in the country, elementary and secondary ed lang po yung available sa karamihan ng lugar. So it is not the fault of our teachers. Meron akong nakausap, "ma'am, chemistry ka? Bakit ka nag e-elementary education?" Eh professor siya of chemistry in a university. Sabi niya, "eh required kasi yung PhD, ito lang yung meron sa amin so ito yung inaral ko." Tapos yung president ng isang state university sabi niya, "paano ba yan, yung mga faculty ko biology naka-enroll silang lahat Philippine studies." Sabi ko, "ma'am, hindi yata nagbabago ang biology kung sa Pilipinas ka man o sa Japan." So we really have very few graduate programs that are able to develop local expertise in education across various fields, across various areas of education beyond elementary and secondary, and unless we invest in the capacity to build local expertise there, beginning at the graduate level, where will that expertise come from to be able to either provide levels 1 to 5, or level 6 post-secondary education programs. Very few.

In fact one of the exercises that we did when we were starting was to ask the technical panel for teacher education to reflect on what areas within their discipline we still do not have expertise either emerging or long-time. For example ed tech, there are so many ed tech training programs but how many universities in the Philippines offer education technology? Very few. How many professors, very few even here in Manila. I know of three universities trying to find faculty because mag i-i-start na yung class pero wala pa silang faculty for ed tech. And that is in Manila from the top schools. How about elsewhere and that is just ed tech, which is the sexiest program you can offer sa teacher training. How about other areas in the

study of teacher education that are less sexy? Who is going to study that? And who is going to provide training there, di ba? If we don't have a critical mass of experts within the discipline of education beyond elementary and secondary, what happens to all the teachers you expose and make vulnerable to training kuno pero wala namang expertise talaga, di ba?

I think structurally if we want to enhance and improve teacher education or education as a whole we need to begin mapping this out systematically and investing in it, because it is long-term. You can't build expertise in a year or two, even in five to 10 years. Look at your faculty, survey your offerings, figure out who can study what, and invest in it. That is what we're trying to do by sending some faculty under CHED scholarships to study abroad. If we rely only on our current capacity, that will only be elementary and secondary ed -- definitely there are gaps. But who is systematically trying to solve it and how are we contributing to that? But this is the first step, differentiating it towards different levels.

These are the new policies, standards, and guidelines for teacher education and you see that it has increased in terms of its diversity. The BED with specialization in SPED now has five different programs -- special needs education, early childhood education, teaching deaf and hard of hearing learners, teaching learners with visual impairment, and elementary school teaching.

**TEACHER
EDUCATION
DEGREE
PROGRAMS**

EXISTING PROGRAMS	REVISED PROGRAMS
Bachelor of Elementary Education (BEEd) (Generalist)	Bachelor of Elementary Education (Generalist)
BEEd with specialization in Special Education	Bachelor of Inclusive and Special Needs Education (Generalist)
	BSNEd with specialization in Early Childhood Education (new)
	BSNEd with specialization in Teaching Deaf and Hard of Hearing Learners (New)
	BSNEd with specialization in Teaching Learners with Visual Impairment (New)
BEEd with specialization in Early Childhood Education	BSNEd with specialization in Elementary School Teaching
	Bachelor of Early Childhood Education

You also have transformations here, but I guess one of the more exciting ones is the post-baccalaureate diploma in Alternative Learning System, a 30-unit post-baccalaureate program with the primary goal of providing the appropriate tertiary ed program that can respond to the need for competent and committed ALS p[ra]ctitioners to serve marginalized learners in the community. But it is now just being piloted.

A lot of us have worked in education for a long time and we know what the needs are and what these programs could look like. Fr. Jun is active in work on the Philippine Qualifications Framework. For example, this is what I've got from their recent discussions piloting it for Dentistry. It looks like this. You study NC I, NC II Dental Lab Technology Services as Lab-Tech or Lab-Assistant or Dental Technician. Later on, you can ladder it to become NC IV as Dental Hygienist or Dental Technologist and then you become a Dentist. Eventually, you can earn credits to become a PhD or MSD. They are piloting it for Dentistry.

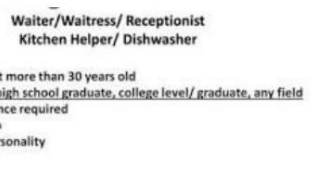
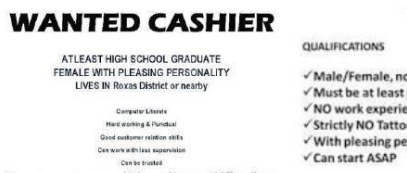
Operationalizing and pioneering the Philippine Qualifications Framework (PQF), this time, for education



We are in education and this should be our forte, this should be where we are good at -- trying to understand teaching and learning and how it can be done in various iterations. If we pilot it for education, how would our

ladders look like? What would our level 1, level 2 be? What would level NC IV be? And why can't we innovate already, instead of waiting for all of these policies to come out and for the secretariat to be finally established and for everything to be done. How will the Philippine Qualifications Framework look like for education? As I suggested earlier, our first point of discussion is among our bachelor degree programs, which ones are not actually four-year programs elsewhere, and that's a start, di po ba? Yes, we're expanding access now, but we are expanding access to elementary and secondary ed. A lot of our students cannot access those four-year programs. Why not give them other iterations that may be more feasible for them to take, but still within the pathway of education.

This is what I want to show you. I did a survey; I just googled job postings in the Philippines and this is what I found.



Wanted: Barista and/or Cashier
Male/Female 18-25 years old
College Level
Must be with pleasing personality
With good communication skills
Hardworking, honest and punctual
Living near Pasig are is ideal
Students are welcome to apply

Salary: *Negotiable*
Address: *Pasig City*

Service crew, waitress, barista, cashier. You will argue that this is not teacher education. Of course, this is not for teachers, but I wanted to point out one thing that I found across these five and I was not consciously looking for it. Notice: college level. The phenomenon of college level people who are employable, people with some college, people who did not finish, but companies are looking for them. My point is we are working in

classrooms, we work with students. Kung yung bata hinintay mong bumagsak bago maghanap ng trabaho, yung self-esteem n'ya, yung morale niya, yung agency n'ya, yung belief in the self bumaba na yan. Why make the barriers so high for them, why have them fail, then have them look for jobs that require "some college" when in fact, our education system because of our laws now allows us to create steps, ladders that meet them where they are and allow them to slowly go up, succeeding in each step. Instead of having them fail at this level you can help them succeed -- you can find the job here. Then succeed again, then try again. Get better, keep going up. Right now our system is, after high school, try college. Pag bumagsak ka saang college ka?

Why not instead innovate for education and begin a pilot for PQF, for the education sector. Anyway a lot of people, a lot of institutions have capacity to offer teacher education, they will have capacity to offer these shorter-term programs that still are within the ladders. And maybe the smaller schools might even be better offering short-term programs instead of requiring all of them to offer four-year programs. Scaling it not just to the capacity of the students but to the capacity of our institutions, the range of institutions we have. Why not start there?

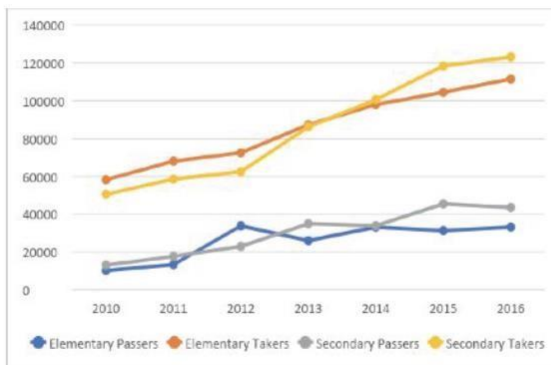
Second, there's a need to more strategically and efficiently strengthen our pipeline of pre-service teachers. As I said earlier, a majority of teacher education programs are in SUCs. Because of free tuition, expect the enrolment figures for teacher education to increase even more in the next few years. But access to quality remains inequitable, with most of the good programs housed in bigger and more expensive schools. We also need to connect DepEd data on teacher deficits (by area and subject) to CHED data on teacher education programs. This is very low hanging fruit. CHED manages or works with universities, chairs the boards of state universities and colleges that churn out a lot of teacher education graduates, works with private HEIs that offer teacher education programs. But we are blind as to what DepEd needs in terms of teachers in what areas and in what subjects. So, we're saying that because there is an oversupply of teachers, there is a moratorium on education programs. Pero kailangan ng teachers sa Science and Math. May moratorium kasi, may oversupply in general, so we work with generalities, we don't see the

nuances. And it is the nuances that are important. It is in the specifics that we are able to solve the issues.

If we are very content with thinking we are pro-active by having a moratorium, we will not solve the problem because it's not the right solution to the problem. But data collection is an impossible thing in the Philippines. We've been trying to work with DepEd, asking for data on teacher deficits. But because hiring of teachers is devolved to the local level, even the central office of DepEd will have a hard time collecting all the data from all of its schools, bringing them up to the national level and turning them over to CHED to identify the slots that will be open in state universities and colleges. There is a desire to get the data, it is medyo common sense, but we haven't been able to do it. So to your point, yes, there seems to be an oversupply but in many areas there are no teachers. And then we need to address the Mindanao issue.

I want to show you this. The number of LET takers has increased consistently but not the passing rate.

The number of LET takers have increased consistently, but not the passing rate



Source: Authors' calculations from Professional Regulation Commission (PRC) data

Paakyat po ng paakyat yung takers, pero yung passers natin yung gap lumalawak, and this is before free tuition. So, imagine free tuition now, how this will look like and what we will do about it, otherwise it will keep expanding and we are wasting our taxpayers' money. We are paying for the tuition fees of these students only for them to fail eventually.

This is also something new that we discovered. We found data that there are higher passing rates for those who graduate from HEIs with pure science programs. Of course, it's always tricky to discuss these types of issues. Eto talaga contention, in the teacher education space. Because may mga advocates for Bachelor of Elementary Education in Science saying it is equally good compared to having them take science programs in science departments alongside education units. But we found data that those who studied and took programs in education in institutions that also have science programs talaga, pure science programs, their passing rate is really much higher. So the education schools that are saying that their science programs on their own are good because they have the capacity to offer them, maybe let's assess your programs and how your students are faring compared to students that have actual science programs. Because a faculty member who really mastered the sciences compared to someone who studied education and then took a few science units will teach differently and will impart knowledge differently. So this is clear data that we should use to inform our policies, to inform directions. One of our proposals then is to expand teacher ed programs in HEIs with strong science and math undergraduate programs.

I also mentioned Mindanao because of this -- the number of schools with passing rates less than 25% in more than five years. Forty out of 47 for elementary, and 43 out of 57 for secondary are in Mindanao. The challenge of Mindanao is very unique. It is a vicious cycle. You rely on your own people, on your own programs, but there are few good ones and so you keep churning out not very good ones that feed into your own programs again. How do we stop this vicious cycle and reverse this trend?

Clearly, the role of CHED in monitoring quality of program offerings in teacher education remains vital, but the next need is to base policies on evidence. For example, when we identify Centers of Excellence and

Centers of Development, and young criteria nation? What studies do we have to back up that those are indicators of quality? So we need to reflect further that when we create policies we have to keep asking ourselves, what is the basis for this?

Next concern is to work towards differentiation in education and to invest in building capacity. And I speak of two priorities. One is at the graduate level across areas of education that we don't have expertise in yet or very little and then to build capacity also in terms of creating short-term programs to pilot PQF for education. A lot of you are from the big schools, so my question is, given all of these, what is the role of the big schools? I have proposed, first, that the big schools pioneer or move in the direction or push the envelope in building expertise within education *na wala pa* in the Philippines. Second, that you find a way to work with Mindanao because the performance in Mindanao schools is really poor. And third, that you increase equitability of access to your programs so that even the poor who have merit are able to access them and they are not blocked from your institutions, only because they cannot afford you despite having the tertiary education subsidy. I want to stress the need to build consensus and complementarity among players in teacher education. Teacher education is one of the most busy and *masikip na* areas because there so many people working on it. So many non-profits. So many experts. So many organizations. But how do our efforts come together? I feel that a lot of time we are working in our own small pockets but there is a lack of convergence in what we are trying to achieve. And actually we know that there are so many teacher ed-funded programs out there, but do we have an agenda for teacher education in terms of moving forward from where we are today? I think we are going in different directions and sometimes we complement each other and sometimes we do not. So one question I leave with you is, what role does FUSE play here? Thank you.

Dr. Rosario Alonzo: Thank you, Mark, for big inputs and big questions that you have posed to us. Is there a journal article for the report that you gave us? Because it's so massive that we need to do more thinking. FUSE can really start thinking of how we can help.

Mr. Yee: Yes, there are three articles with CIDS. I can send you the articles. One has been released, two are about to be released. Once that's done, I'll send copies to FUSE.

Fr. Onofre Inocencio, Jr.: I have been with Mark on several occasions. Just recently we have this diploma course with level 5. Level 5 is a Tech-Voc program by TESDA. It's only today when TESDA has been given the scope of authority up to level 5. Now they're looking at level 5 access to higher education, but we have to remind you of the difficulty. It's in terms of the culture. This is a very important aspect. Everyone has a degree orientation. There is a direction of DepEd, work-ready and college-ready, which we have contested very much in the design of the curriculum and this is the conflict we oftentimes encounter. Why should all people do higher education when they can find fulfillment in pursuing the Tech-Voc track? Because there is another career path track, the Tech-Voc track. The curriculum in basic education has been so academic. Only after they have already tracked them can they say that any track you have you can go to college. If they have already reached the high level of Tech-Voc, then worldwide, they will be accepted, even without a degree, just as long as they have the competency. When they go for employment, the first hurdle is HR, they are asked for a college degree. We have to do something about the culture, we need a cultural transformation, in HR and in the company itself.

Mr. Yee: I'd like to add this point. One of our main points of reflection in teacher education is the fact that the biggest employer is DepEd. So, maybe the change in perspective must begin with DepEd. Clear naman po yung incentives. If there're plantilla positions available, it will drive up demand. The most number of programs and enrollment at the graduate level is teacher education because many positions in DepEd require at least a Master's or PhD to be promoted. So, if DepEd moves in that direction, the market will follow. Because they understand, they look at the opportunities from the employment perspective. So, if you can begin this conversation with DepEd, I think this will be a good start.

Dr. Marilu Madrunio: I have two questions. Number 1, I think CHED will soon come out with the CMO on graduate education. It is recommended to have a Master's by research program and a Master's by course work and PhD by research and PhD by course work. My fear is this particular scenario. Our graduates coming from the undergraduate might not be good enough to take the advanced degree by research program, but schools might take advantage of this. Especially if there are some who are not interested to go inside the classroom; they just feel that they can stay home and then come up with the research. Would that result in quality research? Number 2, I am for vertical articulation. In our case there are some students who have finished Master's in Pharmacy but suddenly they shift to education. One thing that is nice is that they are able to come up with research which is in line with pharmacy education. I don't know if this is the right track or do we still push them for a full PhD in Pharmacy because they already have a BS and MS in Pharmacy?

Mr. Yee: Just to respond quickly. In terms of the CMO on graduate education -- at least in the last iteration I saw of it, yes, there will be a Master's by research and PhD by research but the requirements are very high. So, not all schools might be allowed to offer those programs naman. So, I think that's the safety net. In terms of the second, I also did research on deficits for health care workers and actually, our deficits for pharmacists, dentists, and doctors in the country are so wide. About 60,000 and on the average, we only produce about 3,000 annually. So, maybe instead of bringing them towards education, please keep them in pharmacy and have them practice, because we need so many pharamacists around the country and most of them are in Manila pa. Yes, in terms of vertical articulation, I know many institutions and colleges face this as a problem from CHED. Because sometimes they are very strict na kunwari, my Bachelor's degree was Communications I took up Education Policy for Master's and that's not vertically articulated and that would have been penalized in CHED. Kawawa naman yung institution ko. How to navigate that is still something that we have to learn how to do better.

Dr. Alonzo: My question is, is there a conversation between researchers like you and the people who are working on quality education in the Philippines? Is there a conversation among various stakeholders?

Mr. Yee: There are efforts. We usually try to at least for example my study on the poorest. Which is a very hot topic now because the budget for next year is being debated. We have presented it to the Senate, to UniFAST, and to CHED. At least that has an impact in terms of teacher ed but maybe more along socialized ideas. Let us spread the word also.

Member: Mr. Mark, we truly appreciate what you have shared with us today. It was overwhelming with all those very interesting slides that were an eye opener. Regarding the need to base policy on evidence, I think that's coming out po, the National Research Validation which is coming in a few years' time. It is being sponsored by the Australian Government and CHED also and DepEd.

Mr. Yee: Under which umbrella or who is the process owner? Really? Who is the process owner?

Member: CHED, DepEd, and the Australian government... One thing is, in this research agenda they will be trying to go to differentiation and building of capacity.

Mr. Yee: I agree. That is the point kasi when we were in CHED and I was working with Dr. Cynthia Bautista of UP. She does a lot of research. After our meetings, we always want to do a lot of research. But you're too busy when you're working in a government agency alongside administrative work because sa meetings pa lang at pirmahan, ubos na yung oras mo. So, I think that's the role of education institutions particularly the big schools to do research that the agencies do not have the capacity to do on their own and to echo it back, and the role of the agency is to share the data. To collaborate with the institutions in terms of the research questions that are timely and can be implemented immediately after they're done.

Dr. Fe Hidalgo: Is this the BEST project you're talking about? It has been there for the last few years.

Mr. Yee: For some reason, Secretary Evasco was interested in teacher education. So we formed a national technical working group of which I'm a part, Teacher Education Council, DepEd, some members of PNU, UP also. It's a good development, so we need to do more research.

Dr. Hidalgo: I'd like to comment on your second point here -- the opportunity to work toward differentiation in education and to invest in capacity-building. I'm coming from the Department of Education and over the years it has always been a frustration to know that teachers in elementary are generalists but this is where we need specialists. For example, we talk about mathematics, we talk about reading, which is one of the basic problems in elementary education, because once they go past grade 3 the problem will always be there. It is difficult to solve problems after grade 3; we need the solutions in grades 1 and 2. The highest dropout years ago was in grade 3 and so, we need continuing conversation also in teacher education.

Mr. Yee: Just to add to this. For example in the US, apart from my program on international education policy, there's a master's in higher education, there's a master's in human development and psychology, there's a master's in technology innovation in education, basta napakaraming areas of study. Here, we don't even have a program in education policy; we have no program in higher education. None, despite having so many education institutions, very few, very narrow ang program offerings natin. Which is why a lot of areas of study in education are understudied and undermanned, because there are very few professionals trained to do the work. For example, in Tech-Voc and CHED. What type of graduates are we able to hire? What fields do they graduate from? A good number are in teacher education but is knowing secondary and elementary education a good background to be able to do monitoring work later on for accreditation mechanisms, recognition for COE, COD, for assessing programs at the graduate level? How do you train the professionals you need to manage these agencies at the national and

regional levels, if these are the only programs that are available for education?

Dr. Eden Kelemen: Why did CHED declare a moratorium in teacher education? Has it been lifted?

Mr. Yee: I am not sure if it has been lifted. I think it was 2013 pa. Because there were so many teacher ed programs.

Dr. Kelemen: But from the data you gave us we still need a lot of teachers.

Mr. Yee: Yes, but we don't know yet specifically where. We will have to work on that, the distribution, which areas and which subjects, especially in Senior High School. We went to Iloilo. Sabi noong taga-Iloilo, wala namang nag-o-offer ng statistics and probability in any of our colleges here. Where do we find faculty to teach statistics and probability for Senior High School? So we have to map out the requirements of our education system. Then connect them on what we produce at the higher level. To find out gaps and to find out oversupply and do it systematically. That's still on the table.

Mr. Malayao: My final question, sir. Probably in three or four years from now your data will become richer, because the problem we found out in the first year of implementation from senior high school, I am talking about Mindanao. First when they try to go to school; let's say good schools for senior high school. Let's say STEM. There's a quota on how many can be accepted, but there are private schools who will offer STEM and probably teachers are qualified to teach that. Now, in some areas also, they would say mathematics or science will be taught with master's in the field, but the available teachers have master's in educational management. They have no choice but to hire these people...

Mr. Yee: Two things lang. Mindanao is really an issue. That is a tricky space to move into because CHED ARMM is different from CHED here in Manila. We cannot really impact or do anything or force them to do anything or force them to abide by the PSGs of CHED and a lot of failing

grades are in CHED. I think, second, you're right, I think that's the birth pain of the reform. Natapos naman yung curriculum ng K to 12 and colleges have enough time... to be able to meet the demand or the need of K to 12 in its initial implementation on 2016. Not really, di ba? So yung nagtuturo ng K to 12... the graduates that we were producing are still from the old curriculum, not from the new curriculum. And even up to now, the PSGs are still in elementary and secondary. Can we presume that those who teach junior high can teach senior high? The PSGs will still be PSGs in elementary and secondary ed, do we assume that our teachers there can teach both junior high and senior high? Yes, daw. My question is, what do we do with the graduates that we're producing now with secondary ed training but not yet for this revised curriculum. Why not implement bridging programs that can allow them to transition and handle the senior high school program? At a certain point, we who are doing teacher training want to become irrelevant. Maybe we want to build capacity of the inservice and maybe strengthen proficiencies there but not to bridge, that's not our role. Bridging should be done by the Teacher Education Institutions, they should be producing work-ready graduates who will be able to already take on the work in the classroom. This is the birth pain of the transition. Now that we know it, now that we are feeling it, now that we are at the first few years of it, what do we do? The systematic response I guess should be initiated by DepEd because that's their need and then work with CHED to make sure we fill the gaps especially because we are funding the tuition of millions of Filipino students now. Why not fund them to hit two birds with one stone? Help them to gain access to higher ed but also solve issues of the education system as a whole. So be more strategic in approaching it. Sana yun yung mangyari nga. PIDS is also doing a study to assess the initial implementation of Senior High School and it will come out in December. What is the accessibility of SHS programs in the country? Some of the programs are not what the SHS program was envisioned to be. For example, none of the technical fields we were dreaming of in 2012. And what is happening to the STEM graduates?

Dr. Hidalgo: If I may sum up our discussion this morning, four issues have been raised by Mr. Yee:

1. The role of CHED in monitoring. Policies should be based on evidence – give DepEd evidence.
2. The opportunity to work towards differentiation in education and to invest in capacity-building to address deficits.
3. The role of the big schools in this context.
4. The need to build consensus and complementarity among players in education.

For FUSE, the question is: What role can FUSE play here?