

ROUNDTABLE DISCUSSION 4

Online Education

ROUNDTABLE DISCUSSION 4

Online Education

Salvador Ortiz: This roundtable discussion addresses one of the main tasks of the National Institute of Public Administration: the dissemination of public administrative knowledge.

We think it is very important to achieve this task through electronic means, which allow us to multiply the efforts taken and the effects of this effort.

I would like to welcome Mr. Édgar Vázquez, who has already completed his online master's degree studies in this institution. Bachelor of Science in Informatics by the National Polytechnic Institute, Diploma in E-Government by the Technological of Monterrey and the UN.

Currently, he is Axtel's manager for Federal Government attention. He has managed several companies and has great experience in the field of commercial liaison with the government. He will be our moderator; I yield the floor to him. Thank you.

Édgar Vázquez: Thank you so much. I really want to thank the INAP and all of you for the kind invitation to moderate this discussion regarding Online Education.

In Mexico, online education is a cultural change, a new point of view, a new way to educate students, a new method. The path is difficult, not as easy as watching YouTube videos or making them in Google. It has its characteristics and its way of being. Online education can be used for some subjects and it is impossible to use it for others.

I will now introduce our speakers. Doctor Teresa Guzmán, bachelor in Engineering and Computing Systems by the Technological Institute of Queretaro, master's degree in Mathematics by the

Autonomous University of Querétaro and PhD. in Technological Education by the Rovira and Virgil University of Tarragona, Spain. Currently, she is the Head of the Innovative Information Technologies of the Autonomous University of Querétaro. I call on you Doctor Teresa Guzmán.

Teresa Guzmán: Good afternoon. I am honored to be here. I am specialized in everything regarding distance education. Nowadays, online education is a latent social need that cannot be delayed. I will talk to you about my experience in the Autonomous University of Queretaro, its models of online education and I will focus especially on how the “virtual campus” is organized and managed.

I will also briefly tell you about the Autonomous University of Queretaro, which has ventured into these education methods. I think the University made its first attempt to develop its own educational platform in 2002. In 2003, the Faculty of Nursing gave it another try. Nurses had the idea to implement these online education models. This faculty launched an online graduate program, master's degree program which focused on nursing subjects. They tried to use the educational platform called the Online Education System. It was created to support the master's degree program in Nursing Science.

Currently, it has 17 headquarters. It has schooled nine generations and nearly 600 students have studied the master's program. It also has a bachelor's degree program in Nursing Sciences that was born to regulate the technical level in this specialty; the Health Sector of the Government of Queretaro suggested this.

Subsequently, the Autonomous University of Queretaro realized that there were countless free educational platforms which satisfied all of the needs of a high-level of education institutions. In 2006, it discovered Moodle and forgot about the idea of creating its own educational platform, which is now called “virtual campus”. Ever since this happened, nurses have been accessing this educational platform. This model is based on video conferences. One of the

main problems is schools only accept few students. In 2007, only 30% of the applicants were accepted by the University.

The University also opened a bachelor's degree program in Accounting and Administration. When this program was announced, they realized they need a consultant, a professor and define the necessary roles for online education.

At the same time, the university started to generate a culture related to the educational platform. Several actions were carried out, professors were trained, students started to know more about it and the educational platform supported and strengthened presential education.

In 2010, the Faculty of Accounting launched a model for doctorate level. It has also been a successful model. This program has headquarters in Cancun and Colombia. Diplomas and courses are also available. These are the educational models offered nowadays by the University.

Initially, the virtual campus was managed by only one person, the administrator. Later, the administration decided they needed or wanted other educational platforms. Thus, online education was separated into graduate and undergraduate studies; a platform was installed solely for online education. The initial platform was preserved to support presential educational. Another educational platform was installed to support the admission process to the University. The University also ventured into preparatory courses. Today, several faculties teach theirs solely online, such as the Faculty of Medicine and the Faculty of Engineering.

Currently, the university must clearly define its criteria, especially in this educational model. I would like to add that, today, each of us face online education the best we can, the way we understand it or according to the instruments we have. Currently, online education does not have a defined paradigm like presential education.

The Autonomous University of Querétaro is trying to define which educational model will define it. Other actions are being carried out; i.e. the dean's policy is to make students learn a second language, graduate students should already know English or any other language they prefer.

We are discussing the possibility of offering online foreign language courses; the student already has a complete curricular program, adding extra presential hours would increase his workload. One advantage of online education is it allows us to better organize our schedules.

Our online education models have 568 students, 88 professors and 125 open courses. Presential education has 12 thousand 536 students registered in courses opened by teachers to upload didactic materials in the virtual campus to support presential courses. 644 teachers participate in this project and there are 550 open courses. This means teachers have modified their educational materials and have digitalized them to meet our student's educational need. This is my experience.

Édgar Vázquez: Thank you very much Doctor Guzmán. It is very interesting what you are accomplishing in the Autonomous University of Queretaro. The doctor states and I agree that sites will have to be eventually standardized. Educationally, on contents offered to bachelor, master or postgraduate students. It is very important to regulate contents for each subject.

I would like to welcome Mr. Arturo Vega Hernández; bachelor of Psychology by the Metropolitan Autonomous University and he also has a master's degree in Public Administration. He used to be Director of Academic Planning in the Colegio de Bachilleres, Academic Director of High School Education of the Federal District and is currently the Head of Distance Training and the National Network of Tele-Classrooms in Indesol. Welcome.

Arturo Vega Hernández: Thank you very much. The National Institute for Social Development is currently undergoing a transition process to implement distance training.

I will explain this situation, but first I want to state that the National Institute for Social Development is an administrative body, decentralized from the Social Development Ministry. According to the internal regulations of this Ministry, we are entitled to promote and coordinate training actions to strengthen institutional capacities, civil society organizations and federal and municipal organizations in social development topics.

Another attribution is the establishment and operation of a National Distance Training System. Regulations state we must coordinate with public and private institutions to operate and maintain the necessary infrastructure.

These two attributions created the National Distance Training System, which focuses on social development topics and targets two populations, two kinds of public. On the one hand, civil society organizations and the members of these organizations who work with vulnerable populations and contact Indesol to receive resources and create projects; these projects have to be coordinated with society and government.

Our training topics include: constitution, civil society organization, constitution of civil societies or private assistance institutions; once they have been constituted we work on how they can gain access to public funding given by the federal government to operate social development programs; requirements to obtain these resources, manage them, operate honestly and transparently, accountability, write reports, maintain an institutional organization strategy to generate very good results through government-society interaction.

On the other hand we have a very important topic: federal social development programs. That is, one of our duties is to disseminate these programs, and how institutions and citizens can access their benefits and promote good functioning. Make resources available and give them to the people that need them, in an agile and timely fashion to benefit the people who receive these resources.

We also work with topics regarding gender equity in social development. The gender issue is included into all of our work programs, especially in our training courses. We are constantly looking for the way to focus our courses and promote this subject, gender equity, something our listeners can assume, especially with organizations that move federal resources through projects that benefit vulnerable populations.

Of all of the attributions we have talked about, we are missing the projects we carry out with municipal governments. Municipal governments are the main executors of social spending; as established in budget and public financing regulations. It is the main actor in managing resources for social development programs; that is why we have to be in constant contact.

We train municipal governments in municipal institutional development so as to make the most of social development programs. How is this training done? For more than ten years, since 2000, the Institute has worked with satellite TV technology. We have worked with teleconferences, which last for two hours. These two hours are divided into four sections; the first three have expert speakers that talk about any given topic. These programs are transmitted live, the last section is devoted to questions people have, they can use the telephone, the Internet, chats, fax, etc. In the last section of the program, speakers answer these questions live. These programs can be seen in the Educational Satellite TV Network and EDUSAT, which are open to the public. Anyone who can receive and decode the signal from EDUSAT can watch it. However, this is not easy, not everyone has access to a TV. This is why we have established the National Network of Tele-Classrooms. These TV classrooms can be auditoriums that have a screen and parabolic equipment, decoder and other technical elements to receive EDUSAT's signal. People gather here to watch on a big screen presentations which the speakers will be delivering live.

TV-Classrooms have been operating in various municipalities in the Republic. Nowadays, we have approximately 110 of these

classrooms all over the country; all of the system's contents are viewed there.

We have worked like this for ten years. Satellite TV and distance education where innovative ten years ago; however, nowadays this technology has various difficulties. Producing TV programs is more and more expensive for a budget that does not necessarily grow each year. This model also implies the use of a facilitator, a person in the TV-classroom that works with the people there and has the materials to work with. The content is not just delivered and the people watch it passively, the facilitator uses these contents and transforms it into reflection questions, work exercises, discussion material and recycles it within the group to carry out a presential training.

We cannot always have access to a facilitator; sometimes we do not have the proper working conditions. We are talking about TV-classrooms that do not entirely depend on Indesol, some of them are established by civil society organizations. This is why we are trying to transform this into an online training model. We do not want to lose these teleconferences, these video materials we are producing, and they cannot be lost. We do not want to lose the opportunity to have people gather somewhere to watch a teleconference and listen to a speaker live, a live TV transmission. This could be inserted into an online training platform; contents would include the conference and written materials: exercises, questionnaires, animations and other visual aids to support what people see in these videoconferences; teleconferences and videos will be an element of this material.

Online we have different options to register, access information and once the course is on its way, get to the modules that hold the information, people could have access to written information regarding the subject. What is our goal? What is the synthesis of what we are talking about? There is a box where you can click to obtain the speaker's biography, the topic of the exposition and a space to access the video and also other elements to access support, written or illustrated materials.

We want people to gain access to these courses, obviously on the Internet and in any given location. We would like people in their office, house or anywhere a computer can be plugged into Internet, to access these courses. We also want to democratize and open these resources, establish digital centers that have computer equipment. At least ten computers people can use, an auditorium to view teleconferences and carry out other presential training and an information area regarding resources and programs.

We are looking for these spaces, these digital centers to be established using resources from our social co-investment program; the Federal Government gives out a certain amount of money which was donated by some organizations that work with the government to sustain one of this projects; install centers open to the public so they can have access to our contents.

Besides receiving our contents and teleconferences, they can access other courses organized by other government offices or courses organized by the organization that sustains said TV classroom alongside the government. Computers will be there so people can use them and these will become meeting places, where people can access technology and connectivity. An activity program will also be scheduled, a local training program designed by the people sustaining said center to include other elements like educational CONEVyT-INEA services, alphabetization, elementary, middle school education, online high school education, virtual training for workers, virtual training for municipal government, online courses, Technological of Monterrey, etc.

A number of educational possibilities could be made available, and avoid what some were talking about in the previous roundtable discussion, computers are installed and people just use them to log into Facebook and chat on the Internet, these places have to be led by a specific program.

I thank you for your attention; later on I can answer some questions. Thank you.

Édgar Vázquez: Thank you very much. I yield the floor to Noé Riande Juárez. Lawyer, graduated from the University of Veracruz, has a master's degree in Philosophy by the University Degli Studi di Roma. Head of the Division of Graduate Studies of the National Autonomous University of Mexico.

Currently, Investigation Director of the Center of Graduate Fiscal and Administrative Law Studies and the Federal Court of Fiscal and Administrative Justice.

Noé Riande Juárez: I would like to thank the INAP for the invitation. Our story is not a success story. It is an experience that can help others to improve their performance in distance education areas. The Federal Court of Fiscal and Administrative Justice is a Public Administration body in charge of settling conflicts between particulars and Public Administration bodies, when they have judgments that affect their work, process and activities.

In this sense, we have to train people. When everyone started talking about modernization reforms to Justice Administration in the 60s; staff training was already considered as one of the four basic pillars of court development. Why? There were a lot of corruption, inefficiency and functioning problems.

Like other courts, training our staff was a very important element which had a certain degree of difficulty. The Graduate Studies School of Fiscal and Administrative Law is the judicial school of this court. However, we have to train 42 courts all over the country. Actually, the Federal District has 19 more places people need training, providing distance education is no small challenge.

We have 800 thousand members of jurisdictional staff all over the country. This challenge was first faced with teleconferences. Our teleconferences were used to transmit classes of the master's degree program of Administrative Law, which was launched in 2008, alongside the UNAM for Court employees and jurisdictional staff in other parts of the country who wanted to participate. We

sent an image and controlled inbox and outbox e-mails, which was pretty difficult. However, with some effort it could be done, this was our starting point.

We also managed courses approved by authorities of the Court to train jurisdictional staff and meet needs that appeared from time to time. For example, we have been recently ordered to know what affairs could hinder the IFAI when solving controversies related to personal data, so we have to train our staff about this.

If we have a new court, a special court dedicated to regulating bodies we will have to first study telecommunications concepts. These are things most Administrative Lawyers do not know in depth. These are the special courses that are spontaneously organized. Unfortunately, we do not have enough capital, enough resources to pay the necessary structure to create an organized study plan nor have enough teachers to provide quality education. We depend on the kindness of the experts all over the country or of different bodies of Public Administration who participate for free. They give a two or three hour lecture, they leave, and later on another speaker visits us and gives another conference. There is no pedagogical coherence.

All of this made us think we had to advance. Originally, we only had resources for teleconferences and almost nothing for technological elements. Imagine a one gigabyte computer in 2010; we intended to develop a system for distance education.

These teleconferences were limited and the distance education system was developed thanks to the kindness of the INAP. They provided us the necessary know how to discover work process to generate distance education.

This approach was established, requirements were analyzed and we wondered what we could do. We ran out of time and for the 2011 budget we only hired a company which had web video services and could even do webinars. This is, give our staff interactive training in other parts of the country. However, everything

remained the same. Why? Lectures were given and taped, these tapes were stored and the speakers' materials were shared and if they brought a Power Point presentation it was e-mailed to the people interested. With these materials we made a small library, its contents were shared with people who were interested in them. Our first advance was having these videoconferences; these could be viewed anytime, anywhere; people could benefit from them a lot. On the other hand, a journal of this institution allowed us to publish recognitions made to research students and more relevant papers started to be published.

We lacked distance, presential, interactive and online courses. What happened? We are aware these four points are very important. Why? Because we know that online education can be achieved by generating knowledge in an interactive way; the ones receiving information are not only receivers, they also participate in the creation of knowledge. These are the new pedagogical tendencies. Someone asked what was new in distance education. Structures are not new, pedagogical methods are new.

Nowadays, knowledge can be generated through a teacher-student interaction using social networks; everyone takes of their name tag and interacts to produce knowledge. We then can strive to achieve the Court's goals.

The Court's goals not only have to do with having a good distance education system, but also with guaranteeing greater quality justice services. To achieve this we need pedagogical strength, check current technological alternatives –we have already mentioned them– and promote participation to manage the decisions of our Court. Thank you very much.

Édgar Vázquez: Thank you very much. I call on Moisés Castillo, bachelor in Public Administration by the National Autonomous University of Mexico, he has a master's degree in Public Administration by INAP. He teaches in important institutions of graduate education. He is currently dean at the Sentimientos de la Nación University in Guerrero. Welcome Moisés.

Moisés Castillo: Good afternoon. I am very pleased to be here. A few years ago, I was here with my teacher Luis García as president of the master's degree generation, those were some good times. Thank you for inviting me to the National Institute of Public Administration to talk about my experience in the Sentimientos de la Nación University.

We have gone to the University to research, learn and see what other countries are doing. We have tried to remove interest from solving university issues and focus on those who go to school. I ran into Arturo Vega on the way from the TV classrooms. I have been appointed to manage Morelos and Guerrero. I cannot understand what the Technological of Monterrey is doing with its community learning centers which sometimes work and sometimes do not.

There are so many things we could achieve with technology. We pull our cell phone from our pockets and we have it in our hands. However, our country still has one of the worst places in telecommunications. Communities simply do not have communications, which is the challenge to solve. This country has a very severe problem in education; if you do not believe me ask the Minister of Education or the vice-minister.

I am going to talk about the challenge of using technologies, not what the university does. I really think you know what the Sentimientos de la Nación University is and what it does. The University has fought the inertia of this country and has grown and thrived. We have raised our hands to the Ministry of Education of Guerrero, the Ministry of Public Education and said: gentlemen, this are the youngsters, we already have a name for them, "ninis"; however, we have not improved technologies, infrastructure or anything, call them whatever you like.

I want you to look at communities, not urban areas and also look at migrants. In the US we grab our back pack and go to work. Our countrymen are not getting an education and we obviously do not have the human capital results we should.

I do not want to talk about the university. Before coming here I interviewed a female student and I would like to share this success story, a needle in a haystack. Our distance education system is very similar to those in 1500 universities all around the world: US, Canada and Europe use Moodle. If we wait five, seven or ten years so that Mexico can create a platform of its own, the whole thing will come tumbling down. I am not sure of the institution's payroll will resist, but Mexico will not. Our country needs to be updated like the countries we have been in contact with for so long, I do not know where our counterweight is. We have a campus in Chilpancingo with the software, didactic strategies, course developers but I do not care. I do not care if the University has course developers in Sonora, Texas, Acapulco, in several geographical places thanks to IT, if we correctly understand Internet information nodes.

We have several elements; professors and everything that has been mentioned here. The art of this, of multiplication, is the creation of professional practical units in several places. We have several success stories. There we will have a virtual classroom, virtual, not equipped with everything we imagine; in the Internet classroom those who want to teach and learn can converge.

It would be useful to use community learning centers, which are not used by the country or the communities. There we have technologies and city councils are paying for rent on satellite signal, without knowing if the satellite sends a signal or not and the rent keeps being paid.

Then we have presential tutoring. We have to train people, if we get to their communities and do not train them to use this and that we would then have to explain it to them and retrain them and online train them, etc. And then we have professional practices, a real success in the Sentimientos de la Nación University. Students that do distance studying with us are accepted only if they carry out a professional practice where they live, this way we have a communitarian presence of great value.

We are only doing what we have been taught for a long time, centuries; complement theory and practice, to promote personal and professional growth in a magnificent way.

We then carry out presential exams, we sometimes have communities or groups that have been formed somewhere and allows us to check if the university's mission is being achieved: certify knowledge. We do it virtually and in a presential way if we have certain indicators.

We are working on the language issue to access information and technologies alongside the people who are studying. The platform, roles, training and evaluation system. We have a special evaluation system that includes theory and practice, as I have said before.

The learning portfolio is a well-known method of virtual teaching, we clearly know it. We invite you to supervise the Sentimientos de la Nación University's student's knowledge of online contents. Our students, distance or enrolled, all know how to use ICT.

Ergo, we have various challenges, problems and system goals. I would like to share with you a success story, if you can call it success. It is a four minute video; please see what happens with the community/technology/personal development relationship.

(VIDEO)

Moisés Castillo (MC): Sandra, where are you from?

Sandra (S): I was born in Cuernavaca, Morelos, but I currently live in Chilpancingo, Guerrero.

(MC): What do you study?

(S): I am getting my bachelor's degree and doing social work at the Sentimientos de la Nación University, campus Chilpancingo.

(MC): Sandra, I know you studied for some time in Chilpancingo and then move to Metlatónoc; a municipality in the mountains. Why?

(S): Ever since we started first semester at the university, we had to carry out practices. There, people realize we have the capacity and abilities to develop, and at the same time, this helps us get jobs in institutions that need social workers.

(MC): What happened in Metlatónoc?

(S): Metlatónoc is a very poor municipality. Culture is not like in the cities. Working there is very nice. You learn to be with people with different cultures, know their needs and try to find a solution and make their problems smaller or entirely cover their needs.

(MC): And school? Did you quit?

(S): I did not have to quit, because the university has two educational models, the presential and non-presential (distance). I decided to keep on studying in the non-presential option, some subjects are studied online and some weekends you can take some lessons if your work place is near the Chilpancingo campus. Teachers upload our homework, digital textbooks, exams and we can also contact them through chat rooms in the platform.

(MC): Metlatónoc is a very poor municipality, there is no Internet connection.

(S): It is actually a very serious problem in that municipality, we do have connection, but it is very slow, it takes several hours to access the platform. However, I try to start.

(MC): When is the best time to do your homework?

(S): Between 12 am and 4 pm. After 4pm the mountainous area gets cloudy and the waves cannot get in.

(MC): When you were not studying online, did you use the digital platform?

(S): Yes. It complemented our presential method, we had physical contact with the teacher, but they also uploaded homework and we had to read some books uploaded by teachers or university staff.

(MC): Have you found it useful to use the CAUCN system platform?

(S): Yes. I only live six hours away from Chilpancingo, I can continue studying and not remain a social work technician and my work has helped me put into practice everything I have studied.

(MC): Are you currently working?

(S): Yes, I work in the Health Ministry's health center in Metlatónoc, Guerrero as a social worker.

(MC): How many social workers work there?

(S): Unfortunately, only me. We need other social workers due to the population's needs. However, I am the only one in the entire municipality.

(MC): Are you happy in Metlatónoc?

(S): Yes, I truly like it. Firstly because I have a job and secondly because the municipality's needs are very different to ours, health or education needs are not really important at an individually. I have been able to help a lot of people. Sometimes I cannot complete solve the problem; however, I cover some of their needs.

(MC): Do you think this system can help professionals as yourself be in distant places and help people? As well as helping you as a professional?

(S): Yes, it helps all of the people who want to work and advance technologically. It helps everyone; we can go to distant places and help people.

(MC): Sandra, what would happen if the distance education system were rigid and the professor only waited until 12 am and you were working and with no Internet connection? What would happen?

(S): A lot would happen, I would not be able to work and earn a salary. It is a great advantage to have this system that allows us to work and study at the same time.

(MC): Are you happy as a woman?

(S): I think so, I still need to do many things, I am satisfied with what I have achieved.

(MC): You know strict educational systems would not allow you to do everything you do.

(S): I know, it affects us because they do not allow us to develop our skills, and develop the theory we learn in classroom; distance systems help us use theory and put it into practice.

(MC): Sandra, would you recommend this system to anyone to improve their professional development as you have?

(S): Totally, because it helps us in every aspect, develop our skills, have a job and progress despite distances.

(MC): Thank you Sandra, have a good day.

(S): Thank you.

Moisés Castillo: Thank you, this is the way Sentimientos de la Nación University uses technology.

Édgar Vázquez: Thank you Moisés, you are very kind. I would like to thank Teresa, Moisés, Noé and Arturo for helping me in this roundtable discussion and I would like to conclude by reading briefly a study I now have in my hands.

In Mexico there is a high level of desertion in middle, undergraduate and graduate schools. Furthermore, there is great inequality and educational lag in economically active Mexican population; main problems in Mexican education.

E-learning allows us to avoid educational lag, and the non-conclusion of studies and helps us finish studying. It also makes people's job more efficient, and allows them to have better control of their time and work correctly with these instruments.

We have time for three very brief questions.

Ana Karina Posadas, INAP student: My question is for Arturo Vega. Is the information available in different dialects spoken all over the country? How do you guarantee this information gets to the correct people?

Question: I would like to congratulate you for these discussions. My question has to with the use of technology. I use online educational systems. I am an UNAM professor; I teach a class called Judicial Investigation. Not all of the students are capable of handling distance education, how would you solve this situation? I would like you to help me.

Édgar Vázquez: Now the answers.

Arturo Vega: Our model does not include contents in indigenous languages. Our model works with the support of civil society organizations that work as intermediaries between our work and beneficiary population. I will take some minutes to explain this model of social co-investment because it will help us understand how this operates.

The point is it takes more than installing a TV-classroom and sending contents, it is necessary to call on civil society organizations that work with people that need those services. These organizations develop projects, obtain resources and generate activities that include tele-classrooms or have the space to develop distance contents and work with these populations. If we have communities that do not speak Spanish, the intermediary organization translates these contents.

We do not have operation or technical skills to develop contents in other languages. However, this government-society work concept allows us to take advantage of the organization's leadership, intercommunication skills and their knowledge of other languages so that our message can reach others. This work cannot be done without the organizations' intermediation.

Our main goal is to work with organizations, professionalize them, promote work with organizations to reach our target population and benefit them with social programs.

Moisés Castillo: It would be my pleasure. You sense what all professors sense, education seems to be advancing slowly; however, we have to do everything to communicate with our students. We all have the same worries regarding moving our knowledge to virtual areas. Software helps or allows us to do everything we do in regular classrooms. We have normal, traditional classrooms, the teacher is there, nobody understands anything and no one participates, everything is chaos, etc. Sometimes, teaching is an art; teachers have to make students commit, get them to participate, hand in their homework, train them to use new things, etc., this is the teacher's job.

I would like to emphasize that, in my experience, Sentimientos de la Nación University is hiring young professors with BA, masters and PhD degrees that have computing knowledge. Some years ago, in this Institute, my president asked who knew how to handle computers and I was ashamed to raise my hand because I am part of that generation which started to use computers. There

are professors who still want to have a secretary; what we say and do as teachers can be done with some software.

Nowadays, students struggle with training; no one wants to be left behind. We log into the system and see what the student has logged into, at what time, when, what he did, who he greeted and which homework he did. We see everything the student did. We address critical cases and strengthen training. Training is a permanent job. I can access right now the webpage and show you our permanent training manuals and the way students' skills, competences and use of technology are evaluated. It is a work in progress. I am very satisfied to tell you that if students start studying in high school, because we have high school and undergraduate programs, when they finish their studies, they already have outstanding use of technologies abilities.

I have also seen this in the working context. Companies tell them: all of our work is done online. And our students say: "Just tell me the name of the system" and they can handle it, because they know all of the characteristics a platform like Moodle has, they can even visit external webpages, add some sounds, etc. This is the work teachers do.

Édgar Vázquez: I call on you Teresa.

Teresa Guzmán: I think we need to work on unresolved issues of online education. One of them is evaluation. If we check some indicators, we can see online education currently has a lot of desertion. This has to do with evaluation. I think it is necessary to work on standards for online education, institutions have to accept that learning methods have changed, and the concept of learning has changed. In general terms, if we are going to implement online education, we have to do it responsibly. Online education is as successful and efficient as presential education, if and only if the pedagogical model is clearly defined. Thank you.

Édgar Vázquez: I would like to thank Jesús Suárez and professor Salvador Ortiz for the invitation. I want to congratulate them for finishing their first phase with the first generation of online

master's degree program; this is very important. The INAP needed to immediately jump into this kind of education, and they did it. Thank you very much.

Salvador Ortiz: Thank you Mr. Vázquez, you are very kind. We were here six and a half hours, forty people. We listened and grew for six and a half hours. What did we learn? Everyone should ask themselves that question. What did we learn from this? I think it was very enriching. I think we know technological resources are neutral, it is our responsibility how we use them. We can use them for good things or bad things. We have seen our country's technological reality. We can see it as a half-full or half-empty glass. I think we are in the middle, but we have not achieved balance. We have to make a decision: do or die. I think we should do something. We learnt that technological resources promote better possibilities to attend citizens. This is very important in our line of work: Public Administration.

Various areas of public space are making serious efforts: society and institutions that give added value to technology to improve our life conditions. This is a reality, and the institutions that have been here with us are very important. We had people from the Judicial, Legislative and Executive Powers, from Indesol, the Public Function and Public Education Ministries. We also had people from several universities, from the states of Guerrero and Queretaro. We also had people from the Institute of Public Administration of the State of Mexico and training schools of the State of Mexico and Morelos.

This was a national symposium of Public Administration-related subjects. We are very satisfied with the results; all of us want to improve our society and we are all very dedicated people. We should congratulate ourselves. This idea keeps on going and gathered us here in this place, as well as the 148 cybernauts visiting the TV-INAP channel on the Internet. This is an example of technology promotion.

Thank you very much.