INNOVATION IN HIGHER EDUCATION

Commemorative Summary of Panel Presentations of the International Seminar on Innovation in Higher Education

Celestino Fernández
(compiler)

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International Seminar on
Innovation in Higher Education

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ANIVERSARIO
CETYS Universidad

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Presentation

Fernando León García
President, CETYS University

As part of its 55th anniversary celebration, CETYS University organized in September of 2016 in Mexicali, México a conference that brought together over 40 university leaders from 14 different countries and three continents to discuss Innovation in Higher Education from a comparative perspective.

The event convened strategic partners of CETYS University and representatives of key organizations from around the world, all of whom discussed Innovation from different angles: Overarching Thoughts; Mission of the University; Social Responsibility of the University; Quality, Accreditation, and Accountability; The Role of Students and Faculty; Alternative Models and Technology; International Partnerships; and Leadership and Governance in a Complex Environment.

The conference featured a keynote presentation by Pulitzer Prize Winner Andrés Oppenheimer, who shared his thoughts on Innovation in Latin America based on his publication *Innovate or Die.*

This publication summarizes the main ideas, concepts, and examples that were presented and discussed over the course of this intensive two day event, some of which are listed below:

- Oppenheimer suggests that in particular in Latin America we must espouse the notion of constructive paranoia and humility, which reflects the tendency in developed countries to acknowledge that others can be better and that therefore we should continuously seek to improve what we do as a result of monitoring and reacting to the competition. Furthermore, in order to promote innovation one must work hard at recognizing and rewarding innovation. And lastly, he calls for tolerance failure, as behind every successful entrepreneur and/or innovation there are many efforts that have not met their goal but in the process have laid the foundation for further efforts that are eventually fruitful.
- As we talk about innovation in higher education in the future, it will have to be multi-disciplinary, entrepreneurial, international, and sensitive to social responsibility and sustainability.

Innovation in higher education across regions has both common as well as different elements. All in all, CETYS University hopes that, beyond an event that has brought together distinguished representatives to celebrate the Institution's anniversary, there are valuable themes that will provide fertile ground for further discussion, reflection, and action.

Overarching Thoughts on Innovation in Higher Education

PANELISTS AND MODERATOR

Daniel Hernández Ruipérez
President, Universidad de Salamanca, Spain

Toyoshi Satow
President, International Association of University
Presidents, and Chancellor, J.F. Oberlin University,
Tokyo, Japan

Carlos Martínez-Vela

Vice President, Institute of the Americas at UCSD, USA

Sue Cunningham
President, Council for the Advancement
and Support of Education, Global/USA

Celestino Fernández (Moderator)
Distinguished Professor Emeritus, University of Arizona, USA,
and PIMSA Distinguished Visiting Professor at CETYS University

TRIGGERING COMMENTS AND QUESTIONS

The world of higher education can be discussed through a set of critical questions: What type of education is needed in the coming decades? What is the purpose of education in the current context of social transformation? What models of higher education should we be using? How can we innovate in reviewing institutional mission, addressing the university's social responsibility, developing complex and global management models, while attending to issues of quality, accreditation and accountability?

At present, in almost all countries of the world, there are three academic paradigms in operation in institutions of higher education: 1.0, 2.0 and 3.0. The first paradigm, 1.0, is simple the traditional model in which higher educational institutions have operated since the origin of the modern university: basically, faculty organized in disciplines who teach courses to groups of students in face-to-face settings. The second paradigm, 2.0, is the current model; institutions of higher education under transformation and experimenting with various forms of delivering education, including in the traditional format (e.g. the flipped classroom) as well as electronically both inside and beyond the institution. The most notable examples of the new formats include online education through different approaches, including both synchronous and asynchronous, extending from simply putting a traditional class online without much modification to creating completely new courses fully intended for online that extend worldwide, such as MOOCs.

The third paradigm, 3.0, is that of the future; although not fully defined, this paradigm calls for educational institutions that are highly flexible and easily adaptable to the needs of rapidly changing societies, institutions that are in a state of continuous evolution. Educational innovations are changing consumer habits and consumer habits are changing educational practices. Paradigm 3.0 will be highly challenging to most institutions, in light of both their general conservative nature that tends to resist change and the traditional or-

ganizational structures, policies and procedures that do not allow for much flexibility and mobility. Yet, institutions that wish to be successful in the future will need to transform to this paradigm.

Panelists agreed that innovation, disruptive innovation that brings about significant change, is critical to the success, indeed, to the survival of higher education for numerous reasons, including some macro trends that are shaping higher education, perhaps most importantly the emergence of new technologies and the speed at which knowledge is expanded and modified that has changed almost every aspect of colleges and universities. For at least the past decade, higher education has been engaged in accelerated transformation, including across dimensions of purpose, content, and methodologies. The transformations have been most focused and noticeable in the core functions of the university: teaching and learning, specifically the way in which both teaching and learning are understood and delivered. These changes have not always been welcomed, particularly by faculty who generally tend to be to be wary of change.

In the coming decades, higher education will need to continue to prepare graduates for both life and work. Although in recent years there has been a push toward "training" and away from traditional education, colleges and universities must strive to prepare students in the traditional liberal arts as a means to improve their life experiences, knowledge and values that, of course, also pertain to the workplace, as CETYS provides in its mission for a "humanistic" education. Furthermore, higher education will need to prepare students, with the skills and knowledge they will need in the workplace, including a second language. It is likely that there will be greater tension in the future between the focus on general education and career preparation, although there need not

be such tension because, in reality, the values associated with a traditional liberal arts education, such a critical thinking, communication skills, ability to work with others, etc., are skills and knowledge essential to the workplace; indeed, employers are looking to hire individuals who can work in groups comprised of individuals from diverse backgrounds and interests, engage internationally across cultures, demonstrate ethical behavior and, of course, perform as experts in their chosen line of work. Institutions of higher education should continue to serve both purposes: prepare students with both technical and practical skill and the values for contributing to the common good. Students need to be prepared with the intellectual, emotional and experiential skills for life, civic involvement, and the workforce.

The goal of higher education should be to prepare professionals who are capable of adapting to changing interdisciplinary and multicultural environments, by creating learning spaces that foster creativity and invite innovation, where the essential element is not so much the knowledge as the interconnections among academic disciplines, interdisciplinary. In addition to preparing professionals, institutions of higher education should continue to generate new knowledge through faculty research that can be transferred to society for application, thus maximizing research efforts by contributing to the common good.

Access and affordability are issues that need to be resolved. As the demand for higher education continues to increase throughout the world, including among the working class, universities need to be creative and innovative in how they provide access at an affordable price. These are major challenges, particularly for small colleges and universities, but access and affordability are issues for all institutions of higher education; 2-year,

4-year, public, private, non-profit, for-profit, large or small. We are already seeing, and will continue to see, several small private institutions that have priced themselves out of the market.

In the next decade, we need a higher education system that is capable of responding to the changing needs of society. Jobs of the future will require more education and technical training. Already there are millions of jobs worldwide that are unfilled due to job applicants lacking the necessary qualifications. Indeed, it is difficult to predict some the types of jobs that will be created in the future, even in the next decade. This calls for an innovative approach where higher education initially provides the foundational education that prepares graduates for adaptability in a rapidly changing world, followed by continuous educational offerings throughout an individual's professional career. This is likely to require unbundling of the college degree and credits in the form of certificates and other means of documenting the successful completion of educational modules and courses.

Although one may not be able to predict the specific details of future changes in higher education, there is no doubt that societal demand for higher education will continue to grow throughout the world. Additionally, technology will continue play a central role in the delivery of education. The digitization platform extends to all parts of society: e-democracy, e-health, e-learning, e-payment, e-transport services – it is actually more difficult to identify a sector not affected by technology.

Institutions of higher education will need to work harder to make education accessible and affordable to a wider population. Furthermore, colleges and universities will need to remain flexible, continue to focus on continuous improvement, and respond to the changing

needs of employers and societal problems. Finally, globalization is a given and universities will need to continue to provide educations that prepare students to live and work in an interconnected world. Institutional collaborations and partnerships, like the many that CETYS University has established, will be essential to the success of colleges and universities. And, at the end of the day, leadership, beginning at the top with the President of the university, is critical to fostering an institutional culture of innovation.

It is clear that the future will require innovation in higher education with a focus on the frontiers of knowledge, educational institutions with greater flexibility and agility to make knowledge and training available to those seeking pertinent and meaningful education of high quality. Innovation requires action; taking action is key to change.

Throughout the presentations, CETYS was praised for both its focus on quality and its leadership. CETYS' focus on quality has resulted, for example, in the enhancement of its academic programs, professoriate, and facilities. This focus on quality is also demonstrated by its national and international accreditations. The leadership of CETYS, particularly by the President, has transformed the University to a truly international institution, one where students and faculty are expected to be internationally engaged, resulted in CETYS being formally connected to other universities throughout the world, from neighboring universities in the United States to universities in Asia, Australia, Latin America and Europe.

Innovation: Mission of the University

PANELISTS AND MODERATOR

Chukuka Enwemeka
Provost, San Diego State University, USA

Sung Chull Lee
Senior Vice President, Hanyang University, Korea

Devorah Lieberman
President, University of La Verne, USA

Juan de la Borbolla
President, Universidad
Panamericana-Guadalajara, México

Richard Osborn (Moderator)
Vice President, Western Association of Schools
and Colleges (WASC), USA

International discussion has established that education (in this case higher education) should be a common good, embracing the principles of social justice, equity, and the preparation students for life and work. The specialists in the field discussed the following questions: What type of university should we be? How do we reflect those commitments in the university's mission but within the framework of innovation and trends? Where should universities focus their mission: teaching or research? Should the university serve only well-prepared students or a diverse student body?

The mission, purpose, core values and vision of a university serve to orient everyone who comes in contact with that institution and to communicate with all stakeholders, including students, professors and staff, parents, business and industry, government and the general public. The mission establishes the institution's reason for existing, its philosophical essence. It answers the question: What is a university for? The mission statement communicates what is important about an institution of higher education, an explanation about what the institution does and why it does it. A university's mission is so critical that accrediting agencies begin their reviews of all institutions of higher education by focusing on the mission and on where and how the university communicates and promotes its mission statement, and relatedly, its vision and core values.

The mission of many institutions of higher education has changed, or is changing, from preparation of individuals for thoughtful citizenship to a more utilitarian mission that focuses on the preparation of individuals for the world of work. The education provided under the former mission encompasses what historically has been known as a traditional liberal arts education that was intended to prepare students for a meaningful life, as clearly articulated in a letter by Loren B. Byrne to the Editor of the *New York Times* (April 7, 2013):

> But the best outcomes of a college experience go well beyond this [technical preparation for jobs]. They include development of the whole, thinking person, cultivation

of creativity, maturation of social and cultural sensibilities, and even increased passion for life, learning and civic engagement of all sorts — what collectively might be called "life and citizenship knowledge."

This statement captures the intended outcomes of what in the United States is specifically known as General Education in bachelorette degree programs, that is, the preparation of well-rounded citizens. As one panelist, Chukuka S. Enwemeka, noted:

> The traditional liberal arts education has a major focus on the arts and the humanities, including philosophy, rhetoric, poetry, oratory, history, leadership, politics, the social sciences, as well as in mathematics, astronomy, and the universe. Basically, there was strong focus and interest in understanding our world in general.

Since WWII but specifically during the past 40 years, with the emergence of the for-profit sector that serves working adults, the focus on information technology, and the economic recession that started in 2008, the traditional undergraduate mission has been giving way to a mission whose education is principally, and in many cases exclusively, focused on the transmission of technical and practical skills and knowledge pertinent to employability, promotions, salary increases and careers. With perhaps the exception of a few liberal arts colleges and universities, this shift has been noticeable in almost all institutions of higher education, including two-year, four-year, public, private, non-profit, for-profit, and large and small.

The future calls for a university mission whose education prepares students for an unknown future that includes, for example, big data in many areas. It can easily be predicted, however, that technology will play an increasing role in our daily lives, both personal and

professional. This uncertain future in a technological world calls us to offer the best possible preparation for our students and that includes a blend of the traditional liberal arts and marketable knowledge and skills. As is the case now, the future will need creative individuals who can innovate around both technical problems at work and the larger problems of society and everyday life. Thus, the mission of the future, of an innovative university, should not be an either/or proposition; that is, the mission should not be solely focused on liberal education nor should it be focused exclusively on technical preparation but, rather, the mission should encompass and embrace both preparation for citizenship and employment. Companies and societies will need individuals who are technically competent and also have developed people skills in order to be able to work in teams, often across cultural and political boundaries. Graduates who have acquired a second or more languages will be best prepared for productive lives.

Given this vision of the future, everything an institution of higher education does should be tied back to its mission. The mission should be central when undertaking strategic planning. All decisions should link directly to the institution's mission; otherwise they should not be undertaken. This has been a problem with many institutions of higher education that have experienced "mission drift." Institutions need to focus their metrics on student learning and not only on research dollars, faculty publications, endowment size, exclusivity in admissions, rankings, and other such measures of prestige.

One of the panelists noted that to innovate is not magic. That it is about having an idea, trying it out, failing, research, trying another or modified idea, and ultimately success. Apropos, another writer, Norton I. Teicher, to the Editor of the *New York Times* (April 5,

2013) states the following regarding the mission of the university:

> A university develops knowledge through scholarship and research. A university transmits knowledge through instruction. A university applies knowledge through public service.

Of course, innovation can occur and is needed in how a university conducts scholarship, on how it teaches, and how it engages in public service. It seems, however, that the strategy of most institutions of higher education has been one of imitation, not innovation. Imitation will not transform universities. The mission statements of many universities need revisiting and revising if they are going to be competitive in the future.

In the future, innovation and internationalization should be part of the mission of all institutions of higher education if they are going to be successful in preparing students for an increasingly interconnected and complex world and for jobs that do not already exist. Even today, employers complain that they cannot find people with the needed skills, especially for technical jobs in information technology and health care. But most of all, institutions of higher education should not forget that they exist for the benefit of society, that their mission primarily is to serve the public good.

Innovation: Social Responsibility

PANELISTS AND MODERATOR

Fernando Galván Reula
President, Universidad Alcalá de Henares, Spain

Robert Nava
Vice President, San Francisco State University, USA

James Harris
President, University of San Diego, USA

Eda Machado de Souza
President, Instituto de Educación Superior de Brasilia, Brazil

Gerald Reisinger (Moderator)
President, University of Applied Sciences of Upper Austria

Social responsibility has been linked to university discourse for a long time and the focus on social responsibility has increased over time with the expansion of access to higher education. However, unequal opportunity, access, and inclusion in the labor force have been permanent problems, contributing to a loss of the sense of citizenship among college students. If the university has as a constant innovation in its various forms (models, programs, physical and technological resources), how should social responsibility be expressed in its development plans and in institutional culture? To what extend should the university's commitment to society go? ¿The local level? Regional? National? International?

Although the primary mission of colleges and universities is to prepare students for life and work and, indeed, this is a noble mission, thus their main focus on teaching and learning, institutions of higher education also have a responsibility to serve the larger society in various other ways, that is, to be socially responsible in ways other than the preparation of students. Institutional social responsibility can be defined as the impact made by an institution on society: how an organization takes responsibility for its actions, encouraging a positive impact on the environment and stakeholders including consumers (students), employees, investors, communities, and others. In higher education, social responsibility has been undertaken through both direct and indirect outreach and service programs and activities that expand the broad scope of expertise found among professors, from professional fields such as engineering and law to the fine arts, humanities and social sciences.

Given societies' expanding needs, including both in the workforce and in terms of social problems such as poverty, health care and war, and limited financial resources, creativity and innovation in institutional social responsibility will be even more critical in the future. Panelists noted several social problems that need the attention and knowledge of universities such as the environment, where there should be a focus on protection and sustainability. They pointed out that institutions of higher education have a civic responsibility to their communities and must focus on issues of social jus-

tice. In the 21st century, universities can no longer draw the line at the conventional missions of teaching and research but have to also embrace the "third mission" – social responsibility.

One of the panelists, Fernando Galván, summarized the following three models of higher education in the future, as presented in the 2012 Australian report by Ernst & Young, *University of the Future: A Thousand Year Old Industry on the Cusp of Profound Change*.

- **Streamlined Status Quo:** Some established universities will continue to operate as broad-based teaching and research institutions, but will progressively transform the way they deliver their services and administer their organizations –with major implications for the way they engage with students, government, industry stakeholders, secondary schools, and the community.
- **Niche Dominators:** Some established universities and new entrants into the higher education arena will fundamentally reshape and refine the range of services and markets they operate in, targeting particular "customer" segments with tailored education, research and related services –with a concurrent shift in the business model, organization and operations.
- **Transformers:** Private providers and new entrants will carve out new positions in the "traditional" sector and also create new market spaces that merge parts of the higher education sector with other sectors, such as media, technology, innovation, venture capital and the like. This will create new markets, new segments and new sources of economic value, that deliver much needed incremental revenue to invest in the core business—internationally competitive teaching and research.

Future institutions of higher education, those that will be most successful, will be transformers that hold their social responsibility central to their missions. This focus on social responsibility will take various forms but will include students, faculty, staff, programs and the institution as a whole. In the case of students, for example, it may mean that service and outreach will be an essential dimension of the teaching-learning process so that all students are engaged in service to the larger community. Many courses and programs will have a built-in service learning and/or internship component that require students to extend themselves beyond the university. These program requirements benefit both students (in their learning) and the organizations (knowledge transfer) where students are undertaking them.

Because the traditional faculty role has focused primarily on teaching and research and the reward structure has been developed to support these activities, a new, innovative model will need to be developed that expects and rewards professors for the outreach and service they provide to the larger society based on their expertise. In some cases, faculty will work with business and industry, in others with government, social service agencies, K-12 education, health care organizations, media outlets, etc. Initially, some professors may resist a requirement for extended service both because traditionally service for the faculty has pertained to only serving on internal committees and working with their professional associations and because some professors do want to mix theory with practice or move beyond the "safety" of the university. Yet, institutions of higher education must insist on and reward outreach and service by all professors; professors will come to realize and appreciate that extending beyond the confines of the university and profession will benefit both, them (in helping them remain current in

terms of application and practice) and the organizations they serve (knowledge transfer) and, most of all, contribute to the betterment of society.

Historically, staff at universities has not been thought of as having knowledge or expertise that can be transferred to the larger society and general employees have not been expected to provide outreach and service to the larger society. Clearly, this view of staff is inaccurate; university employees have much knowledge and expertise that is of benefit to society; in fact, many university employees volunteer their time and services outside university time, often through their churches, for example. The great universities of the future will better incorporate staff into the institutional mission, particularly around outreach and service.

At the institutional level, innovation will result in new and expanded partnership with almost all sectors of society, including business, industry, government, religious organizations, etc., all to the benefit of both universities and the larger society. Universities will expect and reward involvement in such partnerships by students and employees. Of course, much of the outreach and service may occur via digital means, particularly to organizations and individuals outside the local community. Technology has expanded the opportunities for outreach and service far beyond the local community; indeed, outreach and service can be provided regionally, nationally and internationally.

Some examples of social responsibility include:

1. Community investment and development: Financial or in-kind contributions to community projects within a specified distance of any campus or affiliated facility.
2. Charity work and disaster relief: Financial or in-kind contributions to national or international causes and charities.

3. Regional human capital development: Proportion of graduates employed in the region or proportion of students from the region.
4. Environmental impact: Performance against a check-list of environmental indicators.

Given the knowledge and expertise housed in institutions of higher education throughout the world, in the future universities can have an even greater positive impact on society, from the local community to global communities. And, the underlying foundation of all university outreach and service should be that such activities be carried out ethically and for the benefit of the greater good; to build a healthier – in all dimensions – society for all people.

Innovation: Quality, Accreditation, and Accountability

PANELISTS AND MODERATOR

Ronald Carter
Commissioner, Western Association
of Schools and Colleges,
and Provost, Loma Linda University, USA

Rodrigo Guerra Botello
Secretary General, Mexican Federation
of Private Universities, México

Thomas Blom
Vice President, Karlstad University, Sweden

Ashok M. Mahajan
Registrar, North Maharashtra University, India

Teófilo Ramos (Moderator)
Director of Institutional Relations, ITESM, México

It is difficult to understand innovation in higher education today without incorporating the concepts of quality, accreditation and accountability or transparency in academic and administrative processes. One can see in the global environment, linked to the phenomenon of globalization, an explosion of university development plans where both quality and accreditation are present. How prepared are both the universities and the various accrediting bodies for this boom? What are the challenges faced by both universities and accrediting agencies to maintain and ensure the quality of education? How can we both undertake innovation in university processes and positively impact accountability? How can we ensure quality in learning outcomes?

Consumers for all products search for quality and, in this respect, consumers of higher education, including students, parents, employers and governments, are no different. They want the best education, education of the highest quality, at the most affordable price and delivered in the student's preferred mode. Quality assurance in institutions of higher education takes place in different forms and at different levels, ranging from the academic unit to international. At the institutional level, courses and programs are reviewed by committees comprised of peers, they can be reviewed by external committees comprised of experts from other universities (domestic and international); states and federal governments are often also involved in quality assurance; and, agencies especially designed to assess quality against sets of standards are responsible for accrediting programs and institutions. An institution's or program's ability to state that it is accredited by such and such organizations communicates to prospective students and the general external public that it is a program/institution of recognized quality.

Although historically accreditation and other forms of quality assurance around the globe have been undertake by federal agencies, recent innovation this arena has been around "international accreditation," seeking and obtaining institutional accreditation from agencies outside the home country. The United States has been a notable exception, where accreditation is undertaken by non-federal, regional organizations comprised of member institutions and quality is assessed by peer reviewers.

Still, the federal government has been directly involved through its ability to grant recognition of accrediting agencies. And it has been indirectly involved through its authority to withhold federal financial aid from a particular college or university. But even in the United States with the longest tradition of independent accreditation, the federal government has been inserting itself into the accreditation process at an accelerating pace; for example, through a set of "federal compliance" requirements that now are mandated to be part of accreditation reviews. The government claims that these intrusions are based on the fact that accrediting agencies have not done enough to control quality, permitting institutions of higher education to continue to operate even when they do not meet the agreed upon standards of quality and best practices.

International accreditation, particularly accreditation from the United States for non-U.S. institutions of higher education, although currently limited, seems to be the wave of the future. Such accreditation is viewed as the gold standard because it is rigorous and based on numerous dimensions that assess quality in all university undertakings. Many accreditation agencies that grant institutional accreditation have modeled both their standards and processes after those of the accrediting agencies in the United States. Historically, the regional accrediting agencies in the U.S. have not engaged in international accreditation; in fact only three of the six regionals have participated in such accreditation and only minimally.

Nonetheless, accreditation in the future is more likely to involve international accreditation. In the past, it has been difficult to compare quality across nations because measures of quality have not been consistent worldwide. International accreditation addresses this

problem by assuring that at least two sets of standards to measure quality have been applied. Institutions/programs that are internationally accredited will be able to publicize, as is currently the case with the few institutions that have obtained international accreditation (such as CETYS University) the fact that they have met various measures of quality, both domestic and international, and that their students can transfer across international borders and their academic course credits and degrees will be recognized as being comparable.

Of course, international accreditation has been practiced by organizations that accredit professional programs, such as business, architecture and law, for many years. International accreditation of professional programs also is expected to grow in the future.

Innovation in quality assurance is not likely to originate with the accrediting agencies since they tend to focus on traditional methods of education and of modalities of deliveries. In fact, accrediting agencies have had to adjust to major innovations in higher education, such as online education, competency-based education, and external educational academic offerings such as massive open online courses (MOOCS). Occasionally, however, as in the case of assessment of student learning, accrediting agencies have been the innovators and led the change efforts. Indeed, as stated in the Blog page of the U.S. Department of Education and underscoring the importance of measuring student learning, the Department notes:

> We are interested in the fact that outcomes matter and ought to be the centerpiece of any kind of quality assurance… Such a quality assurance process will rely much less on inputs, where the emphasis of much accreditation still rests, and will instead focus on outputs and evidence.

Accrediting agencies have innovated and led the change in various areas, from moving away from assessing inputs (such as quality of entering students) to focusing on outcomes (quality of learning). In the future, one of the major challenges to accreditation will be that it not simply become a bureaucratic exercise. The challenge will be to both assess quality in programs and institutions through a set of specific standards that tend to normalize and support the status quo while remaining open and flexible to innovative methods and modalities that initially may be thought of as being outside the realm of quality in higher education, as was the case when online education first emerged, a practice that at least in the United States has been broadly adopted by all sectors of the higher education community and which is spreading rapidly throughout the world. Even now, some governments, led by their Ministers of Education and their accrediting organizations, do not believe in online education because, in their view, it is not of equal quality as education delivered in the traditional face-to-face modality, regardless of the research that finds otherwise. The world is passing them by and may do so with other innovations.

Like never before, governments and the general public are demanding accountability on the part of institutions of higher education. This accountability extends to all dimensions of the institution but particularly to both how resources are spent and on what happens with students while in college and after graduation. The public wants transparency into all institutional processes, especially how decisions are made and how resources are distributed. Increasingly, governments, including in the United States, are holding institutions and their leaders accountable for the quality of education being provided generally and specifically for progression, retention

and graduation rates, as well as for the employability of their graduates in terms of access to careers and levels of earnings. Accrediting agencies have also come to expect transparency and accountability in all university actions.

This focus on accountability, particularly transparency, poses problems for many institutions of higher education and their leaders worldwide since most universities have tended to operate "autonomously" from their governments, with little oversight, and away from the public's eyes. Unfortunately but true, some university presidents have stated that they would never seek accreditation from the U.S. precisely because they would not want to meet the requirement for transparency, preferring to operate behind closed doors, as they always have done. The future is not on their side as the expectations and requirements for accountability and transparency in higher education spread worldwide and the globalization of higher education becomes the norm. Quality, accountability and accreditation are now inextricably linked.

Finally, the expectation for the future is that institutions of higher education develop and foster a culture of continuous improvement. This framework of continuous improvement would require programs and institutions to move toward world-class quality and to regularly assess and report measurable progress, particularly in learning and other student outcomes, relative to their peers and competitors, both national and international.

Innovation: The Role of Students and Faculty

PANELISTS AND MODERATOR

Randy Frisch
President, City University of Seattle, USA

Dan Gregory
Provost, St. Cloud State University, USA

Alberto Montoya Puyana
President, Universidad Autónoma de Bucaramanga, Colombia

Marja-Liisa Tenhunen
former President, Centria University
of Applied Sciences, Finland

Jaime Alonso Gómez (Moderator)
Dean of the School of Business, University of San Diego,
and PIMSA Distinguished Chair at CETYS University

Universities that claim to be world class are in the midst of a dizzying race to innovate their educational models, including technological processes, physical spaces, and service areas such as digital libraries. Innovation as a condition for renewal has provided evidence that some of these changes contribute to the development of life skills. In this context, the following questions were discussed: What is the role of faculty and students in decision-making for innovation? What kind of professors will be needed in the coming decades? Are universities ready to incorporate the innovative ideas and projects of professors and students?

Based on who is attending high school and college today, along with the composition of the larger population, we can confidently predict the makeup of the student body for the next decade. Most of the following statistics are based on college students in the United States and are reported in "Building a Culture of Innovation in Higher Education: Design & Practice for Leaders" (*Revolutions and EDUCAUSE*, 2015, p. 5). Although these specific statistics are based on the student population in the United States, the patterns, with appropriate contextualization for culture and society, are generally similar throughout the world.

- The majority of students will be female; currently about 56 % is female.
- A significant proportion of students will be enrolled part-time; currently about 37% are enrolled part-time.
- In terms of age, the majority will be "non-traditional": already more than 50 % are over age 25 and 26 % has children.
- More students will gravitate to online offerings; currently about 25 % are fully online or in blended courses (partially electronic and partly classroom).
- More students are likely to live at home; only 44 % now live in campus housing.
- Ethnic, racial and religious diversity will continue to increase; about 41 % of current students are non-white.
- Many of the students entering institutions of higher education will be from low-income backgrounds and the first in their families to attend college.

- Many more students are likely to be working; currently 52 % work part-time and 20 % full-time.
- Most students will receive some type of financial aid; about 83 % now receive such support.

For students, and for universities, the following issues will be of primary importance:

- **Access**; fundamentally, this is about availability, particularly for previously underserved populations. Are there colleges and universities, as well as specific programs (certificates and degrees) in which I can enroll given my particular needs, interests and circumstances, such as being a working adult who can only take classes online or evenings and weekends? Students want access to safe, welcoming institutions. Access also pertains to entering students being academically (and culturally) prepared to succeed in college. Students want access to accredited institutions and accredited programs.
- **Cost**; this issue is about affordability and value. Can I afford all of the costs associated with college, most specifically tuition, fees, books, housing, etc.? Will I have to take out loans? What is the value of higher education relative to cost?
- **Progression**; this issue focuses on credit completion and accumulation, gateway course completion, retention and dropout rates. Students want to stay on track and to progress in their studies on a timely basis from start to finish, from the first course through graduation.
- **Completion**; this issue is about students completing the program (course, certificate, degree) they enrolled in and intended to complete. It is about graduation. Students want program and course flexibility within an efficient path to completion.

- **Post-College Outcomes**; students are focused on employment, both jobs and promotions, as well as on earnings. Can they find jobs? What types? At what salary? Students are also concerned about their indebtedness and being able to repay their college loans.

Increasingly, students and parents view themselves as consumers and they view college, specifically the credential, as a ticket to financial well-being. Students expect an education that is focused and career relevant. They expect higher education to be practical, meaning that upon graduation they will be able to find employment or obtain promotions, that a certificate or degree will improve their opportunities for financial wellbeing.

Additionally, almost all students will be both technology literate (indeed, they are digital natives) and expect that universities provide services and education via technology. They expect the convenience of having everything at their fingertips, from online applications and registration to courses and access to information (the library). Moreover, they expect professors to remain up to date on the latest applications that students prefer at any moment, social or otherwise, and to use them in their teaching. The emergence of new technologies, generally, and online education, specifically, have provided opportunities and created the expectation of being able to learn anywhere, anytime and from anyone. Indeed, many students do not necessarily view university professors as the foundations and fountains of knowledge. Students have developed blind faith in consulting online resources ("just Google it"), including information found on social media, without the ability to judge its accuracy.

All of these changes in the student body will greatly challenge institutions of higher education. How will they serve the great diversity of students and their inter-

ests? These changes also will challenge the faculty, particularly "old school" professors who view any change in higher education as antithetical to quality academic formation of young minds. Nonetheless, professors are critical to university life in general and specifically to student success. They are at the frontline daily and must be equipped with the skills and knowledge to allow them to do their jobs by fully utilizing the range of new teaching tools available and those that may emerge. Thus, continuing professional development in best teaching practices for instructors will be necessary across all institutions of higher education as we continue to better understand what makes students successful.

With the traditional lecture format being thrown into greater question, professors will need to be proficient in various teaching methodologies and modalities, particularly methodologies that routinely actively engage students in their learning. Professors will need to be creative and innovative in order to hold students' attention in light of the short attention spans that technology has fomented. This is not an easy task.

Changes in the faculty role have progressed from "sage on the stage" to "guide on the side" to "facilitator" to "mentor" to "partners in collaborative learning." Likewise, the student role is changing from one of "passive learner" to "being engaged" to "taking responsibility for their learning." It appears that teaching is moving in the direction of being better tailored to individual students' needs in order to foster greater student success and this will require professors who are in an ongoing stage of evolution. It will require professors who are unafraid to initiate and lead innovation, to be analytical and critical about teaching, creative, entrepreneurial and with well-developed social skills that allow them to adapt to different working environments. Professors will be

needed who are flexible and adaptable, able to work in diverse, interdisciplinary and international teams, and help students develop multiple intelligences. Many professors, as is the case now, will be part-time and fewer will be on tenure tracks. Even at research universities, some professors may be in teaching only lines, with no expectations for research and service.

Professors of the future are likely to be more international, moving freely among nations, in many cases physically relocating and in most cases simple through the means of current and anticipated technology that make it possible to teach across national boundaries from one's home, without setting foot on a single campus. Likewise, students can take classes from various institutions of higher education simultaneously from their home campus or from their homes.

Another ongoing challenge for both institutions of higher education and professors is around assessment of student learning. It is fair to say that in the past, universities were "faculty-centric" and that they are becoming "student-centric." And, the focus used to be on "teaching" and it is rapidly moving toward "learning." This emphasis on student learning had been led by accrediting agencies who started seriously focusing on this dimension of higher education about fifteen years ago. It has been a long, slow road but, clearly, American higher education has turned the corner. Assessment of student learning, or measuring "learning outcomes," is now expected of all institutions. And, it must be done at all levels, from institutional to the program and the individual course. Although, generally, faculty have been slow in embracing assessment, some professors have been leaders in this movement, recognizing that innovation in assessment of learning outcomes has resulted in greater learning among students, which is what professors want of their students. Additionally, tech-

nology is making possible new kinds of embedded assessment and adaptive curriculum.

The U.S. Department of Education states the following in its Blog page regarding the future of assessing quality, underscoring the focus on student learning outcomes:

> The U.S. Department of Education (ED) is interested in accelerating and focusing the ongoing conversations about what quality assurance might look like in the era of rapidly expanding educational options that are not traditional institutions of higher education. We are particularly interested in thinking about quality assurance through the lens of measurable student outcomes and competencies.

In sum, although students are changing rapidly in terms of demographics, experiences and expectations, faculty throughout the world are ever more prepared to meet the challenges ahead. Worldwide, a greater number of professors are doctorally prepared and their doctoral education includes theory and practice in college teaching. There is no doubt that professors will continue to work on the frontlines daily, albeit in various forms and with different methods, for the benefit of students and the greater good.

Innovation: Alternative Educational Models and Technology

Panelists and Moderator

Diego Mazo
President, CEIPA Business School, Colombia

Rita Hartung Cheng
President, Northern Arizona University, USA

Arturo Cherbowski Lask
Director, Universia/Santander Universidades,
México/Iberoamerica

Jesús Lau (Moderator)
Professor, Universidad Veracruzana,
and PIMSA Distinguished Chair at CETYS University

TRIGGERING COMMENTS AND QUESTIONS

Key questions focused on the impact of an increasingly open and interconnected world on educational models and the incorporation of technology in the delivery of education: What are universities doing and should do, in terms of the education they provide and innovation in the teaching-learning model, to be included successfully on the world stage? Does innovation in alternative educational models allow universities to be sensitive to changing student interests and to address the various solutions they expect?

For time immemorial, institutions of higher education have operated under basically one model: a comprehensive physical campus where all educational activities take place. This structure is based on the academic calendar that is comprised of two semesters, with a possible summer session in-between when students can take one or two classes. This structure was rigid, with little room for innovation. Distance, or extended education, consisted of a few course offerings through correspondence in which professors and students communicated through the traditional "snail" mail, perhaps with an occasional phone call. For a short period, distance education also included having off-campus students watch video recordings of the actual class offered on campus. These videos, too, were transmitted via the traditional postal system. With rare exceptions, complete degree programs were not offered through distance education, only a smattering of basic courses were thus made available, usually lower-division introductory and/or remedial courses.

The traditional structure and institutional policies required students to be in residence, meaning that they had to be physically present to take classes on the campus, which is where all courses and programs were offered. Moreover, almost all courses were offered between 8:00 a.m.-5:00 p.m. (in fact, because of student and faculty preferences, most courses were offered between 9:00 a.m.-3:00 p.m.). Few, if any, courses were offered during evenings and/or on weekends, making it

difficult, often impossible, for non-traditional students, specifically working adults and home-bound individuals, to take classes and enroll in degree programs. A notable exception to this day schedule is the 2-year community college sector; many community colleges routinely offered classes during evenings.

With the advent of for-profit education, as pioneered by the University of Phoenix, the traditional educational structure began to change. Institutions of higher education began to offer courses and entire degree programs off-campus in non-campus like environments, often in professional building with easy freeway access, and such courses and degrees were offered during evenings and weekends. Many traditional institutions actively resisted this innovative approach to higher education, claiming that students needed to be on campus in order to enjoy the benefits of a complete college experience that included all of the facilities (e.g., library, student union, residence halls, and recreation center), activities (e.g., intramural sports, clubs and organizations) and services (e.g., advising and tutoring) available on a traditional campus. Although the traditional campus model remains as the most common model of higher education, few individuals now argue against the decentralized model of education. This new model has proved effective.

Another innovation revolves around the semester and length of courses. Many colleges and universities began and continue to experiment with how many weeks a course should last. Today, one can find institutions of higher education throughout the world whose courses vary greatly in length, ranging from 4 to 16 weeks, some being 5 weeks and others 7.5 weeks, among various other lengths. The key to unlocking course length was based on contact hours (for a 3-credit course over an entire se-

mester, the formula represents at least 45 hours of class time and 90 hours of student preparation); thus, as long as the contact hours remain the same, the length of the course can vary. Initially, many traditional institutions and faculties were skeptical of courses that varied in length from the traditional semester-long classes, claiming that shorter courses were not of the same quality. Today, almost no one holds this point of view, particularly in light of the many studies that have found that as long as contact hours remain the same, length does not negatively affect learning.

Diego Mazo noted on how CEIPA Business School in Columbia innovated with modalities and length of course (semester or a few intensive weeks). CEIPA has moved from the traditional 16-week semester to five 8-week sessions per year, resulting in increased enrollment, employability of graduates, income of graduates, and passing rate in the national test.

An even more radical and innovative practice than length of course emerged with the advent of new technologies and, again, the University of Phoenix was the leader in their use for delivering both courses and, indeed, complete degree programs at both the undergraduate and graduate levels. These technologies allowed for teaching and learning for as many students as wished to enroll; asynchronous education that could take place anytime and from anywhere. Thus emerged what is commonly known today as online education. Online education was also vehemently resisted by many traditional universities and faculties, again claiming that this modality was of lower quality than the face-to-face model, a claim that is still heard in some countries even today, in spite of the hundreds of research studies that have found that online education, although not for every student, is highly effective for millions of students and of the same

quality as the traditional classroom modality. At least in the United States, online education is now a given and practiced by almost all institutions of higher education to deliver both courses and complete degree programs. Indeed, this model of education is growing worldwide and is likely to continue to expand.

An emerging modality that is having much success, known as hybrid or blended, combines both classroom and online education. A particular course may include classroom instruction for one week at the beginning and one week at the end of the course and the rest would be online, or a course may meet once a week online and another time face-to-face; any combination of online and classroom is possible.

Technology has made it possible to both innovate in various modalities and to reach a broader audience (e.g., MOOCs) as well as to make a profit. The future of higher education will be one in which innovations in structure and methodologies are common, resulting in a variety of alternative educational models. Many of these new models will be in partnership among two or several universities, such as with edX (a collaboration of numerous universities from several countries that offers free online courses) or Coursera (another partnership of several universities), and/or with technology companies (e.g., Google or Amazon). They may involve a single course, certificates or entire degree programs.

Chukuka S. Enwemeka described how three universities in three countries (San Diego State University from the U.S., the University of Alcala de Henares from Spain, and CETYS University from México) are innovating with one course focused on climate change. Faculty and students from the universities meet at Alcala for two weeks of intensive lectures, field trips and seminars. Students develop projects comparing issues related to

climate change in the three countries and examine business opportunities related to mitigation of and adaptation to climate change.

Other examples of innovation and international education are courses given in Tijuana, Israel, Barcelona and Finland. These courses, offered by San Diego State University, Cᴇᴛʏs University and other partner university faculty members in Spain and Finland, focus on innovation and entrepreneurship in a global context.

Another innovative model and educational change that is likely to be found in the university of the future involves the institution's relationship with its alumni. Many colleges and universities are beginning to explore a new approach to their students after graduation. Rather than considering them only as alumni, they are developing approaches to have former students return to their campuses on a regular basis; a continuous relationship for lifelong learning.

If nothing else can be said about the future of higher education, three things are quite clear regarding structure and alternative educational models: 1) successful universities will be flexible, willing to innovate around methodologies and practices; 2) technology will continue to play a central role in the teaching-learning model, regardless of modality; and 3) collaboration and partnerships, including across international lines, will be critical in educating students at both the undergraduate and graduate levels. It is also clear that academic programs of the future will be both more interdisciplinary and personalized and built around attainment of knowledge (measurable student learning outcomes) and not the credit hour.

Innovation: Leadership and Governance in a Complex Environment

PANELISTS AND MODERATOR

Rubén Covarrubias Giordano
President, Universidad Mayor, Chile

Richard Legon
President, Association of Governing Boards, USA

Petr Budinsky
Vice President, Vysoka Skola Financi a Spravni, Czech Republic

Michael Cunningham
Chancellor, National University, USA

Dan Shunk (Moderator)
Professor Emeritus, Arizona State University,
and PIMSA Distinguished Chair at CETYS University

There is a clear trend in managing universities whose mission is to be world-class; this approach centers on managing a complex and global university in the context of innovation. The challenges faced by universities include the changing and highly dynamic profiles of the main actors (administrators, teachers, students, and employers), the structures that support university models, and processes throughout the institution. If innovation is a constant in the life of universities, how does one manage a university in a highly complex global environment? What experiences exist relative to this?

Senior leadership has always been important to the success of colleges and universities. Now and in an uncertain future, innovation in leadership and governance is even more critical to the success of higher education. It is critical that leaders of colleges and universities foster a culture of innovation on their campuses if their institutions will thrive. Higher education is changing rapidly and will continue to do so. For example, technology has affected every aspect, ranging from the way students are recruited and how they apply to how they register for classes and how courses are delivered; from how students access information to how they submit course assignments and view their grades. On the backside, technology has changed the way institutions do business, from how they process and maintain student records to how they communicate with alumni.

Moreover, the social, economic and political environments in which higher education operates also are changing rapidly. For example, state and federal governments are providing fewer financial resources to colleges and universities but expecting them to do more with less. Governments have become more intrusive into higher education, exerting political pressure on universities, ranging from course and program offerings to management and governance, including the selection of presidents and members of boards of directors. State and federal governments continue to enact excessive and onerous regulations that require burdensome and costly monitoring and reporting and control how almost

all aspects of universities function, resulting in the loss of traditional university autonomy. These regulations are dependent on who is elected and can change rapidly, almost at whim with the election of new politicians. In many countries, federal governments have direct control of the systems of quality assurance.

Additionally, the larger society, often through the parents of students and elected officials, is placing demands on higher education. For example, society expects greater accountability and transparency on the part of higher education and its leaders.

All of these and other changes have created a highly complex environment for higher education throughout the world and have greatly challenged and placed new pressures on higher education leaders, challenges and pressures that are likely to increase in the coming years. Thus, leaders are needed at all levels, including boards of directors, presidents, vice presidents, deans, directors, and managers who can transform universities into the future. These leaders must be able to articulate a clear and convincing vision for their institution and put the vision into practice with a strategic plan that includes specific measurable goals by competent and committed managers. It will require that all institutional leaders, staff and faculty move in the same direction. Obsolete policies, practices and organizational structures will need to be re-envisioned in order to transform the universities into a more flexible and agile institutions. One panelist noted that:

> There remains a culture of conservatism within European higher education which needs to change. This demands strong leadership and vision from both public authorities and institutional leaders.

Why do universities need to be transformed? First and foremost, universities need to change in order to

better serve the needs of students and society. Through-out the transformational process, leaders will need to keep their eyes on the prize. What is the prize? Student success is the prize, both within (in academic programs) and beyond the university (in jobs and careers).

The president of the university plays a central and critical role in the life of the university, both internally and externally. Internally, this individual is responsible to for moving the institution forward by setting the tone, creating the culture for change and putting together a leadership team to get the job done. The president also is responsible for inspiring students, faculty and staff to move together (ideally, enthusiastically) toward a common vision.

Externally, the president is responsible to promoting a positive image of the university with the governing board, accrediting associations, politicians, donors, alumni, other institutions of higher education, professional associations, and the general public. The president is responsible for putting together the support and financial resources to transform the institution and move it into the future.

In an ever increasingly complex social, economic and political environment, the leaders and managers of tomorrow will need to have both the authority and power to be able to deliver on the institutional vision. Transforming institutions is a difficult undertaking that requires bold leadership, particularly when it involves the merger, elimination, and creation of academic and administrative units, which may lead to the elimination of positions and creation of new ones throughout the institution. Leaders will have to be highly strategic in the allocation of financial, human and physical resources, as well as in the use of technology. Indeed, universities will need to change if they expect to be successful in

the future; remaining stagnant will result in atrophy, possibly closure. Institutional transformations will also require exceptional creativity and continuous innovation. The future needs leaders who are courageous risk-takers; change only occurs by taking risks. Perhaps most of all, the future needs higher education leaders who are ethical, who demonstrate ethical behavior daily.

Effective leaders will need exceptional interpersonal and communication skills for engaging both internally and externally, including internationally. Effective leaders and managers will want to be knowledgeable of best practices in higher education worldwide and be willing implement them, recognizing the need to contextualize. They will want to use data in the decision-making process and be committed to continuous improvement; quality is the name of the game. Effective leaders will build broad relationships, meaningful partnerships with government, business, industry and with higher education institutions within country and internationally. Furthermore, wise leaders will want to appoint leaders, managers and professors that reflect the diversity of the populations their universities serve in order to maximize opportunities for institutional success. Leaders of colleges and universities must foster a culture if their institutions are to thrive in the future.

Innovation and change can be difficult in higher education with its culture of shared governance, where the faculty is expected to be engaged in decision-making, particularly on academic matters. Given this culture, transformational leaders will need to work closely with the faculty. Professors, particularly those in faculty leadership positions, such as Faculty Senates and critical committees, will need to learn to provide their input and make decisions quickly. Ideally, faculty leaders will be fully committed and engaged in the transformation of

their university, from visioning through implementation of innovative practices.

It was noted by the panelists that Dr. Fernando León García, the President of Cᴇᴛʏs University, exemplifies the leader of the future. He and the Board, for example, have a clear vision of, and plan for the university; he is focused on quality in all institutional endeavors; he has assembled a team of administrators and managers that are leading in the same direction; he has generated the resources necessary to make significant changes; he has established numerous practical institutional partnerships, from local to international, for the direct benefit of students and professors. Dr. León García is transforming Cᴇᴛʏs University and positioning it for continued success.

Innovation: International Partnerships

PANELISTS AND MODERATOR

Antonio Esqueda
Assistant Provost for International Education,
City University of Seattle, USA

René Lara
Director for International Relations,
Universidad Mayor, Chile

Bob Benson
Vice President of International Affairs,
National University, USA

Hochuel Han
Manager, International Office,
Hanyang University, Korea

Daniel Palm
Executive Director and Special Assistant
to the President for International Education,
Northern Arizona University, USA

Salomon Amkie
Director of International Relations,
UNIVERSIA/Santander Universidades, México

Tatiana Karmanova
Dean of Extension and Continuous Education,
California State University San Bernardino, USA

Alan Sweedler (Moderator)
Assistant Vice President for International Programs,
San Diego State University, USA

TRIGGERING COMMENTS AND QUESTIONS

The first universities were intended to be international, drawing students and professors from various countries. Indeed, the academic subjects, ideas and concepts with which they dealt were universal, such as philosophy, logic and mathematics. In the modern university, what are the "best practices" and case studies on innovative international partnerships? What is the role of presidential leadership and/or senior leadership in innovation for international programs? Who should be involved in the management of international partnerships? What are the critical challenges to innovation in international partnerships? What aspects should be considered in creating strategic partnerships – breath of impact, depth of impact, faculty support, mutual benefit, sustainability, etc.?

Globalization is here to stay! All panelists in this and all of the other panels agreed that the best universities today are international institutions and the best universities of the future will be even more international. These institutions of higher education will have internationalization as part of their core mission and internationalization will be a central pillar of their strategic plans. They will attract students and professors from throughout the world, recognizing that diversity of perspectives and experiences are critical to a quality education of both undergraduate and graduate students. Moreover, such an education is best suited for preparing students for the globalized world in which they will live and work.

The world in which our graduate will live and work will become increasingly globalized, if for no other reason than technology. Technology provides a platform for reaching international markets and complements existing developments in cross-border education. Certainly, technology will facilitate greater international engagement, even for individuals who may not travel much outside their home country. Through technology, for example, a student who may not have the financial resources to participate in a study abroad program may still engage with students from other countries through the internet. These students could work on a class project by collaborating in international teams that meet thought the internet, includ-

ing via video conferencing through Skype, for instance, in classrooms or simply through a platform such as Face-Time on their phone and other mobile devices.

A university where internationalization is central to its mission will expect, indeed, require international engagement by senior administrators and managers, the faculty, and students. All such engagement would be ethical and have as its ultimate benefit the education of the institution's students. Senior administrators would be engaged in establishing formal partnerships with foreign universities for the benefit of all of the institutions involved in a particular partnership. It is essential that these partnerships be substantive, rather than ceremonial as many have been in the past. Senior administrators would also be regularly involved in international associations where they would make presentations at annual meetings and serve on boards of directors and working committees of these associations and organizations.

As part of their professional development, professors should be required to engage internationally. Such engagement can take a variety of forms. For example: a professor could partner on research projects with one or more peers from one or more universities outside the home country; a professor could lead a group of students on a study abroad program; a professor could teach at a foreign university during their sabbatical or as part of a formal exchange program; a professor could engage in work or service activities abroad during the summer; etc. The possibilities are endless. All faculty international experience would greatly benefit the individual professors, their students, and both the home and host institutions.

Professors would also be involved with international professional associations in their fields of expertise, including making presentations and annual conferences and professional meetings and serving on boards of directors and committees of these associations. Scholarship is a global undertaking.

Likewise, institutions of higher education could require an international experience of all their students. These experiences could take a variety of forms. To be certain, there are challenges in internationalizing an institution of higher education. These challenges may include, lack of an international vision among senior leaders, lack of support among the faculty, lack of interest among students, lack of support for and even hostility to internationalization on the part of members of the governing board, powerful politicians associated with the university, alumni, etc. Other challenges include simply arriving on an agreement that has mutual value, including financial, and to which institutional leaders are committed to providing the leadership and resources necessary to implement the agreement. Also, there is the challenge of institutionalizing agreements, that is, of building them into the fabric and life of the university so that when the leader that championed a particular agreement leaves the institution, the activities associated with that agreement continue to operate. Too often in the past, the long-term success of international agreements has been dependent on a particular individual and the activities pertaining to those agreements have disappeared when that leader left the university. Other challenges of working across international borders may

include cultural and language differences, including the culture of the university.

Although the challenges of working across international and cultural lines can be great, the benefits on internationalization are greater and touch on various dimensions of an institution of higher education. For example, Hochuel Han of Hanyang University of South Korea provided statistics on how his university, as a result of innovation and specifically its focus on internationalization:

> had experienced growth in student enrollment, both domestic and international, expanded international internship experiences for students in both the humanities and business, expanded international student exchanges with various universities, including in Australia, the U.S. Europe and Latin America, and its global rankings increased.

The panelists commented on how CETYS University is being transformed into a high quality international institution with the strong leadership of the president, Dr. Fernando León García, and other senior leaders, the unwavering support of the Board of Directors, and the direct engagement of professors and students. This internationalization is central to CETYS mission and strategic plan and encompasses all of the university's activities and initiatives, first and foremost academic but also co-curricular and sports activities. The internationalization of CETYS University is demonstrated in numerous ways, including, for example, by its having achieved international accreditation from the WASC Senior College and University Commission in the United States and by the international representation at this Symposium.