



EURASIAN
HIGHER EDUCATION
LEADERS FORUM

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GLOBAL TRENDS IN HIGHER EDUCATION
AND THEIR IMPACT ON THE REGION

CONFERENCE PROCEEDINGS

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Nazarbayev University Graduate School of Education is delighted to present the publication written by local and international contributors. The collection stems from the annual International Conference '*Eurasian Higher Education Leaders Forum*' held in June of 2013.

Nazarbayev University Graduate School of Education draws on robust research to address pressing education policy issues and provide innovative, evidence-based advice to policymakers and practitioners. Many internationally recognised higher education leaders have been invited to share expertise among leaders of academic institutions of the newly independent countries of the post-Soviet Central Asia. At the same time, university presidents, rectors and vice rectors as well as ministerial representatives of Central Asian states have been invited to share their invaluable experience of administering and leading their home institutions in challenging times after the collapse of the Soviet Union.

Speakers and delegates from more than 30 countries attended the Forum in 2013. Attendees discussed the global trends in higher education and their impact on the region. The Forum has been divided into three plenary sessions: 1) University Leadership, Governance and Accountability; 2) Quality Assurance in Education & Research and Accountability and 3) Trends in Global Educational Hubs.

Key themes include:

- higher education leadership
- university autonomy and accountability
- research and development
- internationalization and academic mobility
- higher education financing

The Forum aimed at developing an international dialogue between higher education leaders, policy makers, researchers and practitioners from different parts of the world. We believe this dialogue should be at the heart of collaboration both on individual and institutional levels. The papers are based on presentation speeches and articles that offer local and global perspectives on the future of higher education, showcasing the breadth and depth of opinions.

We hope that the annual Forum and its conference proceedings will serve as a valuable resource for higher education leaders, faculty members and policy makers. We invite everyone who is interested in reflecting on the continuities and changes in education development and taking strategic actions to improve their national and local educational environments.

Information about the annual Eurasian Higher Education Leaders' Forum is available on our website at www.ehelf.nu.edu.kz.

We are indebted to our speakers and authors as well as members of the Steering Committee, for their contributions and unstinting support. This collection of papers is a project of the Nazarbayev University Graduate School of Education.

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Nazarbayev University Graduate School of Education,
Astana, Kazakhstan
September 2013

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NAZARBAYEV UNIVERSITY AS A FLAGSHIP UNIVERSITY IN KAZAKHSTAN

Yerbol Orynbayev

Ladies and gentlemen, I am very pleased to welcome participants of the Eurasian Higher Education Leaders Forum to Nazarbayev University. I believe events of lively communication and fruitful discussion like this among representatives of different countries can facilitate the search for innovations and the development of education. Our country has always given priority to the modernization of the national education system. The State Programme of Education Development for 2011-2020 lays out a clear vision of the future of the nation for the next ten years. Kazakhstan is a literate nation with an adept economics system and a highly qualified labor force. A competitive education system serves as a foundation for the future socio-economic and cultural prosperity of the country. A step-by-step road map for modernizing the national education system is laid out in the aforementioned State Programme of Education Development aimed at ensuring the availability of quality education as a factor contributing to sustainable economic growth.

The government of Kazakhstan considers the funding of the education system not merely as social expenditure, but rather as an economic investment. I hope that within the framework of this Forum, many interesting proposals on modernizing the Kazakhstani educational system will be developed further.

Dear colleagues and guests, it is a special pleasure for me that Nazarbayev University (NU), alongside its strategic partners representing world-class universities, can serve as a model to present Kazakhstan to international academe. We are actively studying international best practice and aim to become a center of educational and research expertise in Central Asia, the CIS (Commonwealth of Independent States), and Eurasia overall. A bright example of our aspirations is Nazarbayev University. Today, it forms a modern and innovative environment in Kazakhstan by mobilizing its scientific potential, leading international human resources, and talented youth of the country. Nazarbayev University is becoming the core of a new and innovative cluster of sites of higher education.

For the purpose of realizing the first stage of the cluster, a Commercialization Office, a Business Incubator, and a Piloting Techno Park have already been established with an industrial, high-tech layout. National and international companies will provide the opportunity to locate their own infrastructure for the production and research areas of this layout. The selection of the companies will be based on their cooperation with the research centers of Nazarbayev University and the priorities of industrial development of Kazakhstan.

A large number of interesting projects are emerging as a joint effort of the international faculty and young scholars of Nazarbayev University, all of whom obtained their education at the best engineering universities in the world. This University is still very young. However, within a short period of time, Nazarbayev University has managed to build an efficient system for promoting innovative ideas by scholars.

The strategic plans of Nazarbayev University have been approved for the years of 2013-2020, and this event has heralded a new stage in the University's development. The strategy defines the main long-term objectives and directions for their realization to ensure the dynamic development of the University in becoming a significant model of quality education as an exemplar for other institutions of the country.

The main objective of the University is to prepare professional scientists, managers and entrepreneurs that are required for the sustainable development of Kazakhstan as well as the development of the capital city as a center of knowledge and innovation. In order to ensure collegiality, and transparency of the educational policy of the University in accordance with international practice, collegial bodies such as the Academic Council, Research Council, and Faculty Council have been created.

Beginning from the last year, the University, with the Ministry of Education and Science, has started working on the concept of transferring the University's expertise in higher education management to other higher educational institutions of the country. With that in mind, the University will be transferring its expertise not only in the field of academic governance, but also in terms of innovation in research and development with a focus on the transfer of science.

For Kazakhstan, Nazarbayev University is an experiment that allows the government to reform the existing university structures and create new higher educational institutions. It is not accidental that even today's event has been specially organized by Nazarbayev University.

Dear participants, in this Forum, raising the quality of human capital is an important priority in our country. It is specifically our stake holding in the investment in the development of our future generations that will allow us to develop a competitive nation. Competition, in its turn, is necessary for the formation of an innovative economy. I hope that such forums will become a lasting tradition and lay meaningful grounds for the exchange of cutting-edge expertise and ideas in terms of raising the quality of education in Eurasia in correspondence with best international practices. I wish you a constructive dialogue, efficiently deployed effort, and interesting discussions.

Thank you for your attention.

LEADING EDUCATIONAL REFORMS IN CENTRAL ASIA: THE CASE OF KAZAKHSTAN

Bakhytzhan Zhumagulov

Dear colleague, ladies and gentlemen. It has been a year since our first meeting in the format of Eurasian Higher Education Leaders Forum. It is good to see you again – top managers in education from many Eurasian countries – here at the Second Forum in our beautiful capital city Astana. I think you will agree that these meetings at Nazarbayev University have become a unique conversational platform, and it has great prospects.

After all, today the role of leadership attracts particular attention in global and local initiatives of human development. Let us recall that at the beginning of the 16th century, a Florentine thinker, Niccolò Machiavelli, assigned the phenomenon of leadership as one of the main functions in management of the society. The phenomenon of leadership has become a powerful driving force for statehood, social development, and systematic breakthroughs in policy, economy, science, thinking and the motivation of people.

Each of us can cite many examples of leaders who determined and influenced various spheres of human life. A very clear evidence of this was provided by the First International Nazarbayev Readings Conference held in Astana in November last year. They were devoted to a comprehensive study of the phenomenon of Nursultan Nazarbayev's leadership – the First President of the Republic of Kazakhstan, and this event will take place on a regular basis.

The scope of higher education makes no exception in determining the importance of the role of leadership and this role has not been entirely explored yet. I think that our Forum will ensure significant advancement in this topical issue, for instance, in my opinion, in two key aspects. First, it is the leadership of universities themselves in the global context. We are witnessing times when leading universities are beginning to define the scope and directions of development not only in education, science and innovation, but they also exert a growing influence on the formation of the world's elite.

By means of this, down the chain of leadership, universities are having an impact on economic, scientific, technological and social development. There is a large field for today's debates, for example, on the question – is the Eurasian region ready for global and strong competition for leadership in the world of higher education? What are the predictable consequences of such competition, and how could it change the appearance and the role of higher education in the future?

Second, it is the topic of the leadership of top managers in higher education. As analysis of recent times shows, their role in making progress can be comparable to, and sometimes even higher than, corporate governance mechanisms. To what extent is higher education of the Eurasian region capable of producing the world's best exemplars of leadership in managing universities? Are university leaders ready to address issues of public concern? And these are, primarily, quality, relevance, massification of higher education, interaction between universities, the labor market, industry and society.

I hope that these issues will be reflected in discussions at the Forum. It is particularly relevant today, when Kazakhstani higher education faces new ambitious goals defined by President Nursultan Nazarbayev in the Strategy "*Kazakhstan – 2050*" as our nation enters

the next stage of growth, oriented to membership in the group of thirty most developed countries of the world.

The concept of transition to a “*green*” economy is adopted. Funds in the amount of two percent of national GDP will be invested in “*green modernization*”. Implementation of this concept should be accelerated by the World Exposition EXPO-2017, which will take place in Astana under the theme “*Future Energy*”.

In full swing, too, is the creation of the Eurasian Economic Union, which will bring together regional markets of goods, services and the labor force of Kazakhstan, Russia and Belarus. This is not even a full list of significant challenges that confront us for the successful completion of the swift development of higher education and research.

I would like to summarise in a few words what has been done so far. First of all, we are integrating the academic community of the Eurasian continent with the world globally. In the near future, transfer of a part of our public universities into the trust management of consortiums of foreign and domestic investors will be initiated by the President of our country. This will represent another form of cooperation. This is what we are now doing.

We plan to create scientific and educational world-class clusters in the fields of agriculture, energy and chemistry. Nazarbayev University will serve as a model, with its pattern of international engagement in science, education and innovations. Other means of international integration will be the development of new study programmes for higher education institutions (HEIs)

First and foremost amongst these will be 70 programmes in all educational specialties for undergraduate, graduate, and doctoral degree programmes. Experts in the Graduate School of Education of Nazarbayev University and the universities of Great Britain, Australia, Germany, Finland, Belgium, Japan, South Korea, China, Singapore, etc. are involved in the elaboration hereof. Starting from the next academic year, we will start testing the programmes. Systemic importance for international integration is acquired by the introduction of multilingualism at all levels of education from kindergarten to higher school and post-graduate education, as initiated by the Head of our state.

In the same vein is the formation of a system of independent accreditation of HEIs involving Kazakhstani as well as foreign agencies, and its introduction into the European Quality Assurance Register for Higher Education. This will represent a gradual departure from total government supervision in the field. Already by 2015, state certification of universities will be cancelled.

Dear colleagues, this year marks 20 years of the unique strategic initiative of Nursultan Nazarbayev, that is, the “*Bolashak*” International Scholarship Programme. During this time, thousands of programme scholarship holders have completed their education and are working in various sectors of the nation’s economy. The success of the “*Bolashak*” Programme has served as a good example of the systematic development of the academic mobility of our students.

In addition, we have an on-going relationship with internationally-recognised scholars. In 2011–2012, we invited more than 3,000 professors – from Europe, the U.S., the Russian Federation, Southeast Asia and other parts of the world.

Kazakhstan is among the countries that have adopted a National Framework of Qualifications. Our National Framework is compatible with the European Framework of Qualifications and is a basis for development of National System of Qualifications. In these terms Sectoral Frameworks of Qualifications were developed in a number of key areas of human activity. Systemic development of professional standards was initiated with view to emulating global experience. These standards will form the main basis for the elaboration of new academic programmes and the certification of specialists graduating from our universities. The certification will be carried out by independent centers established on the basis of sectoral employers' associations. This is a completely new mechanism of interaction of Kazakhstan's higher education with the national economy.

Dear colleagues, during the year since the First Eurasian Higher Education Leaders Forum, our higher education system has moved forward considerably. Our HEIs have entered the top 400+ universities according to QS World University Rankings 2012-2013. State policy is firmly focused on strengthening the research output of the university sector. Just in 2012, the number of papers published by our researchers in international peer-reviewed journals has more than doubled.

In 11 universities, a new model for integrating science and innovation, the commercialization of research, and attracting talented young people has been developed. We pay special attention to training scientists. As you know, we have completely switched to the accepted international practice by adopting a three-tiered degree system.

Young people are embarking on their careers of scientists and the number of our researchers has started growing.

Today, we are improving mechanisms of training scientists in accordance with the policy of industrialization of the country. By 2020, we envision to increase our intake for PhD programmes by a fourfold increase. Thus, our higher education sector is on the move, and we are drawing consistently on the most advanced world experiences for its development.

Dear friends, the Eurasian region – and the world as a whole – have entered a period of considerable change. In these circumstances, it is highly important to maintain the pace of progressive development and to stick to ambitious goals. The Eurasian Higher Education Leaders' Forum plays an important role in determining guidelines for higher education development in our countries.

I wish you very fruitful work and innovative achievement in the development of education and science.

ACADEMIC FREEDOM, SHARED GOVERNANCE AND LEADERSHIP IN EXCELLENT ACADEMIC INSTITUTIONS

Richard Miller

Abstract

World class universities are, without exception, the result of a community of world class scholars and teachers driven by a passionate and unhindered pursuit of truth. Assembling this exceptional community and establishing a sustained culture of excellence—driven by a shared vision and marked with openness to new ideas and innovation—is the responsibility of leadership. Governance is responsible for defining the purpose and goals of the university, recruiting and supporting the leadership team, and assuming fiduciary responsibility for all assets of the institution. The relationship between faculty, leadership, and governance is highly complex and unlike that in any other enterprise—largely because of the fundamental role of academic freedom and shared governance. The principles of leadership characterized by a “*command and control*” culture (typical of the military and certain for-profit corporations) works against academic freedom, limits innovative research and the establishment of teams of world class scholars. Academic freedom requires a different culture characterized by trust in the faculty and taking of reasonable risks.

This paper presents some practical lessons in leadership and governance learned during the establishment of Olin College of Engineering in Massachusetts. Olin College embraces academic freedom and shared governance, but does not offer tenure to faculty members nor does it maintain academic departments. Governance is by a Board of Trustees that includes both Founding Trustees (who provided all initial financing and may serve for life) and others who have fixed term limits. Several topics are examined, including: the continual need for board education in academic culture; avoiding micromanagement by the board on one hand, and disengagement by the board on the other; and the problem of establishing shared values and vision. Leadership is an art, and is vastly different from management. Governance is also an art, requiring patience, wisdom, and a willingness to take reasonable risk in order to achieve world class results. There is no certain formula for success. It is a complex human process requiring constant improvisation, intense commitment and patience, and a healthy measure of good fortune.

People and Culture

The context here is the establishment of a leadership and governance environment designed to promote world class university. I begin with an observation that world class universities are, without exception, characterized by world class people, and also a special culture that results in widespread excellence and continual learning.

Since universities are about ideas and people, the quality and impact of a university is determined fundamentally by the quality of the people affiliated with the university. One way of thinking about the many aspects of a world class university (finances, facilities, location, leadership, etc.) is that their ultimate purpose is to attract and retain world class people. No matter how good these other aspects are, nothing can compensate for the absence of truly excellent people.

But having talented and motivated people is not enough. In addition, the university must also establish a culture that results in the continual focus on learning and on collaboration. As stated by Dr. Charles Vest, former President of MIT and of the US National Academy of Engineering:

“Making universities and engineering schools exciting, creative, adventurous, rigorous, demanding and empowering milieus is more important than specifying curricular details.”

Academic Freedom, Intrinsic Motivation, and Management

At the heart of this special culture—which is undoubtedly the most difficult aspect of creating a world class university—is the notion of academic freedom. Academic freedom provides the freedom for all members of the academic community to pursue the truth, wherever it may lead, without fear of retribution. It allows them to think broadly and deeply about whatever excites them, to be driven solely by curiosity, and explore multidisciplinary aspects of problems in pursuit of a more complete understanding. Balancing this freedom is the expectation that the results they produce will be marked by rigor, quality, and impact. This expectation for high standards is powerfully enforced by a system of “peer review,” where the academic rank and general respect of every individual in the university is determined by a process of very serious and confidential peer review of all the academic work (scholarship, research, artistic creations, etc.) produced by each individual.

When properly established, a culture of academic freedom thrives on achievements and pursuits of faculty and students that are driven by intrinsic motivation, rather than extrinsic motivation. When people are driven by intrinsic motivation, they simply do their best work. As reported in the recent book *Drive: the surprising truth about what motivates us* (Pink, 2011), when objective assessment of art works produced under commission is compared with the assessment of similar work by the same artists motivated instead by self-interest, the intrinsically motivated art is consistently judged to be of higher quality. Simply put, people do their very best work when they really care about the subject and are deeply motivated from within. This principle almost certainly applies to research and scholarship, too. And when the goal is to achieve world class standards of excellence across a university, each faculty member should be motivated intrinsically to get world class results. Hence, academic freedom is essential for the culture of intrinsic motivation to thrive.

However, academic freedom also presents some very challenging problems in decision-making and management. If everyone in the university is independently pursuing their own ideas and following their own passions, coherence and institutional direction are very difficult to achieve. Perhaps instead of determining a precise direction for the university, the best that can be achieved is an alignment of values and interests among members of the academic community.

The Clock Speed Problem

In practice, shared governance – or the engagement of all members of the academic community in major institutional decisions – is necessary to attract and retain world class faculty members, who expect to be treated as senior stakeholders in any important changes at the institution. This shared governance can take many forms, but it always involves extended conversations characterized by lengthy discussions at all levels, rather than abrupt memos that direct others in what to think or do. In short, it takes much longer to make a significant

change in a university with academic freedom and shared governance than it does to make a change in a top-down managed organization, like the military or some tightly-managed corporations.

The contrast between the time to reach a conclusion within an academic institution and a corporation is often profound. For example, it may take only a few days for a corporation to make a profound strategic decision that affects all members of the organization; for example, to stop making a certain product and terminate the employees working on that product. In contrast, it is typical under shared governance for a university to take up to an academic year to make a final decision on a new strategic direction, such as a strategic plan. This difference in lapsed time may be considered a “*clock speed*” problem in a university.

When properly implemented, the result is a culture where each member of the community reports that “*I have never worked this hard in my life, but there is nothing else I would rather be doing (!)*” This phrase is frequently heard among students at Olin College, where surveys by Princeton Review have repeatedly identified our students among the top 5 in the US for the category “*students never stop studying*,” while simultaneously identifying Olin students among the “*happiest*” students in America.

A Culture of Interdisciplinary Teamwork

Another important dimension to leading edge innovation is that it typically involves the cross-fertilization of ideas from one academic discipline (or research laboratory) to another. This aspect of the culture is better illustrated by corporations that have a great track record of major innovations than it is in universities, where faculty members have so much autonomy that they often evolve a working environment that minimizes inconveniences for them. One such inconvenience is interacting significantly with people who are not familiar, or engaging with a problem where you need to admit that your expertise is limited.

Some corporations whose culture provides a good example of this inherently interdisciplinary and team-based approach to problem solving include 3M Corporation, Bell Laboratories, Apple Computers, Google, Pixar, IDEO, and facebook. Although each company has a unique culture, these particular companies all share the characteristic that they encouraged cross-functional approaches to research and product development. (Professional colleges and academic departments within universities, unfortunately, often provide substantial barriers to this behavior.)

Interdisciplinarity and Education for Innovation

The term “*innovation*” is so over utilized today that its definition has become unclear. To focus the discussion here, I will define Innovation as the process of having original ideas and insights that have value, and then implementing them in ways that result in significant change in the way people live. A really profound innovation is one that changes life so profoundly that few people can remember life before the innovation was introduced.

This broad definition of innovation intentionally includes non-technology innovations, which are likely to become fundamentally important in the 21st century. For example, I propose that every profound innovation involves the simultaneous occurrence of three independent aspects: feasibility, viability, and desirability. Nothing happens in this world unless it is consistent with the laws of natural science (i.e., feasibility). Among all those

things that are feasible, only those that are also viable – that is, that are financially beneficial by producing more value than they require to make – are the ones that investors might be willing to attempt to produce in large quantities. Finally, among all those things that are both feasible and viable, only those that are also desirable to the society at large are likely to be chosen over competing alternatives in order to become widely accepted.

Some examples of profound innovations in the last one hundred years include the automobile, the airplane, the telephone, the radio, television, computer, internet, space travel, etc. Each of these innovations is now so widespread that few people in the developed world can remember life before they were introduced. But these innovations all involve the invention and widespread implementation of some new technology.

Innovations have also occurred that do not involve technology, at least not as the central feature. These include, for example, the credit card. The credit card, which is a relatively recent invention, has changed profoundly the way people live and behave. Another example is perhaps the iTunes business model for distribution of music through Apple products. This music distribution systems, which is fundamentally a business process innovation, has completely changed the music recording industry and now threatens to change the book publishing industry.

Finally, innovations may also include more abstract things, like Facebook. What does Facebook sell, exactly? I believe Facebook provides the opportunity for all people to tell their story. All humans apparently have a fundamental need to tell their story to friends, perhaps to compensate for the transition to a globalized world in which the nuclear family and local communities are much less influential in the lives of young people today. Another example might even be religion, which changes the personal identity and relationship between people on a large scale.

What do we learn from this framing of the concept of Innovation about educating the next generation? Well, first we see that innovation involves the simultaneous intersection of three independent domains (feasibility, viability, and desirability). But higher education in the last two hundred years has separated these domains into distinct specialty schools on large campuses. For example, “*feasibility*” is the primary domain of engineering and natural sciences. Viability is the primary domain of business and management. And, desirability is the primary domain of psychology, art, and design. Our educational system tends to isolate students in each of these sub-disciplines, minimizing their opportunity to see the intersections. This over-specialization is very likely to create barriers to innovation. The graduates of our traditional academic programs are good specialists in their disciplines, but the insights and opportunities that lead to big innovations lie at the intersections, not in the center of these domains.

To compensate for this, our educational model should change to encourage, or require, a greater degree of interdisciplinary learning. Experience on heterogeneous teams drawn from very different disciplines has proven in innovative corporations to accelerate the production of innovations. Our educational models should learn from this and prepare our graduates accordingly. (This is why Olin College does not have academic departments, and students work on 10 – 20 team design projects during their 4-year engineering degree program.)

Can Innovation Be Taught?

A recent study at Harvard University (Wagner, 2011) followed the early life and career of several exceptional innovators to discover the characteristics most responsible for their

education and success. The themes that emerge are (1) unstructured play during childhood, (2) development of personal passion that fuels an obsessive time commitment necessary to develop real expertise, and (3) identification of a purpose in life in the later career, that drives a commitment to use the expertise to make a positive difference in the world. (This book contains an extensive description of the learning model adopted at Olin College of Engineering.) The conclusion is that creativity is more a product of the learning environment than a person's DNA. As a result, careful attention to creating the right environment is an important contributing factor to the development of innovators.

The learning environment should allow for unstructured experimentation and experiential learning, cultivation of intrinsic motivation, and an ultimate focus on making a positive impact on the world.

The essence of learning to innovate is the skill or practice of improvisation. Learning to improvise, when faced with unexpected challenges, is a central aspect of preparing innovators (just as it is in preparing jazz musicians, as compared to classical musicians, who learn instead to perfectly reproduce the notes written centuries ago by someone else).

Now that we have outlined the type of education needed to become world class, and the learning culture necessary to cultivate world class academic achievement and innovation, we can turn our attention to the problem of structuring the leadership and governance necessary to create and sustain such an organization.

Who Is Responsible for Attracting the People and Building the Culture?

It all starts with the President. Leadership is of critical importance to the establishment of culture and of attracting the right people. The President should establish and live the core values of the institution. S/he must create a culture and organization that values academic freedom and shared governance. To insure that the entire institution understands on an emotional level as well as an intellectual level that the President is authentic in her/his motives, the President should let her/his personal passion shine brightly and infect others in the organization. Charisma is a very useful tool of effective leadership.

The President's task starts with attracting the right people. These are people who are not only world class in talent, but motivated not to seek personal gain or recognition, but rather to make a positive difference for others. In my opinion, the true measure of greatness of an individual is not seen in their accumulations, but rather in their contributions. This spirit of commitment to a cause greater than themselves is fundamental to building a world class institution.

Finally, the President must be or become the change you wish to see in the world, as demonstrated by Gandhi in India.

What is the Primary Role for Governance?

The primary role for governance is to define the purpose and goals of the university, to recruit and support the president, and to assume a fiduciary responsibility for all assets of the institution. This includes responsibility for all forms of inter-generational equity.

Trustees in the best universities are unpaid volunteers who willingly donate their time and treasure for the long-term benefit of the university.

It is critical to note that the governance board is NOT responsible for managing or leading the university. The leadership team manages the university, while the Trustees simply govern.

Governance ≠ Leadership ≠ Management

It is also critical to note that Governance is not the same as Management, which is also distinct from Leadership. These are all three separate and distinct roles that are played by separate and distinct people in the university.

For example, Leadership should ideally be provided by the President, or Chief Executive Officer. The CEO is primarily responsible for “*doing the right thing*.” This often involves making decisions that may be inconvenient and/or unpopular, but important for the long-term welfare of the university.

One example might be to give highest priority to factors that affect quality, while simultaneously managing the less important factors of cost and schedule. Most leadership decisions have consequences on all three of these factors, but leadership requires prioritization. If a world class institution is the goal, then quality must be given higher priority than either cost or schedule, most of the time. (Ten years after a key decision is made, no one is likely to remember whether the budget was balanced initially, or whether the project remained perfectly on schedule, but everyone will notice whether the overall quality turned out as high as planned. It is the leader’s responsibility to meet the quality goals.)

On the other hand, the Vice Presidents, or management team, are responsible for managing the university and executing the decisions made by the President. This team constitutes the group of operating officers that must “*do things right*.”

Finally, the Governance Board is responsible for providing oversight, not decisions or implementation. This means asking general or strategic questions, judging the judgment of the President, and changing the President when needed. Ideally, a key responsibility of the board is to do whatever it takes to support the leadership of the president, rather than undermine it.

In addition, the governance board must exemplify the utmost integrity and avoidance of even the appearance of a conflict of interest. The honesty and integrity of all member of the board should become a beacon that inspires others to demonstrate the highest level of ethical behavior in building the honor and reputation of the university.

Teamwork Between Governance and Leadership Team

The maintenance of a positive relationship between the governance board and the leadership team (including the President and Vice Presidents) is essential for the university to operate successfully. Experience shows that this requires a delicate balance involving constant attention.

Best practices in this area involve a special relationship between the President and the Chair of the governance board. Ideally, there should never be any secrets between them (Chait, et al., 2004)

Between the leadership team and the entire governance board, there should be no surprises. The leadership team should make sure to consult with the governance board before making any decisions of long term or strategic importance. “*No surprises*” is the fundamental rule. Of course, the same applies in the opposite direction. The governance board should never surprise the President or the leadership team with any decisions of long term or strategic

importance. In fact, most decisions should be made by the President, and the governance board should be in the position of approving or denying proposals made by the President and the leadership team (Sample, et al., 2003) and then supporting these decisions.

The leadership team has an equal obligation to engage with the entire academic community before making any major strategic decisions. Communication with the community should ideally be so good that the community also feels informed and engaged in all major strategic decisions. *"No surprises"* applies in this area, too.

Experience shows that many of the problems that develop in leadership and governance of universities are the result of problems with communication. One rule for handling this is the following: *"It doesn't matter what you told them. It only matters what they heard!"* It is the responsibility of each member of the leadership team to communicate so well that they personally insure the right people actually received and understood the message in every case, not just that they told them in some way. It is not acceptable to refer to the fine print in a memo, which no one read or understood.

Another useful rule for leaders to hear is this one: *"First, tell them what you are going to tell them. Then, tell them. And finally, tell them again what you just told them."* The conclusion is that you cannot communicate too often or too much! When operating successfully, it should feel to the leadership that they are over emphasizing communication.

In conclusion, successful establishment of world class universities involves exceptional people; academic freedom and a culture of innovation; the President sets the vision and establishes the culture; the leadership team manages the implementation; and the governance board provides oversight and support. World class universities are characterized by a complex dynamic ecology of excellence in leadership and governance which is an exquisite art requiring constant attention and improvisation, not a science that can be precisely codified in an algorithm.

References

Chait, Richard P., William P. Ryan and Barbara E. Taylor (2004), *Governance as Leadership: reframing the work of non-profit boards*, New York: Wylie.

Pink, Daniel (2011) *Drive: the surprising truth about what motivates us*, New York: Riverhead Books.

Sample, Steven B., and Warren Bennis (2003) *The Contrarian's Guide to Leadership*, San Francisco: Jossey-Bass.

Wagner, Tony (2012) *Creating Innovators: the making of young people who will change the world*, New York: Scribner.

SOCIAL RESPONSIBILITY OF UNIVERSITIES

Kent MacDonald

In our short time together this morning, I will provide two environmental landmines that most universities must navigate and subsequently two recommendations for your consideration. I am greatly influenced by the role I see Algonquin College playing not only in Canada but literally around the world. As one of Canada's leading polytechnic institutions, our expertise has been sought by countries including China, India, Montenegro, Kuwait and Saudi Arabia among others. We set ourselves apart by the expertise and market knowledge of our faculty and the service orientation of our staff. I would welcome everyone here to visit us in Ottawa should you ever have the opportunity to come to Canada.

The Responsibilities of Universities – A Pragmatists View

Let me first share that although my Board expects me to prepare our institution for the future, I am also a pragmatist; a pragmatist in that our College must err on the side of a future where our goals and initiatives are practical and measurable. Most importantly, and this is a critical point of my views I share here this morning - our purpose and our strategic outcomes must have a tangible impact on the prosperity of our society.

Certainly with the successes that universities have enjoyed through the years, it would seem reasonable that a university's leaders might be comfortable with the status quo. Yet this is the paradox faced by every university today. A paradox whereby the means in which universities have achieved success today are not necessarily the same means that university will enjoy success tomorrow. Universities exist within a global economy that has become ultracompetitive and within a domestic environment that is often resource constrained. Therefore, as an educator and President, I am acutely aware of the deception caused by Higher Education's Paradox. It is in fact what keeps me up at night.

It is the sense of pragmatism I mentioned earlier along with this higher education paradox that has influenced my belief that the responsibilities of universities must continue to change – and if we are not prepared to change because we are already practicing the strategies I am about to describe - then we must be prepared to ensure that our strategic priorities become more clear, more prioritized and more clearly communicated.

The Reality of our Environment

This morning I will share two broad responsibilities for universities in the 21st Century. However before doing so, it may be helpful to frame my position around two insidious environmental trends that are the foundation upon which some measure of university change must be constructed.

1. Increased Rate of Participation.

In virtually every Country around the world, the number of people participating in higher education has risen dramatically in the past 50 years. I would argue that of all the afflictions facing educational leaders today - enrolment is not one of them. As an example, in the 1950s in Canada only 5% of the population participated in higher education. In the 1970s, we saw this participation rate climb to 20%. We see this everywhere. In Spain, in 1976 200,000 students were in a university.

Today it is 1.6 million. During that same time, the number of university students doubled in many countries. Today, many countries have the expectation that 70% of the population will go on to earn their diploma.

What are the unintended consequences of this global trend towards massification? As a former Dean in a School of Business, when I see a 70% participation rate, I conclude there is a basic economic reality that the university's graduate supply and demand curve will shift to the right. That is, supply is exceeding demand – specifically, in some countries there appears to be an over-supply of graduates for a shrinking number of middle-class jobs. What makes this situation worse is the fact that in many countries we are seeing highly educated graduates who have earned – or who have learned – few professional skills or attained practical knowledge to make them attractive to hiring employers, at least in the short term.

In Canada, a nation of only 35 million people, we are facing the reality - excuse me... some are facing this reality because there are those who embrace the status quo who fail to see this over-supply reality. We now have hundreds of thousands of unemployed university graduates who cannot find work. Just this month, James Mirza-Davies provided a report to our House of Commons that stated the unemployment rate for those aged 16-24 was 20.5%. Although down from the previous year, it is a shockingly high number. Yet, while we have this high unemployment rate and many university graduates appear to be having difficulty finding employment, while carrying debt from four years at university.

While graduates are 'un' or under-employed, employers are reporting that we will soon ½million have jobs that will be vacant because these employers cannot find people with the relevant skills to fill the vacancies. In Canada we sum this up as People without jobs – Jobs without people and this is a reality that we have seen taking place around the world. And so we must ask, what responsibility does a university have with respect to this situation?

2. Funding in Decline

The second environmental trend I cannot ignore is related to public funding of higher education. At a time when enrolment is rising, there is a fiscal reality that public funding support for higher education is generally in decline. Certainly we are living with this reality in Ontario where millions of dollars are being cut from college and university budgets across the province and this is in the province that already funds universities at a lower rate per student than any province in the Country.

However, Ontario is not alone in that we have seen this funding reduction trend in many jurisdictions around the world including almost all European Union Countries including England, Spain, Ireland and Italy. We see cuts in almost every American State, most Canadian Provinces and many other international jurisdictions.

Beyond the obvious challenges that can occur with when reductions in funding are implemented, these funding cuts have created our own version of a "higher education catch-22". That is, as public funding declines, the response by many universities is to maintain spending practices by committing to further enrolment growth. Certainly this helps to offset a revenue pressure. However, this commitment to enrolment growth at both the undergraduate level, and in what some have come to describe as higher education's after-sales market; graduate school is problematic. It is in the latter that universities have become particularly proficient at addressing funding challenges.

In my view this trend is troubling and within this trend of unbounded growth is the myth that our current practice of increased enrolment is good for everyone. From my perspective, simply widening access to undergraduate programs or increasing the number of graduate programs in order to fuel the university machine may be good – and I repeat “may be good” – for the institution in the short-term. However, as leaders in higher education we must ask about what is best for students who are accruing more debt and what about the tax payers who most often underwrite public universities?

At times of shrinking resources, there is a larger picture that must be viewed. As we enroll thousands of students into programs with no apparent linkage to industry needs or solutions to employment pressures, I ask the question of how long will we close our eyes and continue to enroll students under that premise that education is good... or more precisely, “that any education is good” [emphasis added].

I am not against liberal arts and the humanities. In fact, it seems that as time passes, I become even more convinced we need to strengthen our commitment to these programs and extend these learning outcomes deeper into professional and skills-related programs. Yet, at what point will we say we simply do not need more students in many of these programs. Our communities and our countries expect more from us. Our students deserve more from us and I believe that we can do better. And so within the context of those two environmental trends, we must ask the question again; what responsibility do universities have for this situation?

The University's Responsibility

I want to share two themes related to the public responsibility of universities today. Two perspectives that higher education leaders must consider as we set about adapting our institutions within this rapidly changing environment:

1. The University as Economic Catalyst

I view universities as the economic catalyst of our times. Although some deny it, I believe higher education leaders must embrace the university's responsibility to positively impact long-term economic and social prosperity for the communities we serve. Universities are uniquely positioned to be the community's economic engine and we must rethink how we power this engine in terms of our learning environments and the programs we offer.

I believe, that in a day of declining resources and a marked increase in the need for highly educated, relevant graduates, a university's first responsibility is to educate and prepare graduates who can contribute to the economic prosperity of the community the university was meant to serve. This is not new. 250 years ago Benjamin Franklin – the Father of the Dr. Zemsky's university – the University of Pennsylvania – told us “...students should learn those things that are likely to be most useful.... [with] regard being had to the several professions for which they are intended”. His view is as relevant today as it was in the 1700s.

And we do not have to go back 250 years. Here in Kazakhstan, I believe President Nazarbayev has it right when he wrote in his vision for Kazakhstan 2050 that “Vocational and higher education should be oriented to the current and prospective demands of the national economy”. The first responsibility of the university must be to serve the student and report after report clearly advises that students want one, overwhelming outcome upon graduation – a Job. Better yet – a Career. The most responsible universities have drawn a

direct line between the student needs and a desired career. This question we seek to answer here today is not as much about the university as it is about our students. To that end, this link to a career and all the public good that is accrued when our citizens are contributing to our economies and our societies is the primary responsibility of the university.

2. The University as Innovation Generator

The second responsibility of a university - or at least a high priority responsibility - is related to the fact that the economic and social prosperity of our communities is directly correlated to the ability to create new products and new services. And so I believe the second responsibility of a university today is that of Innovation Generator.

As higher education leaders, we must reflect the fact that our organizations are uniquely positioned to serve our communities. They are positioned like no other public or private institution with both the intellectual and capital capacity to drive innovation and therefore national prosperity.

We must continue to invest in research and yet again, I would argue that we require a shift in the research priorities that are being funded by the public purse. Also once again, here in Kazakhstan, I find myself agreeing with President Nazarbayev when he stated, "Higher education institutions should not limit themselves to purely educational functions. They should create and improve their applied science and R & D divisions".

It is this applied R&D where we must demonstrate greater leadership and responsibility. There are too many countries that state their commitment to R & D. However, once again in my humble view, while they are very good at the research side of the equation, they are often poor at the development side of the equation. As a note, I will say Canada is a good example of this reality and we must do a better job of technology transfer and the commercialization of our research efforts. This is a priority at Algonquin College and I will say we are making great strides in this area. Today, we host not one but three Applied Research Days whereby our faculty, staff, students and employer partners come together to show our good work; research that can directly and positively impact the communities we are meant to support.

Why should a university have this responsibility? Let me share one example. I was recently at a conference whereby I listened to Evan Solomon, one of Canada's leading media personalities. Evan shared an interview that he had with Bill Gates – an interview whereby Mr. Gates was in Canada recruiting employees for Microsoft. Think about that. Bill Gates is a man who spends most of his time doing philanthropic work for his Foundation, and yet here he was making time for a recruiting visit to university campuses in Canada. You may ask why?

Well, as described by Solomon, when he asked Gates why he would spend so much of his scarce time in the function of recruiting students, he was quite clear in his response but let me paraphrase Solomon's interpretation:

While Microsoft is a great company... but it missed Google. Imagine, a couple of university students by the names of Sergey Brin and Larry Page launched one of the world's great technology companies (or marketing companies in the view of some people). How did Microsoft miss this opportunity?

Microsoft is a great company... But it also missed out on that social media firm by the name of Facebook. Once again, a university student launched a billion dollar firm out of a university dorm room. Microsoft could not see what Mark Zuckerberg was able to see.

Microsoft is a great company... Yet it also missed Twitter; an idea that was inspired when Jack Dorsey was a university student. Once again... Darn!

What Bill Gates knows today is that at any time, the success of his company and the success of many communities rest in the hands of a 20-year-old with the next new idea. What Mr. Gates also knows is that the best place to find those 20- somethings is on one of our campuses. Universities are uniquely qualified to provide significant capital assets and intellectual power – it is the university's responsibility to serve as a nation's innovation generator.

In Closing

In these times of increased access and declining resources we need to think more broadly about the responsibilities of our universities. Let me end as I started. We do not want to create a series of universities that have the same mission and purpose. Differentiation is not only good; it is necessary. However, in my mind, if I were to prioritize two responsibilities of the university of today, they would be to serve as economic catalyst and play the role of innovation generator.

Thank you.

SOCIAL RESPONSIBILITY OF UNIVERSITIES: THE CASE OF KAZAKH NATIONAL TECHNICAL UNIVERSITY

Zhexenbek Adilov

The development of the university and its competitiveness is largely associated with the well-organized strategy corresponding to the country's economy, its educational system and global experience. The building of the public (social) responsible development strategy is the modern choice among options available when social needs are met, social rights are implemented and agreed upon social interests, consumers of educational services, the labour market and society.

The social responsibility of the university shall be implemented in the following directions: high quality training and social adaptability of graduates; the transfer of knowledge and skills from one generation to the next; the preparation of elite society in the fields of politics, economy, science and culture; the university's contribution to the scientific and economic progress of the country; the formation of cultural-educational university environment, education for tolerance and intercultural competence of students; an active social policy for students, faculty and staff of the university; the erosion of social barriers in society.

An important aspect of social accountability of universities is to provide high quality training of its graduates. This requires the organization of educational process as an innovative model, the introduction of innovative forms of organization of educational process and the infrastructure development.

There are new educational technologies being intensively implemented in Kazakh National Technical University (KazNTU) on the basis of best e-learning practices, electronic publications, corporate networks and virtual learning.

The university's contributions to the scientific and economic progress of the country includes the expanding of scientific research as the basis for generating a new knowledge and preparation of competitive specialists; development of Master's and PhD programmes and the integration of the university in the world scientific and educational space.

The formation of cultural-developing university environment is in the modernization of social relations through the formation of an innovative corporate spirituality and culture, conducive to the formation of spirituality of each student and staff.

An active social program for students, faculty and staff is carried out by KazNTU, namely the human resources development, the realization of social programs for students and university staff, and the development of employment scheme. KazNTU has highly qualified research and academic staff recognized at national and international level and constituting the "backbone" of the 50 research schools.

The social mobility of young specialists is directly related to their employment, the possibility of retraining, the demand of the level of education and qualification.

KazNTU conducts the whole range of necessary organizational work for the promotion of its graduates and created a special structural division, which comprehensively addresses the issues of employment and production practices.

THE CHANGING LANDSCAPE OF INTERNATIONAL HIGHER EDUCATION

Fatima Zhakypova

The development of international higher education in leading countries of the world is undergoing an influence of global tendencies. One of them is the massification of higher education.

On average, 27% of young people in OECD countries receive higher education. Only in the period from 2008 to 2010, the number of students has increased in the U.S. by 10%, Australia – by 8%, Switzerland and Malaysia - by 5%, China - by 4%, UK and Sweden - by 3%. In Kazakhstan, during the last 10 years the number of students in higher education, in contrast, declined by 3%.

Massification of higher education, in its turn, has led to the rapid development in Australia, the UK, Norway and other countries of the so-called “*non-university*” sector - colleges, polytechnic schools and institutes. They are distinguished by the applied nature of courses taught, the applicability of knowledge after graduation, the relatively low cost of training. A society based on knowledge requires, along with the development of science, the rate of introduction of new technologies, which is achieved due to the ability of employees to quickly learn and apply new knowledge in practice.

Therefore, there is a constant adaptation of educational programs to current and future needs. The quality of education in the modern world is inextricably linked, first of all, with fundamentalization of education, involving preparing cadre for universal activity rather than acquisition of a narrow specialty.

Internationalization of higher education develops a global nature. The number of international students is rapidly increasing. According to UNESCO, over 10 years, from 2000 to 2010, the number of international students has risen to 80% (from 2 to 3.6 million). Most attractive countries for incoming students are the US, UK and Australia. Universities of Kazakhstan have only 1% of international students.

An integral part of the internationalization of higher education are academic programs of transnational higher education. Students are educated not in the home country of the university but in its branch institution. Although this phenomenon has become quite commonplace in the educational space, the extent of its spread in the world is becoming truly global.

Higher education experts also point out the trend of the development of life-long learning programs. This is due to the increased dynamics of the development of society and technology.

On average, six out of ten adults in OECD countries receive higher education. The leader in the age group of 25 to 34 years is Korea, where more than 60% of the population receives higher education, followed by Japan, Canada and Russia, where more than 50% of the population in this age group are enrolled in higher education. Leaders in the age group of 55 to 64 years are Russia, Canada and Israel, where more than 40% of adults are enrolled in higher education. At the same time there is a general liberalization of the administrative management of education by the state, giving autonomy to universities at all levels.

What is the way for universities to participate more effectively in increasingly competitive environment? Improvement of the efficiency of higher education is important not only to the leaders, faculty, staff and students, but also to external interested parties (stakeholders), and the main ones of them are:

State and society: the state represented by the Ministry of Education and Science; the state represented the budget owner.

Individual consumers of educational services: applicants; undergraduate, master and doctoral students; further education students; parents.

Employers: organizations of relevant sector of industry; regional organizations; state organizations; employers providing higher education for their employees.

Strategic partners: institutions of secondary and vocational education; HEIs, research centers and communities, including international ones; professional associations and communities; suppliers of goods and services; sponsors and funders.

The main obstacles/factors impeding the efficient functioning and full-fledged development of strategic partnerships include:

- high transaction costs for participants of strategic partnerships for making joint decisions;
- lack of financial resources / lack of equipment;
- poor / inadequate planning of joint activities;
- complications with commercialization of the results of joint research;
- regulatory and bureaucratic barriers;
- divergent purposes for participation in the strategic partnership;
- differences in corporate cultures.

Considering the large number of external stakeholders, development and implementation of managerial decisions contributing to effective functioning and development of the university should be based on the principle of partnership, which implies:

- determination of priorities for the university on the basis of integration of interests, goals and business processes of the strategic partners;
- development of strategic alliances, partnerships with business entities, professional associations, etc. in the sphere of research and scientific elaborations, production of educational services and goods with foreign and domestic organizations.

An analysis of foreign practice suggests that the most significant progress in ensuring the synergy of education and business was made by the U.K. (along with Ireland). In this country, the *“Statement on the requirements for higher education qualifications”* is published annually, which is developed jointly by the academic community, representatives of employers and professional organizations, and relevant government agencies. In this document, the changing demands of the labor market are considered the highest. The *“Statement”* is a guide for HEIs in developing and implementing strategies of applicability of their graduates.

In accordance with the global experience the main forms of public-private partnership are institutional and project-programmatic. The financial mechanisms ensuring the development of the institutional form are endowment funds, leasing, tax credits, education vouchers, etc.

The financial mechanisms developing of the project-programmatic form include education credits, state guarantees, grants, loans and scholarship programs.

Organizational and administrative mechanisms enabling the development of PPP are: institutes for public participation, accreditation of study programs and other instruments of independent assessment of the quality of educational services, research and field practices, etc.

It is necessary that PPP should be normatively supported. This will provide for the employers' liabilities or economic incentives to participate in PPP.

Interestingly, British and German colleagues are concerned with the tendency of the business community to evaluate education merely through the prism of economic interests. It can cause temptation to neglect not only individual disciplines, but even entire education areas. Those without a distinct market orientation, but significantly contributing to science and culture. Therefore the list of business entities engaged into cooperation should be as broad as possible, from structures of public sector to medium and small businesses.

Coordinating Council for public-private partnership was established under the government of the Republic of Kazakhstan. Relevant resolution of the government of the Republic of Kazakhstan № 1633 *"On the creation of Coordinating Council for Public-Private Partnership under the Government of the Republic of Kazakhstan"* was signed by the Prime Minister Serik Akhmetov on December 20, 2012. The Council is an advisory body to the government of the Republic of Kazakhstan, established to coordinate activities in the field of public-private partnership in the Republic of Kazakhstan.

The bill of the Republic of Kazakhstan *"On the Introduction of Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on adoption of new forms of public-private partnership and expansion of their application areas"* will expand the range of PPP contracts, facilitate implementation of concession projects based on private ownership objects, and enhance the state support to increase the attractiveness of PPP for investors.

Further successful development of higher education requires creation of a system harmonizing the process of cadre training and the demands of labor market. Creative application of the experience of countries that have achieved successful synergies of HEIs and employers is crucial.

Encouraging HEIs to prepare cadre in line with the practical needs will inevitably require strengthening focus on the criteria for the quality of education and the final results /outcomes.

Who is able to and who should execute strategic leadership in the field and what are the characteristics of successful strategic leadership?

Proper strategic planning and management are now a key to successful development of the university.

Strategic management is executed by the top managing staff – the rector and vice-rectors.

There is no doubt that the involvement of internal and external stakeholders is a prerequisite for the strategic planning and leadership. The internal stakeholders include faculty and staff, and external – strategic partners, employers, research organizations.

Six basic planning principles are known: principles of flexibility, continuity, independence, consistency, participation and efficiency. Inability to predict future development of our society and the whole educational system is a characteristic of today's executives. Many of them have not yet learned to look into the future of organization, and do not have a strategic vision.

The fundamental rules for the executive's policy are:

- principle of the competent use of individual undivided authority and collegiality in management (collegiality implies working out collegiate or collective solutions based on the opinions of the managers at various levels, as well as the executives of particular decisions);
- principle of scientific validity / reasonableness of management, i.e. all managerial actions should be based on scientific methods and approaches;
- principle of planning, i.e. determining main trends, objectives, plans for the development of organization in the long run. And then, in these terms, personnel policy planning and development of HR management strategy;
- principle of combining the rights, duties and responsibilities, i.e. everyone in organization is charged with a concrete mission and is responsible for the fulfillment of assigned tasks;
- principle of motivation, i.e. the more carefully managers pursue the policy of rewards and punishments, the more effectively the program will motivate and stimulate people to work and achieve the organizational as well as the individual goals;
- principle of democratization of management implies participation of all employees in management of the organization.

Today's leaders need to know:

- concepts and approaches to modern general and strategic management in relation to higher education institutions;
- approaches to implementation of the main processes of university management.
- today's leaders should have the following skills:
- analysis and elaboration of managerial decisions, strategic analysis applying to HEIs and higher education, development of strategies and plans;
- formulation and solving managerial tasks in groups and teams;
- expert and analytical skills to work with information and data sources;
- designing of management processes, programs and projects in higher education;
- using the models and methods of evaluation the efficiency of higher education institutions, projects and programs in higher education.

According to Taylor, there can be distinguished the following "*leadership qualities / skills*": intelligence, education, special or creative knowledge, physical agility and strength, tact, energy, determination, honesty, prudence and common sense, good health.

Bennis, W.G., one of the experts in leadership studies in the U.S., suggests the following list of qualities a leader should possess: technical competence, propensity for strategic thinking, ability to achieve results, communication, motivation and delegation skills, ability to identify and cultivate talents, ability to make complex solutions under time pressure and the lack of reliable information, character.

A BALANCING ACT: ACHIEVING ACCOUNTABILITY WHILE ENSURING AUTONOMY

Mary Canning

Changing nature of demands on Higher Education

Twenty first century universities are responding to an ever-increasing number of demands from policy makers and from society. These may be summarized under four headings: (i) universities must meet a growth in student demand without reducing their quality of teaching and learning; (ii) degrees must somehow respond to the demands of a labor market where future employment opportunities are unknown, perhaps not even yet imagined; (iii) universities must develop strategies for innovative research and technology transfer to respond to the needs of national economies; and (iv) universities face pressure to increase their own global competitiveness in a world where students and academics are internationally mobile.

Higher education systems are also becoming more complex due to the growth in the number and diversity of public and private institutions, so that the task of managing and monitoring the sector is becoming more specialised and demanding. As a result the old model of total administration and control from a central Ministry of Education is being replaced throughout the world.

Moreover because, increasingly, post-secondary education will consist of communities of learners, freed of temporal and cultural constraints, linked to institutions and to each other by technology and engaged in cross-disciplinary education and research with a global reach, more open, flexible and less hierarchical higher education systems will result in more porous institutional boundaries.

More Effective Institutions in an increasingly competitive environment

International experience shows that for universities to respond to the multiple demands of policy makers, of students and of society outlined above, it is essential that they are free to make their own decisions about academic course content, staff appointments and institutional financing. Without such autonomy, neither boards of governors nor university Presidents can be empowered to take the decisions necessary for the creation of appropriate learning environments or innovative research and technology transfer.

However, it is also increasingly apparent that such academic freedom must be balanced with developed systems of accountability for how taxpayers' money is expended and that transparent information systems must be developed so that funders and philanthropists can be assured of the integrity and quality of the education and research services provided in each institution.

In all developed economies, this fine balance between autonomy and accountability is perceived as the key challenge for policy makers. And this challenge calls for a redefinition of the roles and responsibilities of different levels of the higher education system and, above all, for sophisticated, wise and nimble leadership both at central and institutional level.

In many countries, the role of elected representatives and central Ministries is to articulate a vision and goals and to create frameworks to ensure that universities can be diverse, flexible and responsive to regional and national needs. Some countries, especially the USA, require less articulation partly because of the major role of private universities but also partly because of the size of the economy and the diversity of education provision.

But in many European countries, and also in Kazakhstan, policymakers, central administrators and funding agencies at national level need to develop appropriate governance frameworks to assure institutional autonomy while, at the same time, building the necessary accountability framework which will not interfere with the decision making powers of Presidents or Boards.

This paper argues that in order to build a new governance model clarification to the following key issues should be developed: (i) where the responsibility for the development and leadership of a national strategy for higher education lies; (ii) the legal status of HE institutions as compared to other state-owned entities; (iii) the appropriate governance models for universities with specific reference to the role and composition of Boards and of Institutional Leaders. Also of central importance but outside the scope of this paper is the process by which public funds are allocated to universities and the means by which institutions are accountable for their expenditures.

Strategic Leadership at National Level

Ministries of Education all over the world are grappling with the difficulties of steering and managing rapidly expanding systems of higher education which need to allow providers to develop as autonomous, flexible and responsive institutions.

Typically, higher education policy is the responsibility of the State through its Ministry of Education which has a key role in promoting the best possible outcomes in tertiary education, in defining national goals, in developing a national strategy for the sector and in steering the system. A leadership challenge for Ministries is to look for creative ways of ensuring that the strategy, once formulated, is effectively implemented taking into account the diversity and numbers of higher education stakeholders. Another important role for the State is to develop a regulatory environment that defines lines of authority and accountability together with the institutional responsibilities and accountability.

International experiences indicate that the development of strategies for the successful implementation of higher education reform may include: (i) the creation of new mechanisms whereby functions performed by the Ministry of Education for the higher education system are delegated to other bodies (sometimes called “*buffer*” bodies); and (ii) the delegation to universities of greater powers to manage their own affairs together with the legal status that allows them to operate as independent autonomous bodies (but still within the public sector). Both of these strategies are briefly discussed in this paper.

Buffer Bodies

A buffer body is the term used to refer to an institution, owned by the State but not formally part of a Ministry. Usually, it is semi-independent and has its own governance and management bodies, regulated by the Ministry. Its Board, which typically has an independent Chair, is free to adapt and interpret Government policy while remaining broadly faithful to the national strategy for higher education as developed by Government. Countries where

buffer bodies play an important role in the governance of higher education include England (the Higher Education Funding Council, the Quality Assurance Agency, the Higher Education Statistics Agency and the Higher Education Policy Institute) and Ireland (the Higher Education Authority, the Quality and Qualifications Board).

The key advantage of having a buffer body is that it removes all the detailed operational issues from the Ministry of Education (thus protecting it from charges of political lobbying). However, there remains the challenge of coordinating and managing the national higher education system, especially where a number of agencies or bodies exist for allocating financing and ensuring quality. A formal system of regular coordination at Ministerial level overcomes that issue as does recognition among all bodies of the importance of operating within the national strategic goals for education.

Institutional Autonomy and Accountability

The principle of academic freedom and the development of institutional autonomy are key drivers for many of the reforms required for the development of mass higher education systems. This paper does not seek to elaborate on the various forms of university autonomy as this is a complex issue which varies from country to country depending on local legal requirements. It is sufficient to note that autonomous universities bring significant benefits to a country and that, by almost any measure, the most prestigious universities in the world, operate in a regulatory environment where their Boards and Officers are enabled to manage their affairs fully for the benefit of their students, staff and wider communities.

Although international experience shows a varied picture, the trend in all recent reform legislation is towards granting universities considerable powers in using the autonomy provided to them. Financial freedoms are the first to be granted, followed by powers over staffing and the right to decide on new academic programmes. These changes make institutions more responsive to regional and community needs..

Key features of systems with greater institutional autonomy are the extent to which central restrictions over property are removed. The State may also want to encourage universities to build up their own financial reserves from endowments and gifts from wealthy individuals or corporations and a favourable fiscal and taxation environment should be encouraged for these activities. Appropriate procedures to enable transparent management of technology transfer and community involvement functions will also be required. In former centrally planned economies, a systemic reform element is the strengthening of universities as autonomous corporate entities with specific obligations as to accountability and reporting. Many models have been developed since 1992, including institutions which are not for profit, for profit and, in Kazakhstan, the joint stock company model which is a partnership between the State and the private sector.

Universities in more traditional systems with their detailed prescribed standards, teaching and training procedures, salary rates are no longer appropriate for a system featuring increased institutional autonomy. The international trend is to replace this regulatory framework with a policy framework, defining the goals, performance indicators and qualitative measures of a “*sound*” organization of a university within the parameters of the strategy and the policy priorities that government wishes the sector to work towards.

While recognising the importance of the principles of autonomy and of academic freedom, it must be recognised that there are risks inherent in high levels of institutional autonomy. For example, “*mission drift*” may occur when institutions attempt to raise their academic status, neglecting the students they were designed to serve, and ignoring national priorities or cost considerations. In order to avoid these risks, all institutions which are in receipt of public funds, should be open to public control and should have well developed accountability mechanisms, including a system of performance based financial incentives to steer and drive required institutional behaviours.

In order to monitor and assess institutional performance, a transparent and efficient information system is also required. This should not be interpreted to mean that the former system of inspections should be continued. Rather, by reporting on a series of agreed indicators in a public and open process, institutions are enabled to assure stakeholders of the quality and relevance of their teaching and research activities. At institutional level, Boards must hold the President and his senior team accountable for achieving institutional goals.

Boards of Governors

The requirement for enhanced accountability in return for the award of greater financial autonomy discussed above has implications for the way in which institutions are governed and for the skills of those involved in governance. Modern governance models for autonomous entities suggest quite a clear-cut segregation of governance functions into executive (administrative) and regulatory (prescriptive and controlling) with their assignment to appropriate governance and management bodies of the institution. Typically, internal governance structures include a governing board, the university President and a team of administrative vice presidents, academic deans, department chairs and student representatives.

The Board of Governors is the supreme body of the university and is usually held accountable in legislation for its overall performance, its functioning and development in compliance with its mission and objectives, its accountability to its funders and founders, its openness, efficiency and the high performance of internal administration processes. The thrust of recent international structural reforms is that the Board and the President are gaining extra powers and are being urged by governments to adapt managerial models from business to running their operations.

The size, composition and the process for appointment of Board members are elements that vary according to each country. However, with the reduction of direct State control, the size and composition of university Boards becomes increasingly important. There has been a general trend in favour increased participation on governing bodies by external individuals. In countries where the Board can choose its members the aim is to have people from the obvious stakeholders such as the regional government or municipality, local employers and industries as well as the core professionals such as lawyers, accountants and ICT specialists. Boards are also becoming smaller and, since the position of Board member is usually unpaid (only a Board member’s direct outlays, related to his/her official duties are covered) and the duties (and legal obligations) are becoming more onerous, some countries are advertising in order to obtain candidates of the right quality and professional skills. Denmark’s Arhus University is a very interesting example of this approach to university governance.

Institutional Leadership

The granting of increased legal independence and the development of new governance mechanisms in universities, places a greater burden on their Presidents who are increasingly required to demonstrate not just academic leadership and but advanced management skills. Not only must an excellent institutional leader be able to nurture relations with key stakeholders at national and international levels but s/he must have powerful financial management skills, be capable of strategic management in a time of significant change while promoting a vision of the University's role in the future national economic, social and cultural development needs.

International best practice shows that successful university Presidents are appointed by Boards without external or political interference. There are various models for how these appointments are made with the most independent and transparent being to seek highly competent university leaders through a dual process of a Search Committee which makes recommendations for a long list of suitable candidates to a separate Selection Committee. Membership of each of these Committees would include two or three (at most) members of the academic community and at least an equal number of external and independent individuals under a Chair who is not a staff member of the university and is not linked either personally or professionally to any part of its operation.

Conclusion

As higher education moves increasingly towards mass provision, the role of the State is changing. Increasingly, governments provide leadership in the creation of national goals and strategies as well as in the establishment of quality assurance systems. Rather than interfering in academic processes, a combination of standard setting and financing systems designed to ensure high quality outcomes is the role of the State. The provision of good public higher education is left to higher education institutions, autonomous but accountable in their governance arrangements.

THE ETHICAL UNDERPINNINGS OF WORLD CLASS UNIVERSITIES¹

Stephen P. Heyneman

Executive Summary

Considerable attention has been paid to the characteristics of world class universities (Altbach 2004; Salmi 2009; Heyneman and Lee 2012). Separately attention has been drawn to the problem of corruption in higher education, including its definition, the degree to which corruption occurs, and its economic impact (Heyneman 2004, 2010, 2011; Heyneman, Anderson and Nuraliyeva 2008). This paper combines these two lines of scholarship and explores the degree to which world class universities exhibit ethical qualities. The study defines 'ethics' in the management of a university. This includes mission statements which mention ethical issues, transparency in governance and fiscal affairs, codes of conduct for faculty, administrators and students, procedures for adjudication of infractions, and other elements. It then proposes a rating for the ethical infrastructure elements. Universities have been divided into two groups. First are universities listed on the Times Higher Education Supplement (THES) international ranking. The second are random samples of universities in countries which use English, Korean, Japanese, Georgian, Chinese, German, French, and Russian languages as the medium of instruction.

The paper poses three questions. First, how common is it for internationally-ranked universities to exhibit ethical characteristics on their websites? The answer is unambiguous: 98% of the world class universities have established an ethical infrastructure of some kind. Second, which areas of the world are more likely to have universities which exhibit a depth of ethical infrastructure elements on their websites? In terms of countries, the most comprehensive ethics infrastructure can be found in Britain, Canada, the U.S., and Japan. Lastly, what is the relationship between the level of international ranking and the depth of ethical ingredients? The strength of the relationship is weak, suggesting that the depth of ethical infrastructure is not an important determinant of ranking. However, the fact that virtually all ranked THES universities, across 40 countries, mentioned ethical infrastructure elements, suggests that having an ethical infrastructure is an important ingredient associated with other elements in a university's reputation.

Universities with ambitions of being world class are unlikely to gain that status without establishing an ethical infrastructure. Areas of the world where it is uncommon for universities to have an ethical infrastructure are also areas with high levels of government corruption. In these circumstances, universities will likely be suspected of being corrupt themselves.

Introduction

World class universities can be defined in many ways, but there is general agreement that they exhibit: (i) a concentration of talent from around the world in terms of students, faculty and research interests; (ii) abundant resources from multiple private and public sources, research awards, contracts, endowment and tuition, and (iii) enabling internal governance with supporting regulations, autonomy, academic freedom, and professional management (Salmi 2009; Altbach 2004). To this list a new set of characteristics concerning an enabling macro-policy environment have been added. These included: state incentives to improve

1 Originally published in J.C. Shin and Ulrich Teichler (2013) (eds.)
The Future of the University at the Crossroads. New York: Springer Publishers.

quality and diversity, independence of licensing and accreditation agencies, open competition for scientific research in which universities participate, exception from taxation, clear title to university property, autonomy from governmental managerial regulation, institutional differentiation in mission, and permission to garner a wide variety of income sources (Heyneman and Lee 2012).

On the other hand, it has been noticed that many universities are plagued by problems of corruption. This has included bribery to governmental agencies for accreditation and permission to offer particular curricula, student bribery for entry, grades, dissertation approval, library books and housing, and professional misconduct in research and teaching (Heyneman 2004, 2010, 2011; Heyneman, Anderson, and Nuraliyeva 2008). This has led to questions as to whether university resistance to corruption might be an additional ingredient for attaining the status of being world class.

Many universities, including my own, require administrators, faculty and students to sign a code of conduct and, in the case of administrators and faculty, to sign a conflict of interest statement annually. Incoming students are not only asked to sign a code of conduct, but their names are posted on the wall of the student union displaying their signatures. Students, faculty and administrators are reminded periodically of the need for integrity and what to do when there are infractions. There is a student-run system of honors councils to hear cases of infractions and recommend sanctions. There is a similar faculty-run system to hear cases of faculty infractions. Annual reports from the honors council are publicly available. These reports will list the infractions by category, the decisions and sanctions in each case. Names of the accused are kept confidential. Mission statements may include the definition and recognition of 'harmful activity' to the university. This may include fraud, waste or abuse of resources, misuse of grant money, research fraud, violations of athletic or medical regulations, theft or embezzlement, conflicts of interest, procurement fraud, threats to personal safety, discrimination or harassment, academic misconduct, standards of conduct, and violations of data privacy. We were curious if this sort of attention to ethics was common to universities in other countries.

We began by creating a list of possible ethical elements (16 elements). These included whether or not a university had:

- A mission statement
- Honor code for students
- Codes of conduct for students, faculty and administrators
- Adjudication procedures in case of infractions
- Reported ethical infractions
- Results of ethical infractions
- Faculty handbook
- A statement of non-bias in hiring
- A statement of the criteria used in faculty promotion
- A statement on fairness in admissions
- Transparency in budgets and accounting
- Ethics in research
- Diversity and equity
- Academic integrity

We also noted whether a university was affiliated with a religious institution, public or private, for profit, vocational-oriented or not, its language of instruction, location, and whether in addition to offer a first degree, whether it offered post graduate degrees.

Since we had no access to internal university documents we decided to base our assessment solely on the basis of a university's public information displayed on its website. Of course a university may have an ethical infrastructure not mentioned on its website, and the fact that universities do mention ethical elements on its website is no guarantee that the university is free of corruption.

We began by gathering and training research assistants capable of working in languages in addition to English. We divided the research assistants into country (not language) teams. These included teams to work on Japan, Korea, the Peoples Republic of China, Hong Kong, Singapore, Taiwan, Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia, Georgia, Germany, Britain, the United States, Canada, New Zealand, Australia, Gabon, and France. The first task of each country team was to locate a complete list of the nation's higher education institutions². Once a country's master list was approved, a random ten percent sample was chosen and the websites of that ten percent sample were analyzed. Separately, we used the Times Higher Education Supplement (THES) of 400 highly-ranked universities as our source for World Class Universities³. From the THES list we took a ten percent random sample and analyzed their websites.

Results

Universities differ dramatically in their propensity to mention ethical issues or to describe elements of their ethical infrastructure on their websites. In Kazakhstan, Gabon, Kyrgyzstan and Armenia ethical infrastructures were absent altogether from university websites. In Britain, Canada, Hong Kong, New Zealand, Japan, Singapore, Taiwan, and Korea they were universal, nearly universal in the U.S. (95%), France (91%), and Australia (91%), and very high in China (89%), Georgia (84%), Belarus (80%), Germany (79%), and Russia (77%) (Table 1).

Table 1. Universities with ethical infrastructures

Country	%	Average number of infrastructure elements	Country	%	Average number of infrastructure elements
THES universities*	98	9.2	China	90**	4.8
Britain	100	9.5	U.S.	95	7.6
Canada	100	8.3	Georgia	84	5.2
Hong Kong	100	6.0	Belarus	80	1.4
Japan	100	7.7	Germany	79	0.9
Korea	100	6.9	Russia	77	2.8
New Zealand	100	3.0	Armenia***	0	0
Singapore	100	4.5	Gabon	0	0
Taiwan	100	6.7	Kyrgyzstan	0	0
Australia	91	7.4	Kazakhstan	0	0
France	91	2.4			

² Two year institutions and those with no undergraduate degree programs were eliminated. All accredited institutions were included, public, private and for-profit.

³ We obtained the THES world-class universities from the following website: <http://www.timeshighereducation.co.uk/world-university-rankings/2011-2012/top-400.html>

Notes:

*Times Higher Education Supplement

** Chinese websites usually cited the general law on corruption across all sectors

***Many of the better universities in Armenia have documents describing the regulations pertaining to student conduct and ethics. These might include the American University in Armenia and Yerevan State Universities which have student handbooks and codes of ethics. But none of them happened to fall into the sample.

Knowing the portion of university websites mentioning one ethical infrastructure element may not be as revealing as the number of elements mentioned. These ranged from 9.5 in Britain, 8.3 in Canada, 2.8 in Russia and zero in Armenia, Kazakhstan, Kyrgyzstan, and Gabon. Germany has a surprisingly low number of elements mentioned, perhaps on grounds that the internal websites would be more explicit than those open to the public (Figure 1).

Both Russia and Belarus had a high percentage of their universities which mentioned an ethical issue on their websites (77% and 80%), but neither included much more detail. The average number of infrastructure elements was 1.4 in Belarus and 2.8 in Russia. This suggests that the emphasis on ethics may have been more for pro forma reasons than a genuine concern.

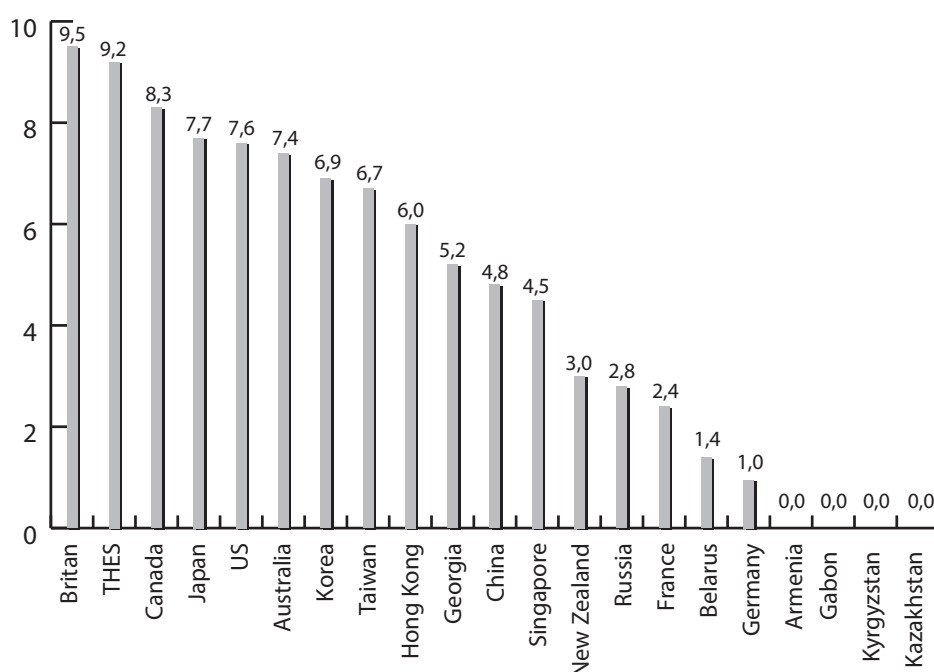


Figure 1. Average number of ethical infrastructure elements by country

In terms of languages, the highest number of infrastructure elements can be found in universities using Japanese, English and Korean (Figure 2).

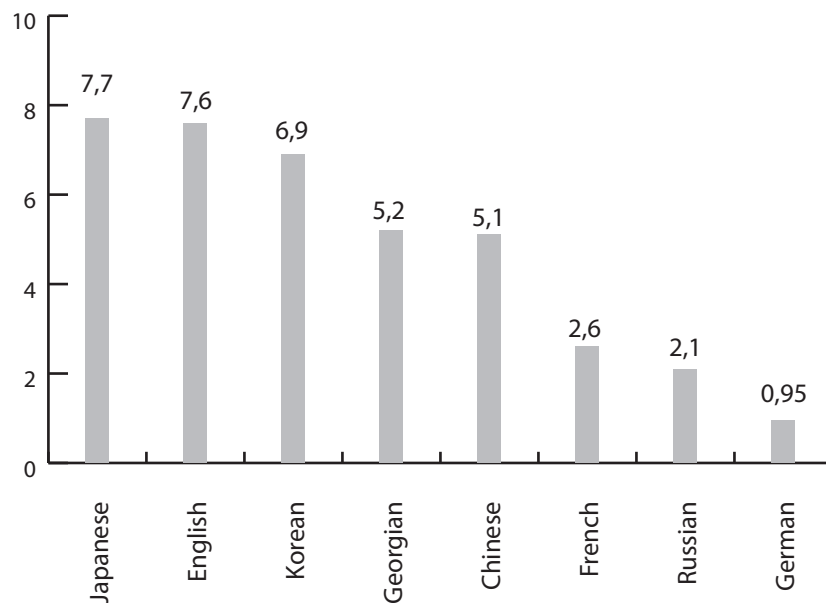


Figure 2. Average number of ethical infrastructure elements by language

Ranked universities appearing on the THES were situated in 40 countries. Virtually all of them (97.5%) mentioned ethical elements on their websites. The typical THES university mentioned 9.2 different elements, higher than any nation's universities save Britain. The correlation between the number of elements mentioned and the level of THES ranking ($r=0.14$) was neither strong nor statistically significant. This suggests that the number of ethical infrastructure elements is not a factor in the level of ranking. However, the more important question may be whether candor about an ethics infrastructure is associated with attaining any THES ranking. The fact that virtually all ranked THES universities, across all 40 countries, mentioned ethical infrastructure suggests that it is an important ingredient associated with other elements in a university's reputation.

Among THES universities, the most common elements to mention were regulations pertaining to academic integrity and the goals of diversity and equity in enrollment and employment (82.5%) budgetary transparency and non-bias in hiring (77.5%), and codes for student conduct and research ethics (75%). Less common were results of ethical infractions (12.5%) and portion of ethical infractions found to be justified (10%) (Figure 3).

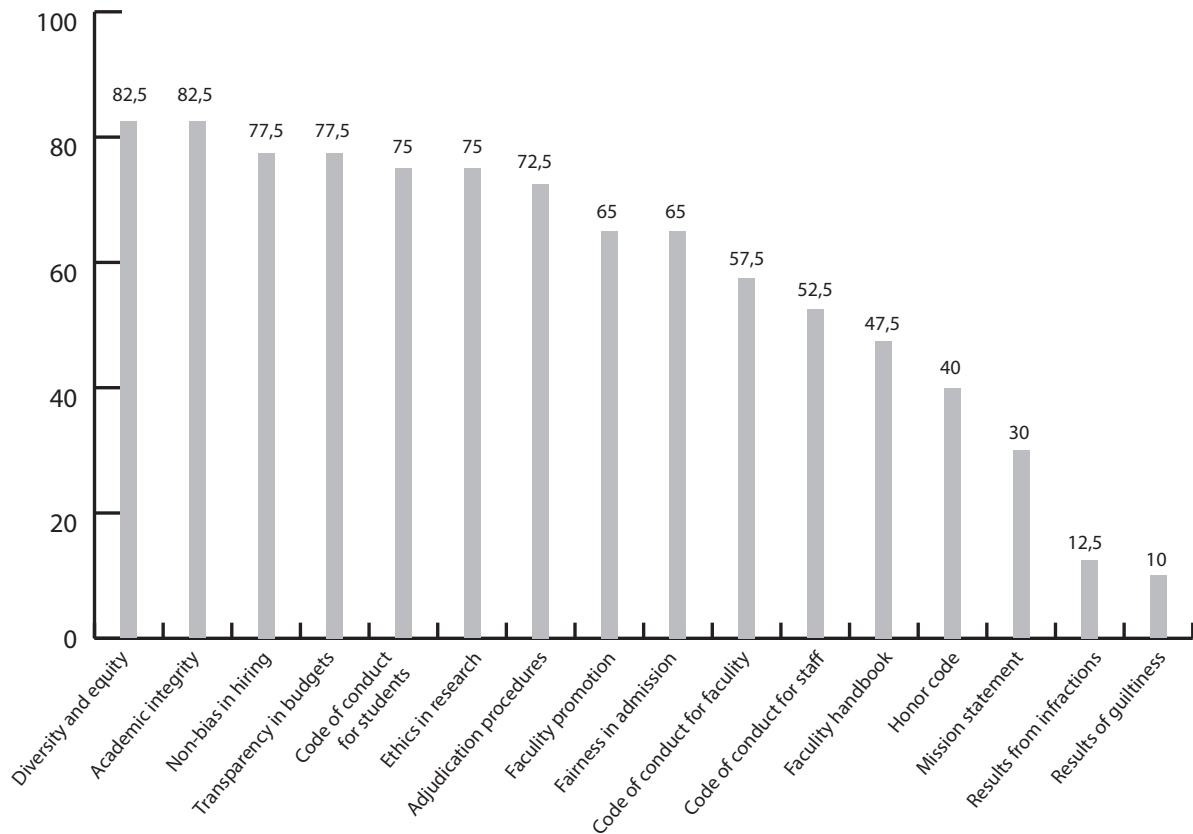


Figure 3. Presence of ethical infrastructure elements (THES) (%)

Focus on the United States

Of the 224 universities which fell into the 10% sample from the United States, 50 offered specialized degrees in technology, health, law or religious studies (Table 2).

Table 2. American higher education institutions with specialized vocational functions

Type of institutions	Number of institutions			Average number of infrastructure elements		
	All	Non-for-profit	For-profit	All	Non-for-profit	For-profit
Seminary including bible colleges	17	17	.	2.9	2.9	.
Art-related	11	6	5	4.5	4.2	4.8
Medical, health-related	12	7	5	4.4	5.7	2.6
Technology	5	2	3	2.4	5.5	0.3
Law school including law-related	5	4	1	4.4	4.5	4.0
Total	50	36	14	3.7	4.0	3.0

About one in three of these were for-profit institutions. These specialized institutions tended to have a lower number of ethical infrastructural elements (3.7). For-profit colleges stand out among this group and against the general tendency of non-profit higher education institutions. Although vocationally-oriented for-profits had a higher number of ethical infrastructure elements in the arts, in medical field, law, and especially in technology, they did not. In technology-oriented institutions the average number of ethical infrastructure elements was 5.5 among non-profits and only 0.3 in for-profit institutions. This suggests that for-profit institutions which specialize in technology are particularly divergent from their non-profit rivals in their concern over ethics. In general, for-profit institutions tended to have a very low number of ethical infrastructure elements (3.0) (Table 3).

Table 3. American higher education: Average number of ethical infrastructural elements for profit and non-profit institutions

Type of institutions		Number of institutions	Average number of infrastructures
Non-for-profit	All	186	8.4
	(Excluding vocational institutions)	(150*)	(9.6*)
For-profit		38	3.7
Total		224	7.6

If one excludes for-profit and vocational institutions, the average number of ethical infrastructure elements typical on the websites of American universities (9.6) is higher than any other country in the sample and higher than the average institutions in the THES ranking. This suggests that for-profit institutions are simply not as interested in combating education corruption as non-for-profit institutions.

Summary

To combat education corruption a university will need to do more than mention ethical behavior on its website. But university concern for ethics is unlikely to be effective without mentioning the ethics problem on its website. Virtually all highly ranked universities are concerned with ethics, they mention more ethical elements on their websites than other universities, and they are more likely to be transparent as to the annual number and type of ethical infractions.

On the other hand, there are universities situated in sample countries such as Kazakhstan, Kyrgyzstan and Gabon where the typical university mentioned nothing about professional ethics on their websites. What does that suggest about them? Circumstantial evidence would suggest that the universities which are silent on the issue of professional ethics are also universities which are widely perceived to be corrupt. They tend to be situated in countries where education corruption is known to be high (Silova, Johnson and Heyneman 2007; Heyneman 2007a, 2007b) and where the business climate is characterized by a high degree of corruption. Kazakhstan for instance is ranked 120 and Kyrgyzstan 164 out of 182 countries in the corruption index of Transparency International (Transparency International 2012). These data from our small study would suggest that universities which do not mention professional ethics on their websites are at the highest risk of being corrupt themselves.

Universities with ambitions of being world class are unlikely to gain that status without establishing an ethical infrastructure. Areas of the world where it is uncommon for universities to have an ethical infrastructure are also areas with high levels of government corruption. In these circumstances, universities will likely be suspected of being corrupt themselves.

References

Altbach, P.G. (2004). The costs and benefits of world-class universities. *Academe* 90, no. 1 (January-February).

Heyneman, S.P. (2004). Education and corruption. *International Journal of Education Development* 24, no. 6: 638-648

Heyneman, S.P. (2007a). Three universities in Georgia, Kazakhstan and Kyrgyzstan: The struggle against corruption and for social cohesion. *UNESCO Prospects* no. 3 (September): 305-318.

Heyneman, S.P. (2007b). Higher education and social cohesion: A comparative perspective. In *Higher education in the new century: Global challenges and innovative ideas*, 55-79.

Edited by Altbach, P.G. and P. M. Peterson. Rotterdam: Sense Publishers in conjunction with UNESCO. (with Richard Kraince, Nancy Lesko and Michael Bastedo) (June).

Heyneman, S.P. (2010). The concern with corruption of ethnics in higher education. In *Creating the ethical academy: A systems approach to understanding misconduct and empowering change*, 13-27. Edited by Tricia Bertram Gallant. New York, NY: Routledge and Kegan Paul.

Heyneman, S.P. (2011). The corruption of ethics in higher education. *International Higher Education* no. 62 (Winter): 8-9.

Heyneman, S. and L. Jeongwoo (2012). World class universities: The sector requirements. In *Institutionalization of world class universities in global competition*. Edited by Shin Jung Chul and B. Kehm. New York, NY: Springer Publishers (forthcoming).

Heyneman, S.P., Anderson, K. H. and N. Nuraliyeva. (2008). The cost of corruption in higher education. *Comparative Education Review* 51, no. 2: 1- 25.

Salmi, J. (2009). The challenge of establishing world-class universities. Washington, D.C.: The World Bank.

Silova, I. Johnson, M. and S.P. Heyneman P. 2007. Education and the crisis of social cohesion in Azerbaijan and Central Asia. *Comparative Education Review* 51, no. 2 (May): 159-180.

Transparency International. Perception of Corruption Index 2011, <http://cpi.transparency.org/cpi2011/results/>

CHANGING PATTERNS OF HIGHER EDUCATION LEADERSHIP IN KAZAKHSTAN

Aida Sagintayeva

Kazakhstan has recently enacted a comprehensive transformation of its higher education system. In 2010, the Ministry of Education and Science (henceforth, the Ministry) proposed the State Program of Education Development for 2011-2020 (henceforth, the Program), a strategic road map of education reforms. One of the main points in the current educational reform is a proposal to grant greater autonomy to higher education institutions (HEIs). Consequently, this drastic organizational change raises concerns about the development of effective institutional leadership. This paper addresses recent developments of higher education leadership in Kazakhstan. The purpose of this paper is to determine changing patterns of higher education leadership and discuss relevant professional skills and capacities of higher education leaders in the context of recently proposed reforms. Based on research findings of the longitudinal study done in partnership with the University of Pennsylvania's Graduate School of Education, the paper draws on research data, documentary analysis and comparative analysis of higher education governance practices.

Introduction

The last 20 years have witnessed higher education reforms in Kazakhstan, including organizational change. One of the current concerns is university leadership and governance in higher education. In this case, questions have been raised about the role of leadership in the context of the ambitious reform of granting greater autonomy to local academic institutions. In recent years, there has been an increasing interest in the subject of university autonomy. Although, several studies have produced estimates of institutional autonomy in Europe and the US, (Anderson, D., Johnson, R., (2009); Estermann, T. & Nokkala, T., 2009; Johnstone, D.B.) there is still insufficient data for higher education leadership in universities of transitional economies including academic institutions based in the post-socialist bloc of countries. The main issues addressed in this paper are: a) identification of higher education leadership patterns: b) the emergence of institutional autonomy and c) relationships between the Board of Trustees and university administrators in Kazakhstan.

Higher education leadership in Kazakhstan

There is a large volume of published studies describing the role of leadership in higher education worldwide. The study of higher education leadership is not a new phenomenon and debate continues about best strategies of university governance and management for university leaders to adopt. However, far too little attention has been paid to the issue of development of higher education leadership at universities in transition (Johnstone and Bain, 2002; Johnstone, 2011). Today, increasing forces of academic globalization and marketization of higher education have led to changing patterns of higher education leadership. In research literatures, the concept of leadership on the institutional level implies university leaders having organizational capacity and strategic vision of bringing about change or altering institutional trajectories (Johnstone, 2011, 182). The traditional understanding of higher education leadership is gradually changing from the leadership by one person to distributed leadership and the role of effective executive team is constantly growing.

To date, higher education leadership in Kazakhstan has consisted of the following key institutions: the Rector, the Academic Council and the Boards of Trustees. In public universities, rectors are appointed by the Minister of Education and Science. In the case of national-status universities, rectors are appointed by the President as advised by the Ministry of Education and Science. So far, there has been little theoretical treatment of higher education governance in Kazakhstan. Furthermore, many issues such as striking a balance between the Rector, the Academic Council and the Boards of Trustees have not yet been explored in detail.

In much of the world, university presidents, chancellors and rectors, as in the case of Kazakhstan, have come to their top management positions through academic career pathways. Rarely have there been university rectors who joined universities coming from the corporate world. In Kazakhstan, as in much of the world, all the rectors, without exception, hold a doctoral degree in a certain academic field and have a significant teaching experience (Altbach, 2011, 6).

Today, both the state and university administrators come to the realization that higher education leaders need further professional development and training apart from their learning “on the job”. The rector’s business skills of integrating academe and industry and managing a good R&D climate have been reflected in the State Program of Education Development 2020 which points out that higher education institutions are encouraged to establish business innovation centers and business incubators on their campuses (2010, 50-51). With the accelerating trends of the market, a top manager of academic institution needs to be an effective academic leader with strong financial and business management skills.

Kazakhstan, among many other countries in transition, has just started to consider models of managing universities as corporations. Due to the absence of the tradition of educational management as a discipline per se, there has not been much professional support for university leaders and their professional training in Kazakhstan. It occurs that it is not only the case of Kazakhstan but also of many universities across the world. As Altbach (2011, 3) has emphasized:

“contemporary universities require a combination of professional management and administration as well as the traditional participation of the academics in the essential academic functions of the institution. In much of the world, there is little awareness of the significance of professional administration and few methods of providing training for administrative staff”

University leadership is always embedded in a certain social and institutional context. As mentioned above, there has been no such discipline as higher education management in Kazakhstan and since there was no specific value for education manager’s professionalism. Due to being well-familiar with the post-Soviet contexts, Heyneman poignantly observes that “(...) Kazakhstan and other new nations from the former Soviet Union would have to professionalize their higher education systems. They would have to treat them like important and complex areas of their economies – health care, social security, environment and the like” (2005, 2). To date, university leaders and their executive teams have developed much reliance on the Ministry of Education and Science due to the entrenched tradition of “the state control model” (Fielden, 2008). University leaders are likely to be followers of the official ministerial decrees and orders. In fact, when asked the question of ‘what is your vision for the university?’, one of the university rectors has responded to us saying, “you would have to ask the Ministry that”.

Since one of the emerging reforms of the Program is the granting of greater autonomy, university administrations will be expected to develop their strategic visions and develop innovations in their management practices. Given the institutional freedom, we believe, it will take some time for the university leaders to develop their leadership skills and professional attitudes.

On the institutional level, the rector appears to be a key decision-making figure in the university governance. The decision-making powers of the newly introduced institutions of the Boards of Trustees have not been developed. So far, most academic institutions in Kazakhstan follow the entrenched post-Soviet governance structure of the Academic Council which supervises the decision-making process at the university. The Academic Council chaired by the Rector is the highest governing body of the University.

Research evidence refers to the fact that most rectors support the granting of institutional autonomy and shared governance on their university campuses. One of the rectors points out: *“currently, from the perspective of important principles of higher education governance, a rector is the main institute of governance and only then comes the Board of Trustees. But in the near future, we envision the Board of Trustees to be a top decision-making constituency”*. The Boards of Trustees, due to being a relevantly new institution of governance in Kazakhstan, appears to play an advisory, less-substantive role in policy formulation and mainly serves as the funding resource for the given university.

The emergence of institutional autonomy

Suggestions to grant greater autonomy to Kazakhstan's higher education institutions have been proposed by local and international higher education experts. For instance, an OECD review (2007, 126) emphasizes the following:

“Autonomy of HEIs from the government, and autonomy of departments and individual academic staff within the HEIs, are critical for fostering a culture of initiative-taking from the institutional level down to the individual academic staff level”

According to the State Education Development Program of Kazakhstan for 2011- 2020, the whole of higher education institutions will be granted university autonomy. The given policy document discusses this organizational change more specifically (2010, 49):

“a gradual, stage-by-stage process of granting autonomy to universities is planned. From 2015 onwards, autonomy will be granted to national research universities, to national higher education institutions in 2016 and to the rest of higher education organizations by 2018”

The Program envisages the higher education system that, by 2020, would be better managed and better integrated, more flexible in providing opportunities for altering institutional trajectories, and more financially self-reliant. Although, many members of the faculty actively supported the higher education reform in Kazakhstan in terms of autonomy, some people expressed concerns about the organizational change. For example, one of the members of the Academic Council at one of the universities observes, “universities will depend on economic incentives and begin to sell diplomas. The only thing that can prevent such a development – is the central control of the Ministry”. Many interviewed university leaders were enthusiastic about the possibility of having greater autonomy. While some recognize that the Ministry still has to play an important role in the higher education governance.

University administrators and the Board of Trustees

According to higher education reforms, “the universities will be subordinated to the boards of trustees”. The Board of Trustees, as a newly emerging institution of governance, plays a fundamental role in the transition from the “state control model” to the “state supervisory model” (Neave, G. and van Vught, F., 1994) to enhance institutional autonomy.

There are many universities in Kazakhstan that established the Boards of Trustees. Research evidence drawn from interviews with university administrators and members of the Boards has shown that in most cases the Boards of Trustees play only a consultative role at universities. For instance, one of the members of the Board of Trustees states, “we are able to advise and consult this university’s top managers rather than setting some long-term visions”. Many members of the Boards of Trustees have expressed their concerns of the lack of understanding higher education management and governance. They have confirmed their motivation to receive some professional training of serving on the Boards. It is worth-noting that the work of the Boards of Trustees, in many cases, is subject to a significant impact of university leaders.

As the Boards of Trustees need to have a say in strategic planning of universities, the Ministry puts a goal to develop new legislative mechanisms of rectors’ appointment at public universities. Rectors are expected to be elected in the sense of meritocracy and open discussions among members of the Boards of Trustees and other stakeholders including faculty members and students. Rectors should develop effective relationships between key constituencies of the university governance as well as constructive relationships with the Board of Trustees. Electing a rector based on his or her professional skills and credentials is one step forward to accountability measures. With this new higher education leadership pattern, the Ministry encourages the Boards of Trustees and the Academic Council to evaluate the work of the elected Rector within their period in office. In this case, university leaders need to learn to be flexible and have a capacity to respond to economic constraints and challenges as well as perform strong fund-raising abilities. They must be able to communicate effectively to faculty members, students, policy makers, employers and other higher education stakeholders.

We hope to see our university leaders with a new perspective and capacity of thinking globally and acting locally. Every university leader should have a strategic approach, should be an innovator and be responsible for their short-term and long-term decisions. We briefly present some features of effective higher education leaders seen as relevant from our perspective:

- Strategist: reconciling short-term and long-term interests of stakeholders at the local and global levels and the establishment of a clear course of action to achieve success.
- Innovator: creating a supportive environment for innovation and change, the identification and use of new global opportunities, products and markets.
- Communicator: involvement and encouragement of the parties through the use of various communication channels to transmit clear messages.
- Rapport builder: the creation of a trust relationship through understanding and respect for differences, and at the same time, meaningful communication with people on a global level.

- Coach: education of the new generation of leaders to maintain a learning culture based on strengths.
- Decision maker: using global perspective, systems thinking and analysis for the implementation of a significant strategy in the conditions of uncertainty and insecurity.
- Global citizenship: recognition of both its uniqueness and values of other nations, cultures, etc., integration into the world community.
- Higher education institutions' top management needs to develop a system of shared governance where the Academic Council and faculty members are empowered to bring their expertise to contribute to important institutional matters.

Conclusion

This paper has implied that higher education institutions over the last 20 years have seen the emergence of different patterns of higher education leadership in Kazakhstan. In 2010, new and ambitious targets for the development of collegial management in universities in a phased process of granting greater autonomy to universities were clearly formulated in the State Program of Education Development 2011-2020. University leaders, having professional knowledge of the local features of higher education practices in Kazakhstan, may need to share their expertise and decision-making powers with the Boards of Trustees. In order to carry out the transition from the “state control model” to the “state supervisory model”, both the state and universities need to build on the current developments of shared governance and raise institutional standards of accountability. The Boards of Trustees need to learn to oversee the overall functioning of an institution. Amidst the drastic reforms, faculty members should also have a say and the Academic Council is likely to develop their functions of academic governance.

References

- Altbach, P.G. (ed) (2011) *Leadership for World-Class Universities: Challenges for Developing Countries*. New York: Routledge.
- Altbach, P.G., & Salmi, J. (2011) *The Road to Academic Excellence: The Making of World-Class Research Universities*. Washington, D.C.: The World Bank.
- Anderson, D., & Johnson, R. (2009) *University Autonomy in Twenty Countries*. Mimeo. Centre for Continuing Education, Australian National University. Canberra: ANU.
- Estermann, T., & Nokkala, T. (2009). *University Autonomy in Europe I: Exploratory Study*. Brussels, Belgium: European University Association.
- Fielden, J. (2008). *Global trends in university governance*. Education Working Paper Series, 9. Washington, DC.: The World Bank.
- Heyneman, S.P. (2005) Post-graduate training and research in Higher Education in Management in Kazakhstan. *Kazakh Journal on Higher Education*. 3, 27-34.
- Johnstone, D. Bruce (2011) The challenge of university leadership in the developing world. In Altbach, P.G. (ed) (2011) *Leadership for World-Class Universities: Challenges for Developing Countries*. New York: Routledge.

Johnstone, D. Bruce (2013) "Higher Educational Autonomy and the Apportionment of Authority among State Governments, Public Multi-Campus systems, and Member College and Universities," in Lane, Jason E. and D. Bruce Johnstone. (eds) (2013) *Higher Education Systems 3.0: Harnessing Systemness, Delivering Performance*. Albany: SUNY Press.

Johnstone, D. Bruce, & Bain, O. (2002) *Universities in transition: Privatization, decentralization, and institutional autonomy as national policy with special reference to the Russian Federation*. In Chapman, D.W., Austin, A.E. (eds) (2002) *Higher Education in the Developing World: Changing contexts and institutional responses*. Westport, CT: Greenwood Press.

Ministry of Education and Science of Kazakhstan (2011) Law "On the special status of 'Nazarbayev University', 'Nazarbayev Intellectual Schools' and 'Nazarbayev Fund'". Retrieved from: http://www.edu.gov.kz/en/legislation/laws_of_the_republic_of_kazakhstan/ Accessed on May 2, 2013.

Neave, G., & van Vught, F.A. (1994) *Government and Higher Education Relationships Across Three Continents*. Oxford: Pergamon Press.

OECD (2007) *Higher Education in Kazakhstan. Reviews of National Policies for Education*. Paris: The World Bank. State Program of Education Development in the Republic of Kazakhstan for 2011–2020, (2010). Retrieved from http://www.edu.gov.kz/en/legislation/state_program_of_education_development_in_the_republic_of_kazakhstan/state_program_of_education_development_in_the_republic_of_kazakhstan_for_20112020/ Accessed on 15 August, 2013.

GOVERNANCE OF THE U.S. UNIVERSITY: ORGANIZATIONAL STRUCTURE AND CHANGING POWER RELATIONSHIPS IN COMPARATIVE PERSPECTIVE

Martin Finkelstein and Kairat Kurakbayev

Abstract

This paper provides a comparative perspective on changes in the governance of U.S. universities in the past two decades. An analysis of trends revealed in U.S. national surveys in 1992 and 2007 shows that faculty influence in decision making has become much more limited to personnel issues, while the influence of academic middle management – particular department chairs and deans – has expanded, especially in matters of budget and establishment of new academic programs, at both the expense of the faculty and even the central university administration. These findings are compared to those for twelve other developed nations as reflected in a 2007-08 global 19 nation survey: *The Changing Academic Profession*. Such comparisons reveal the greater role of external stakeholders, including national governments, in most nations outside the U.S. Recent trends, however, suggest that while many national governments outside the U.S. are increasing the autonomy of universities from government, the federal involvement in higher education in the U.S. is increasing amid such growing decentralization in the governance of universities elsewhere. The findings are interpreted in terms of the search by national governments globally to achieve a “delicate balance” between the demands for autonomy to support academic quality and accountability for the large public investment in higher education

Introduction: The Basic Lay of the Land

As many nations seek to build “world-class” universities as a strategy for enhancing their competitive position in the global “knowledge economy,” there has been increasing attention to the apparent success of the “American” university as a potential model to emulate. U.S. universities, after all, dominate the various world rankings (Wildavsky, 2010); and the notion has become widely accepted that one of the key distinguishing features of the U.S. university that accounts for this academic success is its distinctive organization and relative autonomy from government (Clotfelter, 2010). The U.S. system is indeed relatively insulated from central or even state government by its corporate form (and the historic dominance of the private sector): universities are chartered by state governments and those charters vest ultimate legal power in a self-perpetuating board of lay trustees who serve as the ultimate and legal arbiters of organizational decisions – academic, financial and otherwise¹. Ultimately, the theory is that corporate independence will ensure the unfettered pursuit of distinction in a competitive academic market and at the same preserve the public interest insofar as lay members provide a counterweight to the faculty’s purely academic (and some would argue narcissistic) concerns.

Stated simply, the organization of the American university has pitted a legally supreme board of trustees and their designated representative (the President or Chancellor), on the one hand (or at the top) against an increasingly assertive faculty, on the other (at the bottom) whose major claim to a role in governance is that they bring to the table the highly specialized

¹ This corporate arrangement is similar for public institutions, although membership on their boards of trustees are typically appointed by politicians or elected by the public. Indeed, in a few states – Michigan and California – the university is granted autonomy in the state Constitution.

expertise required to make decisions related to research, academic programs and faculty personnel (Clark, 1983). In some sense, the history of governance of U.S. universities is a history of the struggle between the faculty and the president or administration (representing the board of trustees) to find some accommodations in jointly steering the enterprise. The governance drama in the U.S. case has thus been for the most part an internal one – fought within the boundaries of the campus². To be sure, as American higher education expanded in the post-World War II period, and vast new public systems of universities were established by the individual states, the infusion of resources from all levels of government re-calibrated the “internal” balance on campus as between the faculty and the administration, usually in favor of the administration as the primary “boundary spanners” between the campus and the political system³.

What becomes readily apparent from this description is just how different the U.S. system is from most of the rest of the globe. In Continental Europe and in most of Asia (Germany and Japan are the prototypes), the faculties at the individual universities dominate those universities and governance typically plays out between the individual faculties or even individual professors and the Ministry (or other regional entities). Central administrations (rectors) are relatively weak and certainly do not offer a competing center of power on the campus.

This is the basic context within which we want in the remainder of this paper to (1) describe two basic trends currently underway in the U.S. in terms of the faculty role in university governance and the re-alignment of relationships on campus; and (2) to describe the changing nature of federal involvement in higher education which, we believe, has some important implications for the vaunted autonomy from government of the American university. Finally, (3) we want to consider these changes in light of current university reforms outside the U.S. as well their implications for the future of higher education in Kazakhstan.

Before proceeding to the basic discussion of current governance trends in the U.S., we want to provide a brief overview of the data sources for most of the subsequent discussion: the 1992 Carnegie Foundation for the Advancement of Teaching’s International Academic Profession survey (Altbach, 1996) and The Changing Academic Profession [CAP] survey of 2007-08 (Cummings and Finkelstein, 2011).

Data Sources

In 1992, the Carnegie Foundation for the Advancement of Teaching conducted the first international survey of the academic profession. Nearly 20K academic staff in fourteen countries responded to an instrument including questions about career and work experience, teaching and research activities, perceptions of the higher education system, generally, and of organization and governance, in particular (Altbach, 1996). Fifteen years later, a group of professors who had played a leading role in the 1992 survey organized a follow-up conducted during 2007-08 with a common sampling frame and instrument. More than 20K academic staff responded from 19 countries, including ten of the original Carnegie 14, Australia, Brazil, Hong Kong (treated here as a separate country prior to its return to China by the British), Germany, Japan, Mexico, the Netherlands, South Korea, the UK, and the US. The reference population of both the Carnegie and the CAP Survey primarily comprised full-time teaching

2 Of course with the advent of public systems within the individual states, the proverbial “campus” might expand 10-20 fold under single corporate board.

3 But sometimes in favor of faculty to the extent that they could independently command government resources to fund their research and laboratories.

professionals in higher education institutions that offer a baccalaureate degree or higher (Type A of the OECD classification or Level 5A of the ISCED-97).

The 2007-08 CAP survey included a critical mass of questions related to each of the CAP's three major themes: managerialism, internationalization, and relevance. The items on managerialism – which included faculty perceptions of the power and influence of various external and internal constituencies (including themselves) in campus decision-making, in budgeting policies and practices, in the evaluation of teaching and research, and in their academic units – largely replicated the items in the original 1992 Carnegie survey – effectively permitting a comparison of changing perceptions over a 15 year period – a period which in the U.S. saw almost no systematic national study of academic governance.

Findings: The Shrinking Faculty Role and the Rise of Deans

The 1992 and 2007 surveys posed a similar set of questions providing respondents with a series of decision areas (faculty appointments, approving new academic programs, selecting top administrators, etc.) and asking them to rate the relative influence of key stakeholders in making those decisions. For purposes of simplicity, we focused on five decision categories that we believed were representative of the continuum of decisions from purely personnel and curricular (the typical domain of the faculty) to budgetary and administrator selection (traditionally outside the faculty's purview) and sought to compare the responses in 1992 to those in 2007 for three stakeholder groups: faculty (including individual faculty, faculty committee and senates/unions), middle managers (deans and department chairs) and central administration (including boards and external groups). The results are displayed in Table 1 below.

Table 1. Summary: At your institution, which actor has the primary influence on the following decisions? (% very influential & influential) 1992 vs. 2007

	Central Admin & External Stakeholders		Deans & Chairs		Internal Faculty Bodies	
	1992	2007	1992	2007	1992	2007
Selecting key administrators	83.7%	76.9%	11.3%	14.7%	4.9%	8.3%
Choosing new faculty	17.6%	5.6%	19.8%	33.0%	62.5%	61.4%
Making faculty promotion and tenure decisions	31.9%	18.3%	30.9%	30.5%	37.2%	51.1%
Determining budget priorities	86.5%	55.4%	9.3%	42.4%	4.2%	2.2%
Approving new academic programs	47.4%	47.7%	27.6%	16.6%	25.0%	35.6%
Data source: CAP Kassel International Survey, 2009						

If we examine the results for the two areas of faculty personnel which have traditionally fallen within the purview of the American faculty (choosing new faculty and making faculty promotion and tenure decisions), a clear pattern emerges. Between 1992-2007, central administration and external groups lost influence in these matters while deans/department chairs and faculty gained or retained their influence. According to these data, by 2007, the faculty had clearly consolidated its hold over faculty personnel decisions. At the other end of the decision spectrum, i.e. establishing budget priorities, a very different trend emerges. Central administrators and external groups lost influence between 1992-2007 while middle management (deans and department chairs) gained influence. While, central administration

was perceived as retaining the major share of influence in budgetary matters (55.4 percent of respondents still saw them as the primary arbiters in matters of budget); it was however the deans who relative to the faculty gained influence during this period. In 1992, deans and faculty were perceived to be about equally ineffectual in budgetary matters (perceived as primary influencers by 4.2 - 9.3 percent of respondents). By 2007, the deans were perceived as primary influencers by more than two-fifths (only marginally below central administration). In the area of selection of administrators central administration retains its primary influence during this period. Neither deans nor faculty appear to have made any inroads in this area.

The key area of approving new academic programs reveals a different trend. The declining influence on the part of deans and department chairs, and steady or increasing influence on the part both of central administration and faculty bodies. That administrators continue to retain the highest share of influence in new academic program approval suggests the key role of resources (budget) in the start-up of new programs. That the faculty have increased their influence may be attributable to two forces. The persistence in faculty efforts to exert their control over academic program (an area traditionally the domain of the faculty) as well as the increasing entrepreneurial activity of faculty in the area of new academic program development through securing external, grant support.

In sum, the overall pattern is one of continued ascendance of central administration in matters of budget, administrative staffing and new academic programs, the consolidation of faculty influence in the area of faculty personnel decisions, and the increasing influence of deans and department chairs (middle management), especially in budgetary matters.

While, by way of counterpoint, administrative influence appears to be increasing, that increase may be less at the central administrative level, and more decentralized at the level of the academic unit. That is, the available evidence suggests that deans of academic unit (schools or colleges) have been the primary beneficiaries of increased administrative influence – species of “decentralized” bureaucratization.

Historically, faculty's influence in governance has varied by institutional type and academic field: at the most prestigious, research institutions, faculty have tended to be more influential overall (although there are known to be institutional cultures more or less hospitable to faculty influence, e.g. faculty at Yale) as have faculty in the natural sciences and in the professions, esp. medicine and law. There is some evidence that the decline has been across the board. There remains anecdotal evidence that institutional prestige still matters ---- witness the faculty response to the recent trustee firing of the president at the University of Virginia and her subsequent re-instatement after faculty protest and resignations.

How does the situation of U.S. faculty compare to their counterparts in other mature economies and nations? Data from the *Changing Academic Profession*, 2007-08, suggest that American faculty are less influential overall than their colleagues in Canada, Germany, Italy, Japan and the Scandinavian countries (Finkelstein, 2012). Most notably, these faculties wield influence on matters of budget, administrator selection and academic programs unimaginable to American faculty. Moreover, they typically wield influence in the public policy process through their role on national system governance mechanism such as the University Grants Committee in the UK, various national disciplinary committees in France and Germany and directly on the staff of national ministries of education (Clark, 1983).

The U.S. system tends to shield faculty from intrusion by the state, especially in matters of curriculum, academic programs and personnel and research. It does so, however, at the price

of erecting a much more formidable power center at home – the local president who, subject to board approval, remains the ultimate source on legally binding institutional decisions.

Two new developments that will be playing out over the next 5-10 years merit special attention – as they potentially affect this portrait we have drawn:

(1) The trend outside the U.S. to increase the autonomy of individual universities vis-à-vis the central government – a trend that, harkening to the American model – is premised on the notion that institutional autonomy is a key ingredient of academic quality. This trend is associated with the growth of central administration at the individual university level (threatening the traditional absence of a local administrative counterpoint to faculty influence);

(2) The trend in the U.S. toward an increasingly intrusive role of the federal government in higher education threatening the vaunted autonomy of America's universities.

Trends in the Reform of Higher Education Governance Outside the U.S.

Most would agree that the pace of governmental efforts to reform higher education systems at the national level has accelerated markedly since the mid-1990s. The thrust of many such efforts has been to decentralize academic and personnel decision-making.

In several countries, there are signs of the growing decentralization of the employment and working conditions of academics. There are various shifts of responsibility towards the academic workplace according to country: intermediation as a shift of responsibility from the central government to intermediate bodies; regionalization as a shift of responsibility from central to regional state authorities; localization as the shift of responsibility to the local level of employer regulations and local collective bargaining; and individualization as a shift towards individual bargaining between academics and institutional representatives. Salaries, teaching loads and other elements of time and resource allocation tend to become more flexible and are reorganized according to institutional and individual circumstances (Enders, 2001).

This devolution of responsibility downward has usually been accompanied by both increased regulation of performance (quality assurance standards and processes) and also by the mushrooming of administrative staff at the regional and institutional levels. Some have suggested that such efforts to increase institutional autonomy (and, of course, accountability) have merely led to “re-bureaucratization” – but now at the local level (Enders, 2001).

While Enders was referring to Europe in his analysis, Japan's National Universities may represent the most extreme example of this trend. In 2002, new legislation re-established the nation's 99 national universities as quasi-independent entities, governed by autonomous boards of trustees (appointed by the Ministry, to be sure). In tandem, the Japanese government reduced overall university expenditures, established a performance – funding system for designated “centers of excellence” and introduced fixed contract staffing into the universities. It is still too early to tell whether what appears to be an “Americanization” plan for Japan's elite public sector will indeed be implemented as conceptualized or whether, if implemented with fidelity, it will have the desired effect – targeting funding on performance, encouraging competition and enhancing quality. The same can be said about reform efforts in Europe. The point, however, is that governance in many regions of the world are moving toward some version of a decentralized American model. To the extent that this is occurring, it does so, quite ironically, at a time when the decentralized, autonomy protecting “American” model

may itself be undergoing something of a silent transformation as the role of the federal government in American higher education becomes both stronger and more suffocating.

Most universities in transition have started to adopt the Western academic model. In the case of Kazakhstan, twenty years of national independence have been accompanied with the challenges of struggling with the ideological regimentation and the centralist model of higher education governance. Universities have experienced tight control of the state and at the same time have been under pressure to raise standards and internationalize the higher education system. There is anecdotal evidence that the state control model of higher education governance has gone to such lengths as micro-managing academic processes of universities. This has led to over-bureaucratization of the higher education management and serious concerns have been raised by university leaders and faculty members.

After the fall of the Soviet Union, national strategic plans have clearly focused on steering academic institutions to serve economic interests of the nation. Similar to other transitional economies, key trends of higher education governance include decentralization and privatization. The marketization of higher education has implied the need for the development of institutional self-governance and flexibility. With the increasing effect of the market forces, the state has started to reformulate its long-standing relationship with universities and is now considering to devolve greater autonomy to them. It is envisioned that by 2018 the whole of higher education institutions will be autonomous. The Ministry of Education and Science seems to proceed with caution and the process of granting university autonomy tends to be gradual. The primary step is to grant institutional autonomy to well-established national universities by 2015. At present, in order to enhance institutional autonomy, the Ministry has established buffer agencies ensuring public accountability and quality control. The national policies of education development have encouraged academic institutions to adopt best practices of higher education management originating predominantly in the West. These reforms and appropriate legal frameworks of introducing institutional freedom, implied by the Bologna Process, establishing the Boards of Trustees and holding merit-based selection of candidates for the post of university leaders are under way.

It is too early to state if Kazakhstan's higher education system is ready to adopt organizational principles of university autonomy. There is good reason to believe that the granting of academic autonomy will facilitate the market relevance of the courses. As the patterns of institutional self-governance are very diverse, the reformulation of the relationship between the state and universities is likely to lead to evolving different context-sensitive strategies of higher education governance.

The Changing Role of the U.S. Government in Higher Education

Whether one selects 2002 (debate begins on the re-authorization of the Higher Education Act by the U.S. Congress) or 2006 (the Report of the Commission on the Future of American Higher Education appointed by Margaret Spellings, U.S. Secretary of Education) as the watershed (demarcator), a "new era" is emerging – very rapidly – in the relationship between the federal government and institutions of higher education in the U. S. (Eaton, 2012). The historically "hands-off" role of central government in the U.S. (beyond providing student aid and research funding) is evolving into a substantively regulatory one.

The new era was precipitated by the confluence of a variety of forces, including the escalating costs of university tuition in the U.S. threatening the capability of most middle-class families to afford a college education for their children, a spate of national reports questioning the substantive outcomes and economic value of a four-year undergraduate

degree, public scandals involving for-profit, private institutions that have paid headhunters to recruit new students—many of questionable academic ability—helped them apply for billions of dollars of federal student aid loans, only to have them either drop out prior to degree or certificate completion or be unable to find jobs and default on their federal loans—and a general sense that higher education institutions are not providing adequate information for consumers of their “high priced” services. There was enormous political pressure for the federal government to step in and ensure the provision of adequate information to consumers as well as protect federal student aid investments. This resulted in the passage of federal legislation in the 1990s (for the first time) and a spate of new rules subsequently aimed at regulating the standards and process of institutional accreditation or quality assurance.

By way of background, a word about quality assurance in the U.S. context. Historically, quality assurance in higher education in the U.S. operated on the principles of voluntary self-regulation, peer review and a focus on improvement. In each of seven geographic regions, voluntary organizations arose of universities and secondary schools (e.g. the Middle States Association of Schools and Colleges in the mid-Atlantic area). These associations collaboratively developed broad, albeit flexible, standards for assessing quality and organized a system whereby universities undertook periodic self-studies that addressed regional standards, and were “visited” by teams of reviewers from peer institutions to assess the extent to which standards were being met. Visiting teams developed recommendations for improvement and for the award of overall accreditation status. It is this voluntary system of self-regulation supplemented by a similar discipline-specific process undertaken under the aegis of various national disciplinary and professional associations that have shielded colleges and universities in the U.S. from national government mandates related to academic programs, student admissions, staffing levels and qualifications, etc. Indeed, for the past 50 years, the U.S. government has put its own imprimatur on the work of these “voluntary” regional and professional accrediting associations by “accepting” their judgments as the basis of eligibility of enrolled students for federal financial aid. No more. New federal legislation and rules mandate uniform standards that must be met by all institutions as well as uniform indicators of such standards. Thus, it is no longer sufficient to have a local plan for assessing student outcomes, but rather a uniform set of quantitative indicators---across all institutions. Moreover, the new rules specify the processes to be used in quality assurance, including who may serve on review committees. Staff at the U.S. Department of Education review reports and are increasingly questioning specific decisions or recommendations by peer review teams (Eaton, 2012). Control is enforced through the threat of removal of an institution from the accreditation list or of an individual from the accreditation team roster. What is emerging is a standardized, bureaucratic compliance-oriented process that imposes uniformity in both substantive standards and quality assurance processes as well as centralized, bureaucratic supervision of the process. While the public policy intent of such changes are laudably aimed at “consumer protection” and optimizing the quality and transparency of information about institutions of higher education (all public goods), they may also have quite unintended and negative consequences for the historic autonomy of universities in the U.S. as well as the principle of the supremacy of peer review in deliberations about academic quality.

What Do These New Developments in University Governance Mean?

It is still too early to make judgments about the impact of decentralization and the expansion of university autonomy in Europe and Japan, as it is about the increasing centralization and chipping away at institutional autonomy in the U.S. It seems unlikely that national Ministries are losing their place at the center of most national systems in Europe and Asia; nor that the

federal government in the U.S. will take on the trappings of a traditional national Ministry of Education.

For universities in transition, including higher education institutions of Kazakhstan, there are good lessons to learn. As the state carefully examines international practices of higher education governance, universities need to prove that they have developed adequate accountability measures. Institutional autonomy is highly likely to be granted to those academic institutions that will manage to provide effective internal accountability mechanisms and perform institutional credibility and strategic leadership. There seems to be an agreement at both ends of the government and most public universities that the state will continue to play a substantive role in the higher education governance.

What these developments demonstrate is that higher education systems across the globe are experiencing seismic pressures at once to promote academic quality and scientific innovation among their university systems to ensure their economic competitiveness in the global economy at the same time that they are seeking to “manage” the demands of massification and protect their public investment in colleges and universities.

These pressures are initially disrupting the balance between government action and university autonomy and we are in the midst of a period of “re-calibration” – even in the U.S. system. We all need to be watching these developments carefully and constantly re-appraising the “delicate balance” between universities and the public interest.

References

- Altbach, P. G. (Ed.). (1996). *The International Academic Profession: Portraits of Fourteen Countries*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.
- Clotfelter, C. (2010). *American Universities in the Global Market*. Chicago: University of Chicago Press.
- Cummings, W. & Finkelstein, M. (2011). *Scholars in the Changing American Academy: New Contexts, New Rules, and New Roles*. Dordrecht, NL: Springer.
- Eaton, J. (2012). “The Future of Accreditation.” *Planning for Higher Education* 40 (April-June).
- Enders, J. (2001). *Academic Staff in Europe: Changing Contexts and Conditions*. Westport, CT: Greenwood Press.
- Finkelstein, M. (2012) “American Faculty and their Institutions: The Global View.” *Change* 44 (May/June). 48-59.
- Finkelstein, M., M. Ju and W. Cummings (2011). “The United States of America: Perspectives on Faculty Governance, 1992-2007.” In: Locke, W, W Cummings and D. Fisher. Dordrecht, NL: Springer.
- Kaplan, G., E. (2002). *Preliminary Results from the 2001 Survey on Higher Education Governance*. Washington, D.C.: American Association of University Professors.
- Tierney, W.G. & Minor, J.T. (2003). *Challenges for Governance: A National Report*. Los Angeles: Center for Higher Education Policy Analysis, University of Southern California.
- Wildavsky, B. (2010). *The Great Brain Race*. Princeton, NJ: Princeton University Press.

QUALITY ASSURANCE IN EDUCATION, RESEARCH AND ACCOUNTABILITY

Tom Boland

There is a broad consensus globally of the value of education to social and economic development. Higher education in particular plays a crucial role in creating culturally vibrant and democratic societies. Higher education and research, and the outcomes they produce in terms of well-educated graduates, a capacity for innovation and new knowledge, play crucial roles in the economic development of all our societies. So we can agree that well performing higher education institutions, accessible to all who can benefit from higher education and graduating high quality graduates is a worthwhile objective for all of us.

Given this central role of higher education in our lives, a key issue for higher education institutions, governments and policy makers is how to ensure quality outcomes, in the teaching and learning mission of institutions and in their research mission. For graduates quality outcomes will determine their life chances and the success of their careers; for governments, that have invested valuable and usually scarce public resources, they expect a good “*return*” from their investment in terms both of well-educated graduates, knowledge transfer and innovation; for societies, their social and economic development depends crucially on the quality of educational outcomes. Quality, and its assurance, is also key to the accountability relationship between higher education institutions and the governments who fund them and regulate them in the public interest.

What is “quality”?

One of the great difficulties in discussing quality and quality assurance is to find a shared understanding of what is meant by the term “*quality*”, in contrast with the relatively easy task of defining other measures of institutional performance. What do we mean by quality; how can it be measured or assured and who needs to agree on the definitions and the measures to be employed?

Rather than trying to coerce all stakeholders into an agreed definition of quality a more pragmatic and ultimately more impactful approach is suggested - allow that quality means different things to different people depending on their perspective and context. For the student a quality higher education experience is one which prepares her or him for life by supporting personal development. For academic staff quality lies in their capacity to generate new knowledge and to transmit that knowledge effectively to the wider world through their students as graduates. For governments, quality outcomes are those which ensure the most efficient generation of knowledge and its transfer, especially into economic activity. For employers quality rests in the skills and competences of graduates as employees. For society, to take a broad and wide encompassing category, quality outcomes from higher education include all of these as well as the dynamic that quality higher education generates towards creating better places to live that respond to human needs, socially, culturally and financially.

Quality assurance as quality enhancement

If quality means many different things to different people, does this render the task of quality assurance an impossible tangle of conflicting aims and objectives? Not so for a number of reasons. First, fundamental to quality assurance is a focus on quality improvement or enhancement. Quality assurance needs to have as its animating spirit one of support and

improvement, not fault finding and regulation. An ever present danger with quality assurance systems that adopt a quality audit approach is that this will kill the very thing it seeks to promote by smothering it in red tape, box ticking and bureaucracy. A quality enhancement approach, on the other hand, offers the prospect of constantly improving standards of performance.

The higher education institution as primary arbiter

Secondly, while all stakeholders have an interest in the outcomes of quality assurance processes, only one is in the key position to determine those outcomes – the institution itself. It is the institution, acting within its proper sphere of autonomy that decides (or should decide) on the internal allocation of its resources; that hires staff, mentors them and assesses their performance; that admits, teaches and graduates its students. It is a fundamental principle in the Irish higher education system, and in many others around the world, that the primary responsibility for creating a quality learning experience for students, for quality outcomes from teaching and research and for quality assurance is the institution itself.

But this is not to disenfranchise other stakeholders – in particular governments and of course students who have the keenest interest in quality outcomes and in ensuring those outcomes are achieved. Government's interest arises from its role in promoting the public interest and as a substantial investor of public funds on behalf of the wider public. Achieving a balance between autonomy and accountability is respect of quality assurance, as well as other aspects of the operation of a higher education institution, is key to a successful relationship between governments and higher education institutions. The role of government, therefore, is to ensure that institutions do that which they are morally and legally obliged to do - and not to try to do it for them, or do it to them. In other words there should be a clear statutory delegation of responsibility to HEIs to put in place appropriate QA processes and the responsibility of the government is to ensure that such process are in place; that they meet best international standards; that they are fully operational and that they are effective in the constant drive towards quality improvement.

Ireland

Taking Ireland as a case study for quality assurance, it reflects this approach. As a matter of law and practice, primary responsibility for quality assurance rests with the higher education institutions. The public interest is supported through the role of a special statutory body, Quality and Qualifications Ireland, the focus of which is on quality enhancement, rather than detailed micro-regulation of the institutions and their processes.

Taking the wider context in Ireland, the Higher Education Authority is at present leading a process of reform that will see a re-orientation of the regulatory regime for higher education away from a focus on inputs to a focus on outputs and outcomes. Quality, its assessment and assurance, will be an important performance indicator in an approach that will see an increasing alignment of public funding with national objectives and a clear relationship between public funding and institutional performance.

Role of Students

Students must play an important role in QA processes. They, after all, are most directly impacted by what higher education institutions do. For that reason alone statutory provisions relating to QA should specifically mandate the involvement of students. In addition many

countries find surveys of students a useful way to determine the quality of the higher education experience from a student perspective. In Ireland we have developed such an instrument which will be provided as a national student survey from next year with direct feedback to HEIs. A similar approach has been initiated in Ireland also in the past year with respect to employers.

So all the key stakeholders (institutions, government, students and employers) can and should input into the quality assurance process, each with a clear understanding of the role of the other and all with an appreciation of the importance of the autonomy of the institution to take primary responsibility for ensuring the quality of its core activities in teaching and research.

The National Forum for the Enhancement of Teaching and Learning

Working through academics across the higher education sector the Higher Education Authority in Ireland has recently overseen the establishment of the National Forum for the Enhancement of Teaching and Learning. The Forum will be the key, system-level infrastructure for the enhancement of teaching and learning in which the HEA will direct system-level investments in teaching and learning in the years ahead. Building on past collective endeavours, the Forum will serve as a national platform for academic-led enhancement of teaching and learning.

A key objective of the National Forum will be to foster the integration of high-quality research with the mission and practice of teaching and learning. Within this context, the Forum will have a vital role to play in advancing the scholarship of teaching and learning to ensure that teaching practice in Irish higher education is informed by up-to-date and relevant pedagogical research. It will aim to support innovation and experimentation across the sector at the frontiers of international 'best practice', and to facilitate the development of an open eco-system for scholarship in teaching and learning for the academic community.

Quality vs. resources

Returning to the main theme – quality - this is a complex concept. One of the proxies often employed is the resource per student in a university or college.

While all can appreciate that there is some relationship between the quality of outcomes in higher education and the quantum of resources applied to achieve those outcomes, the relationship is certainly not a linear one and is in practice poorly understood. This issue has assumed greater importance as countries move towards mass higher education with the funding implications that that carries for both government and students. Added to this in recent years has been deep recession in many of the more developed economies.

This is an area that is poorly researched. A conspiracy theorist might say this stands to reason since the very people who would research it, academics, are the very people who might have most to lose if research showed poor correlation between the level of resource available to universities and the quality of outcomes. But conspiracy aside, failure to better understand the issue could lead to one of a number of undesirable outcomes. Either governments yield to the consistent calls from institutional leaders for more investment and risk wasting always overstretched public resources on over-funded programmes; or in those jurisdictions where students carry a significant portion of the cost of their higher education they leave college

burdened with loans that bear no relationship to the earning power of their degrees; or, conversely, governments do not respond to demands for resources, demands that cannot be met by students and the quality of outcomes is damaged. This latter is probably the worst of all possible scenarios since once quality suffers it is very difficult to undo the damage on the ground or in reputation.

International ranking systems

The quest for instruments that can measure quality outcomes in higher education has led to the development of international ranking systems, or league tables. The problem with such rankings are not the ranking systems themselves or indeed their developers and compilers, but the way in which the rankings are used – by universities, governments and the media, to mention the main culprits.

By far the most perverse response to such league tables of universities is for a country to set out to invest so as to try to ensure that a chosen one or two of its universities achieve top ten, or any other “*top*” ranking. In doing so, it is suggested, a country runs the risk of impoverishing its higher education system as a whole, maybe even its entire education system, for the chimera of a prize which even if achieved (and that’s unlikely) is unlikely to deliver the benefits expected. This is true even in the wealthiest of societies. The approach adopted in Ireland, and currently being robustly implemented by the HEA is to create a high quality system of mission specific diverse HEIs well-co-ordinated and aligned with national objectives, funded so as to sustainably ensure quality outcomes in a mass higher education system. The focus is on what Ireland needs from its higher education institutions, not what an international ranking system will measure. If, as an outcome of this policy, any of our universities is ranked first, tenth, one hundredth, or whatever that is fine but it is not an objective.

AHELO

Another project, which initially promised a great deal more than ranking systems was AHELO - the Assessment of Higher Education Learning Outcomes. In an environment where international league tables were unchallenged drivers of public policy for higher education this OECD project offered the prospect of a much broader method of comparing performance in higher education institutions across jurisdictions. A five year feasibility study has proved disappointing however.

The study has brought benefits in terms of bringing a renewed international focus on the importance of learning outcomes in the participating institutions and in the minds of students and staff and it has demonstrated that technically it is possible to mount an international survey in this space. Those countries that participated have also benefitted through the impact of this focussed dialogue on learning outcomes, and assessment methodology in their institutions.

However, there remain deep concerns regarding methodological aspects and, in the view of many, intractable challenges associated with developing a common set of standards. There is also concern and confusion, over the purpose of the exercise – whether it should be a high-stakes accountability tool versus a low-stakes developmental or self-improvement mechanism – a conflict reflected earlier in my remarks that go to the heart of what quality assurance processes should be. And how would AHELO fit into the ecosystem of existing

instruments with similar objectives and avoid survey fatigue on the part of students and staff. Above all, after five years of significant investment and considerable effort by many admirable people we still have no clear answer to some key questions on future costs and likely benefits of the project.

All things considered, it now seems unlikely that the project can deliver on its initial promise. We should pocket what learning and benefits we can from the work to-date either at national or international level and move on.

U-Multirank

Another project with somewhat similar objectives is the EU promoted U-Multirank project. U-Multirank is a very different form of ranking, and indeed in my view it is a misnomer to call it a ranking system at all. Not only is it a misnomer but it runs the risk of discrediting what could be a very useful instrument, by its association with the more contested international ranking exercises.

The key potential strength of U-Multirank is the capacity it gives to universities and colleges to benchmark their performance against comparable HEIs. It allows comparison of performance not only in research, but also in teaching, knowledge transfer, international orientation and regional engagement and as such it is a multi-dimensional instrument. It does not produce league tables; neither does it aggregate the performance of universities in different activities into a composite score. It presents performance profiles for universities across the five dimensions using a broad range of performance indicators. It provides these performance profiles at two levels: for the institution as a whole; and at the level of different disciplinary fields (initially mechanical and electrical engineering, business and physics). U-Multirank uses publicly available information (particularly on research performance) and data from national sources wherever possible as well as information supplied by participating institutions.

A key feature of the U-Multirank webtool is that it enables users to specify the type of institutions they wish to compare (in terms of the activities they are engaged in). Users can then decide which areas of performance to include in the comparison of the selected group of universities; in this way U-Multirank produces personalised benchmarking of HEIs.

Participation in U-Multirank provides potentially significant benefits to higher education institutions.

- Visibility internationally of performance profile and in the disciplinary fields in which it is active.
- This performance profile is accessible via the interactive web-tool to a wide range of stakeholders: internationally mobile students (and their parents); academic staff and other higher education institutions seeking partners; business and industry with particular R&D or professional education needs etc.
- The HEI can compare and benchmark its performance profile on a wide range of indicators with other institutions with similar institutional profiles within the European Higher Education Area and beyond, and can identify potential partners for cooperation.

It is a project to be watched with interest as it is rolled out.

Conclusion

Quality outcomes from higher education are the objective of all stakeholders. Quality assurance processes are key to such outcomes and are a central element in the accountability of HEIs to those stakeholders. Such processes also go to the heart of the autonomy of HEIs. Finding the correct balance between that autonomy and accountability is the essence of an effective, synergistic relationship between higher education and Government. Four principles of approach are suggested –

- The higher education institution has primary responsibility for ensuring quality outcomes from its programmes and all its activities;
- The appropriate role for government is to ensure that the HEI takes its role seriously and puts in place the processes necessary to best guarantee such outcomes;
- Such processes must include students at their core and other stakeholders as appropriate;
- The focus of quality assurance processes should be on quality enhancement, avoiding the trap of bureaucracy and box ticking;

THE ROLE OF THE STATE IN QUALITY ASSURANCE OF EDUCATION

Sholpan Kalanova

Establishment of an effective quality management system of education is a strategic priority for the national education system. In Kazakhstan, issues of control, accreditation and quality assurance play a key role in enhancing the competitiveness of the country. It must serve the interests of the state, society, students and the academic community. At the state level, the accreditation process in Kazakhstan has been fixed on a legal basis, which consists of *“Amendments to the Law” “On Education”* of 2001, the Law *“On Education”* of 2007 and *“Amendments to the Law” “On Education”* of 2011.

All the positive changes in the transfer of supervisory powers in education became possible by defining the role of the state, the political will of the President of the country, Nursultan Nazarbayev, and the development of a number of key strategic Government documents. They are: Strategic Development Plan of the Republic of Kazakhstan till 2020, the State Education Development Program 2011-2020, signed by President of the country in 2010, the Law *“On Education”* on October 24, 2011, with amendments. In all the above stated documents the role of accreditation in ensuring the quality of education was raised to the next level and the emphasis was placed on the independent accreditation.

The core changes in government regulations and legal acts are:

- Transfer of a part of the state authority’s power to the non-governmental sector in the light of orders from the President of the Republic of Kazakhstan to Government to reduce governmental control and supervisory functions (2011);
- The development of public-private partnership in education in different forms and at different levels.

For example, the State Programme of Education Development stipulates that from 2012 onwards, the accreditation will be conducted by non-profit non-governmental organizations. The state transfers part of its supervisory power to the non-governmental sector, but the state will regulate the accreditation of suppliers by their recognition and inclusion in the National Register of accreditation bodies (legislation). At the end of December 2011, the procedure and requirements for the management of the National Register of accreditation bodies was signed by the order of the Ministry, which consists of requirements for local and foreign agencies.

The National Register of Accreditation Agencies clearly states that institutional accreditation will be carried out by Kazakhstani agencies and specialized (academic programme) accreditation can be conducted by any of the agencies that are included in the National Register. Currently, the Registry includes two Kazakhstani and four foreign agencies.

The legal amendments enshrined a transitional period up to 2014-2015, during which national accreditation and state attestation will be carried out in parallel.

As from 2015, state certification will be completely replaced by the national institutional and specialized (academic programme) accreditation of universities and colleges (legislation).

From 2014-2015, in accordance with the law, the state authorization for offering of Bachelor’s, Masters’ and PhD will only be received by a higher education institution which has passed institutional and programme accreditation by the agencies that are included

in the National Register. Thus, the government will encourage institutions to conduct an independent national accreditation since placement of orders or educational grants will be provided only to accredited educational institutions. Moreover, accredited institutions with accredited educational programmes will have a right to issue their own diplomas that will be recognized by the government.

Currently, the Independent Kazakhstan Quality Assurance Agency for Education (IQAA), which was accepted into the National Register, has developed procedures and standards of independent national accreditation. Best international practices, the experience of American and European Quality Assurance Agencies, the experience of international networks such as ENQA, APQN, INQAAHE, CHEA International Quality Group have been taken into account, as well as proposals of Kazakhstani universities.

These non-profit agencies, as part of the general policy of the state in providing autonomy to universities, allows the state system of institutional management to strike a balance between the development of institutions' self-governance and an effective quality assurance system, to increase a powerful system of incentives for universities, seeking to improve the training of professionals, to engage all stakeholders, especially employers in the development process and improvement of education quality.

FRONTIER QUALITY DIFFERENTIALS IN HYBRID HIGHER EDUCATION

Hamish Coates and Marian Thakur

Abstract

This paper contributes to international quality assurance by reviewing implications arising from emerging ‘hybrid’ business scenarios. This hybridised higher education has alluring economies but fundamental implications for quality. This paper devotes sustained attention to unpacking what, as a result of contemporary reconfigurations, would appear to be pressing current change/differentiation frontiers—engineering an engaged learning experience, and authenticating learning outcomes. These frontiers are analysed, with consideration of development options. The paper concludes by emphasising the consequent and urgent imperatives for workforce development.

Keywords: education change, learning outcomes, student experience, business models

Introduction

Higher learning has always been a ‘distributed’ activity—scholars and students have long moved around the world within collegial networks, the free-flow of research and development helps develop economies and societies, and universities have engaged with local and regional communities. Universities have always served as institutional nodes underpinning this anarchical flow, providing structure and resources that support innovation and development. Major and diverse changes are resulting, therefore, from what looks like a de-institutionalisation of higher education—or perhaps a re-institutionalisation characterised by new institutional architectures, reconfiguration of core academic business, new epistemological and operating contexts, and shifting workforce prospects and technologies.

A big challenge to higher education is the advent of new ways of doing business. In the last decade online technologies, commercial players and innovative academic leaders have combined to carve out new decouplings and recouplings (on this, for instance, see: Online Learning Task Force, 2011). Examples—such as Swinburne Online University (in Australia), Capella University (owned by Capella Education Company) and Ameritas College of Brandman University (United States) and the University of Essex/Kaplan (United Kingdom)—illustrate different ways in which private firms have nestled in to facets of core education business like admissions, curriculum, teaching and assessment. Such ‘disruption’ leads to potential diversification, for it invites new positionings and approaches to existing practices. The implications are particularly notable for education and institutional leadership. Yet any such institutional diversification is correlated with pressure to make explicit and manifest many of the most important and often intangible features of higher education, introducing a “*dynamic tension between comparability and differentiation*” (James, 2013).

Over recent decades fundamental changes to higher education have enabled more people than ever before to access curriculum and teaching. Today, knowledge and insights from international thought leaders can be freely accessed. Yet as getting in becomes easier, getting out gets harder—or it should if standards are to be maintained. Institutions must establish feasible and effective strategies for engaging students in learning, and for ensuring they achieve acceptable learning outcomes. This challenge poses obvious implications for credentialing and basic conceptualisations of a ‘course of study’.

In essence, the significant expansion of higher education over the last three decades has driven a need for institutions and their funding agencies to examine, in crude terms, 'how to do higher education cheaper and better'. The economies and qualities of elite systems do not scale. Along with growth, institutions operate day-to-day in ever more competitive and complex borderless environments. Commercial and private provision is growing, as detailed below. Such growth and diversification ramps-up the need for evidence that students are learning and what they are achieving. Leaders and managers need such information to form strategy and guide practice. Policymakers and quality agencies seek information on quality and productivity to procure and justify increasing public spending. A substrate on which much of the collegial system is built – trust – takes new forms in (semi-)commercial settings.

This paper contributes to international quality assurance. It reviews forces driving reconfiguration of higher education, and the new 'hybrid' business scenarios arising in response. The paper then devotes sustained attention to unpacking what would appear to be pressing current change/differentiation frontiers – engineering an engaged learning experience, and authenticating learning outcomes. These frontiers are analysed, with consideration of development options. The paper concludes by emphasising the consequent and urgent imperatives for workforce development.

The analysis in this paper focuses on the education business of universities, and while the remarks are not particularly constrained the interest here lies primarily in undergraduate coursework education. In most systems the education of domestic students is a distinct and protected market segment, often subsidised by government, with its own economic dynamics. Of course, change in the core business of undergraduate education carries immediate implications for research, engagement and leadership.

As noted in the conclusion, the contexts and changes which have been considered seem threatening, almost perhaps in an existential way. But these changes do not portend the 'death of the university'. Instead, the contention is that this reconfiguration of higher education will strengthen rather than weaken established providers, though the mechanics of teaching and learning will be substantially reconfigured. With careful navigation, higher education will continue to innovate, and build sustainability and reach. Of course, the analysis in this paper is necessarily general rather than particular, and while it may not apply to many systems or programs, it is relevant to many.

Contexts shaping higher education

Significant forces are reshaping core facets of higher education, many of which cannot be ignored even at the most conservative universities. Key forces include those associated with cost and pricing, transparency and privatisation, diversification and stratification, curriculum and provision, and students and academics.

Even among service industries higher education stands out as being particularly afflicted by what Baumol (1967) described as the "*cost disease*". Universities have large infrastructure costs, large labour costs and reliance on expensive face-to-face provision. This underpins high fixed and variable costs, and limited economies of scale. The model is not highly expandable without seeing diseconomies of scale, particularly in a highly person-centric services sector that manifests several growth-inhibiting factors. This puts increasing pressure on institutions to explore revised cost structures. The urgent need to boost university productivity has

been noted by many (e.g. Massy, 2013; Sullivan, Mackie, Massy & Sinha, 2012; Auguste, Cota, Jayaram & Laboissière, 2010).

Revenue as well as expenditure is squeezed. Coupled with cost pressures, universities typically have only limited capacity to set price. In domestic markets regulation and subsidisation tend to nourish elite oligopolistic clubs which would enable universities to function as 'price makers' were it not for the typical imposition of tuition price ceilings. Internationally, universities tend to be 'price takers' like any others, competing on the open market for student enrolment. Compounding these pricing pressures is the emergence of new institutional players, explored below, which are offering higher education services at substantially lower cost.

Higher education is encountering transparency forces which have never been seen before. The proliferation of institution and program rankings highlights this thirst. But more broadly, governments are demanding that institutions detail activity, and prove performance and standards (European Commission, 2013; TEQSA, 2013). Potential students and their families are seeking information to guide investments in learning. Business is seeking reliable data to guide graduate recruitment and research partnerships. Many of these transparency developments are international, working off 'found data' and restricting the capacity of institutions or governments to establish or control reporting. Institutions can attempt to manage and assure the data that feeds into such processes (in Australia various institutions have hired 'rankings coordinators', and many hire consultants to assist with positioning), but much can already be sourced passively by third parties.

At the same time, universities are confronting new commercial constraints. Though various facets of university research have long had commercial flavours, the new pressures surround core education business. New streams of often private finance are flowing into higher education, seemingly in loose counterpoint to the diminution of government subsidy. This kind of money can create problems for universities, imposing new obligations – for instance, around intellectual property and disclosure – which mix uneasily with basic tenets of scholarly work (and the transparency demands exposed above). 'Commercial transparency' and 'scholarly openness' differ in theory and practice. This situation puts pressure on universities to rethink collegial conventions regarding knowledge creation and dissemination, many of which are tacit. Who owns knowledge and how freely can it be accessed and shared?

Among all this, institutions are facing enormous stratification pressures in new global ecosystems. National systems are not knowledge islands – academics, students and ideas travel widely among systems. In many advanced systems it seems increasingly fruitless to seek 'national sense' out of either research or education, for so much of higher education is international in essence. The national barriers that protected most universities are being eroded by a new international hierarchy. Institutions are situating, though mostly being situated, in emerging borderless orders partly driven by student markets and preferences. Kennie and Price (2012), for instance, detail one taxonomy of an emerging international ecosystem which structures the landscape by selectivity (open/elite) and funding (public/private). Van Vught (2012) writes of a hierarchy consisting of the top echelon, international research universities, a range of niche/specialised institutions, a plethora of local teaching institutions, and a set of virtual global players. Barber, Donnelly and Rizvi (2013) propose another taxonomy – the elite university, the mass university, the niche university, the local university, and the lifelong learning mechanism.

Against these stratification pressures sits a host of policy and strategic desires for a diverse higher education system. Systems desire policies that maximise the value and reach of scarcer public dollars. Institutions seek 'blue oceans' (Kim & Mauborgne, 2005) that deliver alpha performance in increasingly contested terrain. Both eschew isomorphism that leads to structural inertia. Finding and establishing difference gets harder just as it becomes more important.

And knowledge is being flatpacked. Universities are facing business pressures arising from the promulgation of online open-access proprietary curriculum products. Protecting access to knowledge resources once gave higher education a strategic edge. Until very recently, universities could distinguish themselves through the substance and quality of curriculum materials. Institutions with access to leading professors/experts, with ownership of distinctive technologies, and with expensive facilities, had relatively exclusive access to knowledge. In many areas of higher education this differentiation parameter has gone, with the internet and global flow of talent servicing what several major United States research institutions referred to nearly a decade ago as the 'open courseware initiative' (MIT, 2013). The new knowledge architectures lead to reconceptualisation and reform of how higher education is conducted. Providers can recode and recompile information, repackaging this in myriad ways to suit different individuals and groups.

A decade ago, aspirations shaping books on 'virtual universities' (e.g. Robins & Webster, 2002; van der Molen, 1999) might have swamped sales, but such literature is being reprinted now that software services expectations (Daniel, 2012). What once higher education ostracised as 'programmed learning' today may constitute 'authentic pedagogy'. The physical university has not died, but virtual learning has proliferated and been incorporated within existing institutions. Despite persistent shortcomings (Coates, James & Baldwin, 2005) learning management systems have automated many core teaching functions. Far from being a backwards slide, however, this refiguring of teaching creates space for innovation, positioning, and diversification. The same 'Accounting 101' may be 'implemented' by a robotic algorithm, a fully tenured professor, or a sessional lecturer, all with different financial structures, market potentials, and intellectual textures. Institutions capture more degrees of freedom to locate themselves in the market. The disruptive consequences for higher education are well documented (Daniel, 2013) even though sustainable business models for these new forms of provision are yet to be established.

These new access dynamics – relatively open curriculum and automated provision – enable the distribution of higher education to more different learners than ever before (OECD, 2012). As economies mature, not many countries are shrinking higher education, and even where there is unmet demand it can be serviced by global online providers. The student body is growing and diversifying, ramping up pressures on universities around provision and support.

While learner demand grows, the supply of teachers is bottlenecking. In many systems universities are facing workforce pressures such as increasing international competition for talent coupled with a looming tranche of retirements (Coates & Goedegebuure, 2012). This means a lot, for even in the most programmed context skilled people are needed to create curriculum and teach. Teachers and other professionals need to support students. Academics need to produce research, and to integrate and synthesise information into knowledge. This basic restatement of core academic work is required as many of the most

vital facets of academic work are intangible, and all knowledge has a half-life, even in highly digitised environments. Displacing core teaching work to people on contingent contracts is symptomatic not curative

Of course, anyone working in or around universities recognises these pressures play out in different ways in different moments, and that the above review is necessarily incomplete. Yet these pressures account for more than a little of contemporary reconfigurations in higher education, to which this paper now turns.

The emergence of hybrid higher education

Higher education, by mission or definition, resides in a state of perpetual change. But one of the great strengths of universities is their organisational capacity to morph and distribute, made feasible by – to stereotype – broad governance structures, loose managerial couplings, a highly creative workforce, and financial opacity. But there are limits and key boundaries – cost, capacity, planning, operations, etc. – have already been well stretched. New forms of higher education have emerged over the last decade, which are now transfiguring core university business.

‘Higher education service firms’ (for want of better term) are now well established in many fields, and can do curriculum and teaching better and cheaper than institutions (universities) operating on a legacy business model. These firms are difficult to describe, almost by definition. They take many corporate forms. They may or may not be accredited providers, national or global in scale and scope, for-profit or non-profit, held privately or publicly, and have large or small research capability. They function more as partners than consultants. Technology tends to play more than a bit role in their core business. Generally, these firms have production functions that have lower cost structures and increased economies of scale. They are eating into many of the most financially significant facets of sustainable university operation. Sample firms include Apollo Global, Laureate, University Ventures, Educomp Solutions Limited, Academic Partnerships, Pearson and Seek, in which Laureate recently took a sizable equity stake¹. Large IT firms – Google, Microsoft, Apple included – are also entering the higher education market. The Australian Trade Commission (2013) provides a thematically grouped list of firms operating in this market.

But even if accredited to provide education within a given system, these firms are unlikely to be able to access markets typically restricted to universities. Nor do these firms, even with smart corporate positioning and prestigious boards, necessarily have the same depth or repute as universities. At the same time, universities with market access and well-refined governance structures suffer from legacy business models and the pressures noted above. Herein lie the deals giving birth to hybrid higher education. Increasingly, it seems universities are looking to education/business models for the most part being fostered by service firms that offer new technologies of learning and hence new production functions. Rather than compete with the new and more efficient business models, universities are seeing these as ‘complementors’ (Brandenburger & Nalebuff, 1998). The deal, in short, appears to be that the university partner offers brand, market access and intellectual infrastructure, while the educational service firm offers more productive and flexible economic potentials. Universities have long outsourced various corporate and research functions, but now they are outsourcing

¹ See: www.apolloglobal.us, www.laureate.net, www.universityventuresfund.com, www.educomp.com, www.academicpartnerships.com, www.pearsoned.com and www.seek.com.

core academic business (and not just to contingent/sessional staff). Accredited institutions are forming hybrid alliances with non-accredited service organisations, seeding derivative joint ventures, bolstering academic governance arrangements, and reviewing the costs of provision. These ventures vary in structure and substance, and manifest a range of business models. Many of these are untested (Daniel, 2012), resembling the assertions made a decade ago (for instance: Coaldrake, 2000) about universities and faculty being unbundled into a credentialing skeleton.

As might be expected given the deliberately invisible nature of this trade which is not de rigueur and still largely secret, case studies are hard to find. Carlton (2012) has distilled a recent Australian case that highlights important dynamics. The company Online Education Services was founded in 2011 as a joint venture between Swinburne University and SEEK, an online employment recruitment company listed on the Australian Stock Exchange. Online Education Services trades as Swinburne Online (see: www.seeklearning.com.au/swinburne-online). Commercially, this partnership diversified SEEK's education profile giving access to government-subsidised students at an institution with a proven track record in online education, and gave Swinburne access to an equity partner and rapid exposure through an employment agency reportedly touching around 20 per cent of the world's GDP. Academically, *"Swinburne University academic staff design, accredit and develop programs, while e-learning advisors employed through Swinburne Online support students and assess student learning outcomes"* (Carlton, 2012: 12). This division of labour, which separates production from delivery, casts new dynamics for academic and teaching responsibilities. These interlinked workforces are framed by different industrial arrangements and provoke new governance questions, including as related to for-profit provision.

As this case brings out, much though not all of this fusion is driven by education redesigns underpinned by online learning technologies. Implemented proficiently, online or blended provision has the capacity to lower cost and sustain or boost outcomes (Twigg, 2005; Staton, 2012). The excitement of online learning has infused higher education for nearly two decades, fuelling creative ideas about alternative forms of provision, new economies of scale, and the demise of campus-based education. Unsurprisingly, universities have proven their resilience over the last decade, sustaining continued confidence of and investment from governments, faculty and learners. Hence it is no small development when campus-based universities start incorporating sophisticated technological capability into core institutional activities.

These new arrangements are important to higher education. Regulatory intervention and domestic subsidy has the capacity to sustain universities for only so long. At the same time, domestic protection and adherence to legacy business models may have hindered the capacity (and perhaps willingness) of universities to respond to emerging commercial dynamics in the smartest or most nimble ways. In the face of competitive pressures it appears that rather than look to subsidy and protection, higher education must become more productive. Adopting redesigned business/education model enables universities to lower costs and scale provision.

Pressing quality frontiers

Invariably, these new configurations raise questions, and pressures, about standards and how institutions monitor and enhance what teachers and students know and can do. The more standardised production of curriculum and provision via learning management systems, for instance, may work to compress quality while at the same time ensuring above minimal levels of provision (Coates, James & Baldwin, 2005). Many pressure points stem from

the change forces explored above. Ultimately, however, there are two critical areas that while already reasonably well-trodden (Coates, 2006, 2012) are in need of even more sustained attention – student engagement and learning outcomes. In key respects, these are pressing change frontiers. It would be too radical – just – to claim that due to the increased delegation of education to learners, institutions can no longer be held to account. But undoubtedly how students engage is even more instrumental to production. Likewise, assessing what students know and can do takes new stakes in a post-compulsory environment in which access to knowledge resources is quite freely available. Managing, and thriving, in this new context demands a specialised tertiary workforce, and the following closing remarks speak to what this entails.

Higher education is post-compulsory in many respects, and universities have limited means of compelling student behaviour. Universities might once have left the bulk of learning coordination to students, though relied on admissions, curriculum, teaching and assessment to manage. But asynchronous forms of provision open even more flexibility and decoupling that, without intelligent steering, fuels greater risk that students move unguided and run off the rails. Learning from electronic robots brings reach, fresh economies, customisation and networks, but also raises risks of standardisation, loneliness and confusion. Dropout rates in new hybrid forms of provision are difficult to assess, but reports suggest can be as high as 70-90 per cent (University of Phoenix, 2012; Daniel, 2012). In this context the quality of the ‘student experience’ – a quick buzzword but with complex texture, explored below – assumes even greater prominence. Engineering an engaged experience becomes an even greater differentiating factor for students, for teachers, and for institutions and hence systems.

Recent national research in Australia has set new conceptual and system-wide foundations for what an engaged experience entails. Building on nearly two decades of research into the student experience (James, Krause & Jennings, 2010) and a decade of innovation around student engagement (Coates, 2009), a series of projects in 2011 and 2012 has established ingredients of ‘engaged student experience’ and road-tested system-wide implementation (Radloff, Coates, Taylor, James & Krause, 2013). Conceptually, this work distilled four core facets of the student experience—Skills Development, Learner Engagement, Teaching Quality, Student Support and Learning Resources. Students/graduates must develop skills, and for this they need to engage, they need to be taught well, they need support—this is critical (Coates, Radloff & Ransom, forthcoming), and they require access to resources. These are basic facets of the student experience, and assuring their quality is imperative from regulatory, educational and commercial perspectives.

Over several years, institutions around the world have explored how these facets of the student experience can be measured, analysed and reported. In the United States, more than 1,500 institutions have participated in the National Survey of Student Engagement (NSSE) – and most institutions in Canada too. This work has been replicated in several other systems – Australia, China, Japan, Korea, Mexico, New Zealand, South Africa, among others (Coates & McCormick, 2013). In 2012, the collection of data in Australia on an engaged student experience took another step, becoming mandatory for all universities. The nationally developed University Experience Survey was administered for the second year, and for the first time to all bachelor degree students in the country. Reports and data are provided to institutions, and government intends on servicing the transparency agenda by publishing results on the ‘My University’ website (Australian Government, 2012).

Data collection is a mere, but necessary, precursor to review and improvement. To date, data collection may have swamped improvement work, partly because of the practical challenges

associated with measurement and the sensitivities associated with this change frontier. In the era of 'big data', however, this is no longer the case. The broad argument here is that the responsibilities and opportunities for failing to measure and improve have grown too large to be ignored. Ensuring an engaged student experience is critical to success in the 'new' higher education. Not least, because students appear to like learning with other people.

Engaging students is necessary but not sufficient to ensure quality education. Technically, good education reduces to students achieving high-quality outcomes. Any such repositioning of curriculum and teaching, as sketched above, carries implications not just for engagement but also, and moreso, for learning outcomes and their assessment. Program accreditation is not sufficient to assure individual competence (Coates & Seifert, 2010). Especially in new and reconfigured higher education, where program and learner characteristics are uncertain, student assessment carries new and different gravitas.

Institutions (or faculty or departments) can use various ways to establish what students know and can do. The collegial approach provides one option, albeit with limitations in scope and scale (Coates, 2010). Commercial assessment services are proliferating, even for the most boutique areas of study. In certain instances – notably perhaps 'generic skills' – governments and big business intervene, in part seeking metrics that can be used to differentiate providers on education grounds. These efforts, combined, paint a picture of educators searching for new forms of 'authorising' learning. In essence, the quest is for an independent 'circuit breaker' capable of distancing assessment and credentialing from curriculum and provision. In this environment the search for authoritative assessment becomes competitive for institutions, not just for students. In most cases leaning back on structure, even elite structure, fails. Private production inflates risk and hinders comparison.

This sparks the search for new externally credible forms of assessment. New systems are required, and this paper reviews several options – the provision of 'shrink wrapped' tasks, training academics, task review or benchmarking, the development of collaborative item libraries, process or data moderation, and the deployment of stand-alone tests, and improving capacity and systems.

Externally validated assessment tasks can be developed for a large number of higher education subjects. Achieving consistency across tasks can be vital, because variations in task severity will register as variations in student achievement, regardless of actual competence. Broad subjects based on a single textbook, which take a 'shrink-wrapped' approach, can be accompanied by assessment materials. These materials can incorporate formative assignments for continuous assessment as well as validated examinations or items. The tasks themselves could be supported by notes for managing the assessment, analysing data, interpreting results and reporting achievement. A degree of flexibility would presumably need to be designed into the tasks to both encourage and support local adaptations. These assessments could be designed to fit different levels and fields of study, and may include performance tasks, portfolios, open ended questions, constructed response items, and multiple choice questions. The validated tasks for these mass subjects could take many different forms, their defining characteristic being that they are designed to optimise the measurement, diagnosis and enhancement of learning.

Many higher education subjects are specialised in nature or small in scale, however, and it may not be feasible to develop fully validated assessments. It is important, nonetheless, that the resource-consuming nature of assessment design does not inhibit high-quality

practice. In such instances, the most appropriate approach may be to train academic staff. An awareness of basic principles of assessment design and advanced practice would develop the capacity of teaching staff to enhance their own assessment tasks and activities. It would also have more general pedagogical benefits, by requiring academics to think not just about what and how they teach, but about what students are expected to learn and how they should be assessed.

Training teaching staff in assessment could be coupled with a process of assessment task review, in which technical experts or academic colleagues offer feedback on assessment tasks and approaches, and ensure that tasks are of appropriate quality. This feedback may reference quality criteria for student assessment. Of course, this currently happens for many courses and assessments, but the process is by no means universal. The largely individualised development of assessment tasks can make it difficult to develop informed and generalisable criteria which map out thresholds of increasing performance. It can be difficult, as a result, for institutions to assure the quality of the tasks which are themselves used to set academic standards.

Creating good assessment requires scale economies, which bolsters the value of collaboration. Collaborative production takes new shape in the “*sharing economy*” (The Economist, 2013), in which access trumps ownership and people seek to maximise the value and use of expensive resources. In general terms, the academic model resembles that used for collaborative research production and review (Coates & Seifert, 2010). The Australian Medical Assessment Collaboration (Edwards, Wilkinson, Coates & Canny, 2012) provides an example. By sharing development, educators and their institutions reduce costs of production while assuring the quality of development processes, standards and outcomes. More beyond development could be shared, including assessment administration, data analysis, or results benchmarking. Of course sharing can mix poorly with the security requirements of assessment, particularly where the disclosure or leakage of material leads to waste of expensive items.

Moderation might be used to ensure the generalisability of assessment standards and outcomes. In general, moderation requires teaching staff to review samples of student work to assure the comparability of standards across contexts. Such moderation may be conducted on an ad hoc basis, as often already occurs. It is preferable to design robust and scalable management systems, however, to ensure that outcomes can be quality assured. Moderation could be managed by a cross-institutional agency, as in many senior secondary contexts, or perhaps by a cluster of discipline-specific agencies. The UK External Examiner system illustrates one implementation of moderation in higher education (QAA, 2008). It might involve statistical calibration processes to help equate standards, highlight unusual scores and to manage moderation processes.

Along with the development of formative assessment practice, stand-alone tests can be used to measure critical thinking, problem solving, discipline-specific and numeracy skills. Such tests have become popular over the last decade for monitoring the standards of institutional provision. The Assessment of Higher Education Learning Outcomes (AHELO) (Coates & Richardson, 2012) provides an overview of this kind of work. Such tests have the advantage of providing objective estimates of each participant’s performance. Data provide external points of reference which can help validate assessment processes and inform moderation and final grading. Similar triangulation may be obtained by drawing, where

appropriate, on licensing examinations, consistent feedback from graduate employers or professional bodies, or other information about the performance of graduates.

Education systems are evolving rapidly, yet currently there exists no industry-wide infrastructure for learning in the same way, for instance, as there are systems for scholarly publication, the training of academics or – as has developed in many countries in recent decades – the evaluation of teaching. This needs to change – systems need to take shape, for if the analysis above seems reasonable then the need to ‘authenticate learning’ will continue to grow in significance.

Concluding imperatives

The contention in this paper is that a plethora of change forces are buffeting universities and reconfiguring core facets of undergraduate education and institutional positioning. New business and education models are forming, with particularly interesting derivatives being spawned through deals struck between universities and education service providers. Such hybridised higher education has alluring economies, but also fundamental implications for experiences and outcomes. This carries implications for quality assurance methods and practices, and for institutions to find and make ‘blue oceans’. The paper explored these, and rationales and approaches for the new forms of authentication required. It closes by reviewing a few broader implications from these changes.

It may seem unavoidable to see matters analysed here as carrying gloomy consequences for universities. This is not (necessarily) the case. Forecasting the demise of the traditional university is a popular pursuit, but universities are resilient. A decade ago books about virtual provision foretold the demise of campus-based provision, yet the same institutions have now incorporated e-learning and converted computer labs into learning commons. Different institutions will be affected in different ways (Lawton & Katsomitros, 2012), though with effective leadership, universities are well positioned to capitalise on change and growth. But as Barber, Donnelly and Rizvi (2013) have argued persuasively, past conversations will not move institutions into the future. New generation thinking is required to drive innovation. In post-compulsory contexts in which responsibility for learning is largely devolved to students, institutions must take active leadership over engineering an engaged student experience and implementing mechanisms to authenticate learning outcomes. The change contexts reduce the strategic plasticity of universities and put reflected pressure on them to identify and operationalise a distinguishing mission. *“Winners will be those with best brands and agile business models that balance scale, selectivity and price”* (BCG, 2013: 18). Policies and practices are being developed in many systems.

Shifting the focus of educational gravity in these ways triggers the need to structure higher education using new parameters. For instance, is the education owned publicly or privately, and what are the debt and equity arrangements? What forms of governance are in place, and what of leadership and management infrastructure? What is the provider’s market position given scope (local, regional, national, international) and scale (elite or open)? What of the research, teaching or service functions of the provider? How about curriculum, teaching and assessment – who owns it, who does it, and who accredits it? Debating learning pathways and authentication quickly provokes consideration of credentialing, and of the relative interests and incentives that drive institution and student performance. While beyond the scope of

this paper, these parameters and others will be needed to shape any cogent analysis of organisational and educational activity and performance.

The change forces reviewed at the start of the paper are far-reaching and diffuse rather than localised, and are spurring “*disruptive innovation*” (Christensen, 2011) on many fronts. This paper has concentrated on the essential function and implications of an engaged student experience and authentication of learning outcomes. Almost all of the other forces discussed, and others, are being reshaped as environments and institutions shift. In perpetually more market-driven contexts, topics like institutional transparency and diversification assume greater weight, and urgency. How are institutions going to use the quality differentials explored here to distinguish themselves from their peers? Interactions between academic standards and the economies of learning demand sustained analysis.

All of this has implications for leading and working in higher education institutions, which goes to leadership and workforce development. New forms of governance, provision, knowledge, regulation and in certain instances ownership, project new strategic landscapes, necessities and opportunities. New roles are being formed and will be required to support and deliver alpha performance in link directly with institutional, policy and scholarly research. In Australia in recent years, many institutions have established leaders and managers of student engagement, typically with institution – or faculty-wide roles. Such roles vary in their scope and scale, but invariably they require broad understanding of student learning and development, institutional systems, and how to influence policy and practice. Less common in Australia and many systems, though relatively standard in the United States, are institution-wide student learning and assessment positions. These are leaders and staff with responsibility for supporting and assuring high-quality assessment. Of course, the actual functions exist in any institution with authority for authenticating student learning, though often parcelled into many positions rather than distinguished as a separate profession.

In important respects, despite a plethora of new organisational architectures, diversification of programs or institutions would appear to be an immediate casualty of the change forces described in this paper. The pressures analysed in this paper resolve towards more uniform tertiary education delivered via a form of hybrid structure. But are such configurations just transitions on the way to other more permanent arrangements? The vectors along which systems and institutions steer through contemporary complexities will shape the differentiation and stratification that emerges, with direct consequences for the number and characteristics of institutions, links between research and teaching, and the rudiments of the academic profession.

References

- Auguste, B.G., Cota, A. Jayaram, K. & Laboissière, M.C.A. (2010). Winning by Degrees: The strategies of highly productive higher-education institutions. Accessed 1 February 2013 from: <http://mckinseyonsociety.com/winning-by-degrees>
- Australian Government (2012). MyUniversity. Accessed 1 December 2012 from: <http://myuniversity.gov.au>.
- Australian Trade Commission (2013). More than MOOCS: Opportunities arising from disruptive technologies in education. Canberra: Australian Trade Commission.
- Barber, M., Donnelly, K. & Rizvi, S. (2013). An Avalanche is Coming: Higher education and the revolution ahead. London: Institute for Public Policy Research.

Boston Consulting Group (BCG). (2013). Australia's International Education Industry: Analysis of strategic trends. Melbourne: BCG.

Christensen, C. (2011). *The Innovative University*. Cambridge: Harvard Business School Press.

Coaldrake, P. (2000). Rethinking academic and university work. *Higher Education Management*, 12(3), 7-20.

Coates, H. & Goedegebuure, L. (2012). Recasting the Academic Workforce: Why the attractiveness of the academic profession needs to be increased and eight possible strategies for how to go about this from an Australian perspective. *Higher Education*, 64, 875-889.

Coates, H. & Richardson, S. (2011). An international assessment of bachelor degree graduates' learning outcomes. *Higher Education Management and Policy*, 23(3), 51-69.

Coates, H. (2006). *Student Engagement in Campus-based and Online Education: University connections*. London: Taylor and Francis.

Coates, H. (2009). Development of the Australasian Survey of Student Engagement (AUSSE). *Higher Education*, 60(10), 1-17.

Coates, H. (2010). Defining and monitoring academic standards in Australian higher education. *Higher Education Management and Policy*, 22(1), 1-17.

Coates, H. & McCormick, A.C. (Eds.) (2013). *Engaging University Students: International insights from system-wide studies*. Dordrecht: Springer.

Coates, H., James, R. & Baldwin, G. (2005). A critical examination of the effects of Learning Management Systems on university teaching and learning. *Tertiary Education and Management*, 11, 19-36.

Coates, H., Radloff, A. & Ransom, L. (forthcoming). Students' early departure intention and the mitigating role of support. *Studies in Higher Education*.

Daniel, J. (2012). Making Sense of Musings in a Maze of Myth, Paradox and Possibility. Accessed 1 April 2013 from: www.academicpartnerships.com

Edwards, D., Wilkinson, D., Coates, H. & Canny, B. (2012). *The Australian Medical Assessment Collaboration: Developing the foundations for a national assessment of medical student learning outcomes*. Sydney: Office of Learning and Teaching.

European Commission (2013). Horizon 2020 Program. Accessed 1 March 2013 from: <http://ec.europa.eu/research/horizon2020>

Higher Education Standards Panel (2013). Draft Standards for Course Design and Learning Outcomes. Accessed 1 April 2013 from: <http://www.HEstandards.gov.au>

James, R., Krause, K-L. & Jennings, C. (2010). *The First Year Experience in Australian Universities: Findings from 1994 to 2009*. Parkville: Centre for the Study of Higher Education.

Kennie, T. & Price, I. (2012). *Disruptive Innovation and the Higher Education Ecosystem Post-2012*. London: Leadership Foundation for Higher Education.

- Kim, W.C. & Mauborgne, R. (2005). *Blue Ocean Strategy: How to create uncontested market space and make competition irrelevant*. Cambridge: Harvard Business Press
- Lawton, W. & Katsomitros, A. (2012). *MOOCs and disruptive innovation: The challenge to HE business models*. London: The Observatory on Borderless Higher Education.
- Massachusetts Institute of Technology (MIT) (2013). MIT OpenCourseWare (OCW). Accessed 1 March 2013 from: <http://ocw.mit.edu/index.htm>
- Massy, B. (2013). *Initiatives for Containing the Cost of Higher Education*. Washington D.C.: American Enterprise Institute.
- Norton, A., Sonnemann, J. & McGannon, C. (2013). *.edu: Online technology and higher education*. Parkville: The Grattan Institute.
- Online Learning Task Force (2011). *Collaborate to Compete: Seizing the opportunity of online learning for UK higher education*. Bristol: Higher Education Funding Council for England.
- Organisation for Economic Cooperation and Development (OECD) (2012). *Education at a Glance*. Paris: OECD.
- Quality Assurance Agency (QAA). (2008). *Academic Infrastructure*. Accessed 1 February 2008 from: www.qaa.ac.uk
- Radloff, A., Coates, H., Taylor, R., James, R. & Krause, K. (2013). *UES National Report*. Canberra: Department of Industry, Innovation, Science, Research and Tertiary Education.
- Robins, K. & Webster, F. (Eds.) (2002). *The Virtual University? Knowledge, Markets and Management*. Oxford: Oxford University Press.
- Staton, M. (2012). *Disaggregating the components of a college degree*. Paper presented at the American Enterprise Institute. Washington, D.C., United States.
- Sullivan, T.A., Mackie, C., Massy, W.F. & Sinha, E. (2012). *Improving Measurement of Productivity in Higher Education*. Washington, D.C.: National Academies Press.
- Taylor, P., Parker, K., Lenhart, A. & Patten, E. (2013). *The Digital Revolution and Higher Education: College presidents, public differ on value of online learning*. Washington D.C.: Pew Research Centre.
- The Economist (2013). *All eyes on the sharing economy*. The Economist. London: The Economist Magazine.
- Twigg, C. (2005). *Improving Quality and Reducing Costs: The case for redesign*. Saratoga Springs: National Center for Academic Transformation.
- University of Phoenix (2012). *University of Phoenix 2011 Annual Report*. Accessed 1 April 2013 from: http://cdn.assets-phoenix.net/content/dam/altcloud/doc/about_uopx/academic-annual-report-2011.pdf
- van der Molen, H.J. (Ed.) (1999). *Virtual University? Educational Environments of the future*. London: Portland Press.

QUALITY ASSURANCE IN EDUCATION & RESEARCH AND ACCOUNTABILITY

David Bridges

As a general observation, we should probably be alert to the different conditions and requirements that operate between e.g. 'big science' (that might require heavy investment in equipment and facilities and large teams of researchers) and research e.g. in the humanities and social sciences that might have different features and requirements.

1. What makes a university or university department an attractive and supportive environment for academic researchers? What might provide evidence of an excellent research environment? How do you build or develop such an environment?

Here are some candidates for inclusion in a response – some of them drawn from experience in the UK Research Assessment Exercise, which required panels to assess the quality of the research environment in individual university departments. Which of these (or other features) would you regard as most important?

- Mentoring and support is offered to early career researchers
- There are funds available to support attendance at research conferences etc.
- There is a strong nucleus of research and especially doctoral students
- The department has a strong track record of attracting external research funding for research
- There are regular research seminars at which colleagues discuss each other's work
- There are team and collaborative projects and publications
- There are regular opportunities for sabbatical terms
- Departmental leaders protect staff from over burdensome bureaucracy and meetings
- Teaching loads are limited to 50%/ 60%/ 70% (?) of the total workload
- There are regular visitors from other national and international HE institutions
- The coffee room/ restaurant and etc. are a buzz of research conversation
- There is an excellent library and readily available access to on-line resources
- (For example in scientific fields) there are state of the art laboratories and technical facilities

2. What expectations should university or departmental leaders have of the evidence individual members of faculty should be able to offer of their research productivity and quality?

Some universities express these expectations in terms of the number of publications eg in peer reviewed/ or 'international' journals but what is a reasonable expectation? And are there not issues about responsibility to publish in journals in the local language accessible to one's own citizens? (See Bridges 2006)

Some universities express this in terms of research grants won or applied for. (This applies especially but not exclusively to those in senior positions).

In some universities (the University of Ghent in Belgium, for example) such expectations are enshrined in individual contracts and faculty are liable for dismissal if they do not achieve

what is set down. More often they get drawn into some sort of guidance and mentoring system, though the threat of dismissal or early retirement hangs over them.

3. Against what criteria do/should we use to assess the quality of these research products?

The European Education Research Quality Indicators (EERQI) project (www.eerqi.eu), supported by a range of national research associations and leading publishers, proposed the following criteria of quality for the assessment of research publications:

Rigour i.e. it has to be conducted systematically in line with established or persuasively proposed research methods; argument and inference and interpretation need to be logically drawn etc.

Originality i.e. it has to offer something new or innovative

Significance i.e. it has to make a contribution of some importance to the field (eg policy, practice, innovative technology) to which it relates

Style i.e. it is expressed clearly, articulately, intelligibly – perhaps even elegantly

Integrity i.e. it is the authentic work of the author and acknowledges debts where appropriate; it is conducted ethically and where appropriate in line with established professional or research ethical codes.

Are these the criteria that you would apply?

4. How do we make a valid and reliable assessment of this quality against such criteria?

The UK Research Assessment Panels that assessed research quality across all subject areas and all higher education institutions in 2008 (see Bridges 2009a) decided that there was no adequate short cut to engaging directly with the research that was offered for assessment (in general four papers drawn from the previous seven years work by each submitted member of staff) i.e. by reading it. Many systems have sought to find a less demanding and more mechanical form of assessment by e.g.

- Some simply count the number of papers published by individuals in particular kinds of journals (e.g. 'peer reviewed' journals, 'international' journals, journals that appear in the Web of Science).
- Some countries (including Australia and France) have generated fierce controversy by trying to rate journals according to what some people have judged as their importance. (A European Community sponsored project aimed at creating a similar index for the humanities collapsed into rather satisfying ignominy!).
- Some have tried to employ citation indices as a proxy for quality notwithstanding the arbitrary composition of such indices and the ambivalences in the messages they provide.
- At one stage the EERQI project, assisted by some clever linguists from Xerox Grenoble tried to identify machine recognisable semantic features of high quality publications, but these attempts were defeated by among other things the fact that judgements about originality and significance are relational i.e. they require the assessor to look at one piece of writing against all sorts of understanding about its context and other sources that machine readers simply did not have and/or could not apply.

My own argument (which there is not space to develop here but see Bridges, D. 2009b) is that none of these proxies provide a valid and reliable alternative to an expert and moderated peer review reading of the text). But this view is linked to the requirements of an assessment that becomes rather fine grained at the top end (and this may be material to the discussion) The UK RAE functioned not just to identify basically adequate research (an assessment for which acceptance by a reputable peer reviewed journal might serve as an adequate proxy) but to distinguish among such research what was excellent or outstanding by national standards and then what was world class. It was this level of discrimination for which the various proxies proposed seemed seriously inadequate: informed connoisseurship or judgement by practised peer reviewers seemed to be the only way.

5. System wide, do you achieve research quality by being selective i.e. by concentrating research funding on institutions/ departments judged to produce high quality research or by distributing such investment across the higher education sector?

The ‘fine grained’ judgement that I refer to above served in the UK research assessment system (and was subsequently taken up in several other administrations , including e.g. Hong Kong) not so much for the purpose of assessing in any recognisable way individual researchers, but to assess – along with considerations of the quality of the research environment indicated above -- the quality of work of individual university departments. This assessment then served in turn to determine what funding that university would receive over the next five years or so to support its research.

This approach was quite explicitly linked to a policy decision taken in the context of an expanding higher education system to concentrate research funding in institutions that could demonstrate research excellence: it was and remains a policy of ‘research selectivity’. The consequence is that a university whose departments do not perform well in the research assessment (the ‘Research Assessment Exercise’ in 2008, the Research Excellence Framework in 2014) do not receive that proportion of funding that would otherwise support the share of faculty time dedicated to research. The consequence for individual university academics in these circumstances is that they have effectively to earn their entire salary through income derived from their teaching and that they have no allowance of time for research.

These exercises are conducted every 5 to 7 years, and it is easy to see how, to some extent they become self-fulfilling: the universities that start off doing well get the main share of funding for research and the next time round they tend to do well again. In practice the consequence in the UK is that something like 80% or more of research funding for higher education goes to the ‘golden triangle’ of Oxford – Cambridge -- London.

The question our forum might consider is the balance of benefit to the country and to higher education of such ‘research selectivity’.

Further reading

More about the UK research assessment exercises can be found on the web-site of the Higher Education Funding Council at www.rae.ac.uk and www.ref.ac.uk. There is more information about the EERQI initiative at www.eerqi.eu.

Some of the points made in this piece are developed in the following works by the author:

Bridges, D. (2006) 'The international and the excellent in educational research' in P.Smeyers & M Depaepe (2006) (eds.) *Educational Research: why what works doesn't work*, Dordrecht, Springer.

Bridges, D. (2009a) 'Assessing the quality of research in higher education: the UK Research Assessment Exercise' in ed. T.Besley, *Assessing the quality of research in higher education: a comparative study*, Rotterdam, Sense Publications.

Bridges, D. (2009b) *Research quality assessment: impossible science, possible art?* *British Educational Research Journal*, 35: 4 pp. 497-517.

CREATING AN INSTITUTIONAL ECOLOGY THAT SUPPORTS RESEARCH

Matthew Hartley

Research capacity has large influence on a nation's competitiveness and its economic strength. Institutions can make a significant difference in the research productivity of their faculty. Indeed, research shows that institutional affiliation (where one is a faculty member) is an important predictor of productivity over time (Bland et al, 2006). What this suggests is that effective scholars thrive in a certain kind of academic "*ecology*." The purpose of this paper is to describe several key features of this environment and to pay special attention to what will be required to cultivate the next generation of researchers.

The question of research productivity is of particular important in Kazakhstan. The Ministry of Education and Science's State Program of Education Development in the Republic of Kazakhstan for 2011-2020 (2010) points to the importance of education in fueling the country's economic growth. A key objective laid out in the document is improving research by "*training highly qualified scientific and scientific-pedagogical staff*" (p. 4). However, there are some significant challenges. Kazakhstan needs to develop a new cadre of scholars. The average age of researchers is 55 (p. 12.) Further, many of most able and academically gifted students are lured into business and industry where the pay is much greater. Young faculty members must also contend with a high teaching load. A recent World Bank report notes that "*the typical teaching load of a lecturer was 800 to 900 class contact hours a year (...) compared to 180 to 240 contact hours in Canada, the United Kingdom and the United States*" (OECD – World Bank, 2007, p. 165). In addition to these challenges, Kazakhstan's universities have great infrastructure needs – better laboratories and information technology. It is therefore no surprise that research productivity tends to be low. As the State Program estimates, the share of universities that are carrying out "*innovative activity through the integration of education and science and implementation of domestic research results into production*" in 2010 was zero (p. 18).

Although the situation in Kazakhstan is challenging, the recent waves of education reforms suggest that the Government is serious about making progress in the area of education and research productivity. What characteristics need to be established at the institutional level in order foster greater research activity?

First, institutions must be clear about their expectations regarding research. The most fundamental expectation is that of academic freedom – the right to examine any line of inquiry without constraint. There are more prosaic considerations as well, for example researchers should be clear about expectations regarding output. These cannot be reduced to a universal and rigid formula (X number of publications per year.). They must be flexible. Expectations for publication must accommodate the realities of the workplace (such as teaching load) and also must take into account disciplinary realities. It is impossible for an anthropologist to produce papers as fast as a quantitative policy analyst – ethnography takes time. While the gold standard of productivity has tended to be "*top tier peer reviewed journals*," there are high quality peer reviewed journals whose audience is practitioners or policy makers. These are important venues for scholars to make an impact on their field and ought to be valued appropriately. Finally, it is important to take into account both quantity and quality. A scholar who publishes fewer articles than other colleagues but whose work is highly original should be rewarded, not penalized for failing to meet some arbitrary goal.

Second, faculty members must have adequate resources to produce high quality research. Some of these resources are basic and tangible – labs to work in and access to library materials. Most research universities in the U.S. provide start-up funds for new junior faculty members to support their research. At places like Stanford and Penn it is not uncommon to provide \$5,000 in start up funds for new junior faculty and that amount can greatly expand if there are specialized needs like equipment and lab space. Junior faculty at research universities are also supported by staff members who help them identify potential grants, edit their grant proposals, and administer the budgetary aspects of grants that are ultimately won. The most important resource a faculty member can be given is time. A consistent funding in studies that examine productivity is that large teaching loads diminish scholarly output (Graves et al, 1982). A fairly typical load at a research university in the U.S. might be two courses per semester with the ability to buy-out at least two of those courses through grants or certain administrative responsibilities. Simply put, producing world-class research requires making strategic (and world class) investments.

Third, it's important to establish landmarks that enable faculty to see their progress over time. Many institutions use end of the year evaluation processes and allocate merit pay. Some Kazakhstani universities are also using various forms of merit pay (especially since salaries at public universities are set by the Ministry.) In the U.S., junior faculty often have a review after their first several years where they present what they have accomplished and lay out longer term plans for their scholarship. The University of Texas system has put into a place a system for periodically evaluating all faculty members to influence salary, promotion and in extreme cases termination of employment. The process is designed to encourage self-reflection and remediation for faculty who need help. When done correctly, faculty members report that these processes help them be more intentional about planning their research activities.

Fourth, creating an institutional ecology that supports research means not only paying attention to the extrinsic rewards system, it means paying attention to intrinsic rewards. People tend to be drawn to a life in the academy because they are curious about the world (and about their academic subject) and because they want to make a difference. They are internally motivated. Inspiring faculty is less about dangling incentives in front of them than supporting their own curiosity and desire to be a part of an intellectual community. These kinds of activities can take many forms. Junior faculty can benefit from being connected to senior scholars who can serve as mentors (Gappa et al, 2007). Relationships such as these help young scholars develop social knowledge about what it means to be an effective researcher and can help build strong professional networks (Blackburn & Lawrence, 1995). Some institutions have developed internal grant processes that encourage the involvement of both senior and junior faculty. Creating a vibrant community of ideas also means creating opportunities for faculty to share their work—organizing colloquia, profiling interesting developments on the university website, inviting faculty to share their expertise in events held in the community on topics of interest.

The founder of the University of Pennsylvania (and a founder of the United States), Benjamin Franklin, once said that “*genius without education is like silver still in the mine.*” In the same way, brilliant young scholars without the environment to cultivate their talents will result in them failing to achieve their promise. Strategic investments by institutions (and the government that supports them) should give researchers the guidance and support and

resources they need so that they, the institution, and indeed the world can benefit from the fruits of their imagination and their insights.

References

Altbach, Philip G. (2011). The Past, Present, and Future of the Research University. In Philip G. Altbach & Jamil Salmi (Eds.), *The Road to Academic Excellence: The Making of World-Class Research Universities*. Washington, D.C.: The World Bank.

Blackburn, Robert T., & Lawrence, Janet H. (1995). *Faculty at Work*. Baltimore, MD: Johns Hopkins University Press.

Bland, Carole J., Center, Bruce A., Finstad, Deborah A., Risbey, Kelly R., & Staples, Justin. (2006). The Impact of Appointment Type on the Productivity and Commitment of Full-Time Faculty in Research and Doctoral Institutions. *Journal of Higher Education*, 77(1), 89-123.

Gappa, Judith M., Austin, Ann E., & Trice, Andrea G. (2007). *Rethinking Faculty Work: Higher Education's Strategic Imperative*. San Francisco, CA: Jossey-Bass, Inc. .

Graves, P.E., Marchand, J.R., & Thompson, R. (1982). Economics Department Rankings: Research Incentives, Constraints, and Efficiency. *American Economic Review*, 72(5), 1131-1141.

OECD - World Bank. (2007). *Higher Education in Kazakhstan*: OECD Publishing.

SCIENTIFIC EXCELLENCE AND RESEARCH OUTCOME-BASED ASSESSMENT APPROACHES

Zhaxybay Zhumadilov

Introduction

Recent advances in rapidly developing science and technology, especially key discoveries in biomedical research have the potential to significantly improve human health quality and overcome many health challenges in the world. As a result, many countries, including developing countries are increasing the resources dedicated to establishing centers of excellence and innovative technology clusters. A world-class research enterprise to conduct cutting-edge biomedical research in this century must establish a comprehensive system to attract, retain and develop talented researchers from both local and international scientific communities. Furthermore, strong mentorship for junior researchers and students must be an integral component in these centers.

The Nazarbayev University of Kazakhstan aims to become a globally recognized teaching and research institution so that its students are equipped to compete internationally. Academic freedom and institutional independence are legally sanctioned at Nazarbayev University, setting it apart from some other universities in Central Asia. In the past two years in Kazakhstan funding allocated to science and research has more than doubled in accordance with the Ministry of Education and Science reports. Kazakhstan's healthcare spending has been experiencing steady growth for past few years as well. Upgrading the existing system, improving mechanisms for implementation and increasing efficiency and effectiveness of professionals working in health services as well as increasing quality of medical services provided, remain to be the priority area for development. Total financing of science grew almost 2.5-fold over the last two years.

The Ministry of Education and Science (MES) has been focusing on the importance of financing of scientific research through financing of educational institutions. More investment means more funding is allocated to the development of infrastructure, equipment and quality of research. Innovation can be nurtured through adequate investment into not only development of infrastructure but also through cultivation of young talent through education. More funding is needed to educate promising young scientists and scholars leading research centers and institutes. Kazakhstan has seen growth in numbers of young scholars and scientists emerging in the region.

Younger generation is showing increased interest in science majors across the country as more and more universities offer scientific majors. The Ministry identified many challenges that lay ahead, which include the need for technological modernization of the scientific infrastructure, synchronization of science with innovative development and encouraging cooperation between science and business. In order to streamline this process the Ministry has formed a "*Science Fund*" with 21 scientific projects in Kazakhstan that are aimed at practical solutions to streamline research. In Kazakhstan, it is of outmost importance to prevent losing qualified scientists and researchers to other countries. Kazakhstan's government recognizes this issue and encourages cultivating and nourishing home grown talent by providing adequate investment into development of first and foremost, educational institutions, infrastructure, teaching staff and equipment. Innovation comes with invention, and invention requires substantial investment, this is the reality that the government has taken notice of.

Current activities to promote research excellence

The Nazarbayev University Center for Life Sciences was registered in December, 2010, as an independent entity owned by the University and became fully operational since June 2011. The Center's vision is to develop fundamental and obtain new knowledge about the nature and behavior of living organisms and to use this knowledge to extend quality of life and improve the health of the population in Kazakhstan. The mission of the Center is to be a leader in the transformation of medicine in Kazakhstan by carrying out innovative research and translating research results into practice. The Center is focusing on high-level training of medical scientists so that they can engage with and contribute to the international medical research community.

The Center is embracing the principles of evidence-based medicine and encourages its practice. The Center for Life Sciences is a part of an integrated academic health-care system that includes six medical centers of the National Medical Holding, a School of Medicine as well as future Oncology Center. These centers provide care in obstetrics and gynecology, neurosurgery, diagnostics, cardiology and cardiac surgery, emergency care, and pediatric rehabilitation. As part of this system, the Center for Life Sciences integrates scientific research programs with clinical practice and education. In 2015, a school of medicine will be added to Nazarbayev University, and will be integrated into this system. A challenge facing the Center for Life Sciences is to raise the quality of biomedical research in Kazakhstan to international standards given budgetary constraints. One way in which the Center is tackling this challenge is to develop partnerships with leading academic centers internationally and to seek advice and input from leaders in this field. Such partnerships were established with centers such as the University of Pittsburgh, Duke University, Columbia University, NIH, Seoul National University, BGI, Oxford University, Cardiff University, University of Brighton, UCL, RIKEN Center for Genomic Medicine, Yokohama, Japan, Kyoto University, National Cancer Center of Tokyo. Center for Life Science researchers have spent time in various training and joint programs at these centers. In 2011 for the first time in Kazakhstan the International Partner Advisory Board was convened.

The International Partner Advisory Board was established as an acting body of Center for Life Sciences, which oversees ongoing research activities of the center in the field of personalized medicine, genomics and multi-omics research, bioinformatics, global health, pharmacogenomics and has been following the progress and development of number of its projects. The mandate of International Partner's Advisory Board is to provide guidance and support initiatives proposed by CLS research scientists. Board members were interested and engaged in discussions regarding the Center's strategy and research programs. The Board provided constructive advice on specific research projects and supported the strategic directions of the Center for Life Sciences. CLS scientists have an excellent opportunity to not only gain significant expertise and experience, but also to perfect their knowledge through collaborative research projects outlines in research initiatives. Advisory Board concurs that in order to maintain the quality of research conducted at CLS, it is vital to develop adequate infrastructure and provide intensive training to research personnel and abundant investment is necessary for further progress. Advisory Board is committed to aiding CLS in achieving its research objectives and anticipates that the ultimate outcome of this research will make valuable contributions to development of various fields of biomedicine in Kazakhstan and beyond.

The challenge faced by current biomedical researchers is the difficulty in bringing together a collaborative multidisciplinary research team which should include distinguished researchers, experienced practitioners and highly skilled industry personnel in order - to yield significant research outcomes. Indeed, funders of any research are increasingly seeking, more outcome-based indicators of societal and economic impact as they evaluate the value of the research. For example, in the United Kingdom, the Higher Education Funding Council for England (HEFCE) developed proposals for the Research Excellence Framework (REF) to allocate public research funding to higher education institutions, inter alia, on the basis of the social and economic impact of their research. Twenty impact indicators from seven categories proposed by HEFCE are presented; their strengths and limitations are discussed using insights from the relevant biomedical and research policy literature. It was confirmed that the majority of the proposed indicators have some validity, there are significant challenges in operationalizing and measuring these indicators reliably, as well as in comparing evidence of research impact across different cases in a standardized manner. It is suggested that the public funding agencies, medical research charities, universities, and the wider medical research community work together to develop more robust methodologies for capturing and describing impact, including more valid and reliable impact indicators. It is quite common for the h-index and the impact factor to be used as the objective measure of research impact. At the same time in December 2012 the San Francisco Declaration on Research Assessment (DORA) was initiated by the American Society for Cell Biology (ASCB) together with a group of editors and publishers of scholarly journals, recognizes the need to improve the ways in which the outputs of scientific research are evaluated. It was noted that it is a worldwide initiative covering all scholarly disciplines and they encouraged individuals and organizations who are concerned about the appropriate assessment of scientific research to sign DORA. As Steen (2013) points out, *"the San Francisco Declaration on Research Assessment (DORA) criticizes Journal Impact Factor (JIF) without offering an alternative"*.

Conclusion

The potential benefits and limitations of bibliometrics in the evaluation of research, as well as the relationship between metrics and peer review, databases used as sources of bibliometric analysis should be assessed with caution and in the context of all indicators of scientific impact. It should be noted as well that the fundamental format of scientific exchange and publishing, assimilation of scientific information, and teaching pedagogy have not changed in a century. In the 21st century our internet-supported culture resulted in rapid access to poorly validated information. The pivot of knowledge is still considered the peer-review process, but it is limited and not measurable. This process does not provide for an intensive interaction between the reviewer-author-editor-end user which would be more efficient and quantitative.

To overcome these challenges we have to consider possibly university-industry-public-governmental partnerships in Kazakhstan who will be: 1) involved in promoting excellence in science and fostering research outcomes translation; 2) establishing industrial cooperation and partnerships; 3) properly analyzing and addressing important societal challenges; and 4) promoting research competitiveness and an appropriate business/innovation environment. These issues are of critical importance and a solution is urgently needed to be effectively solved in a timely manner. In this century an evaluation methodology using informative indicators should be developed to assess research performance across four broad categories:

innovations and knowledge creation; intellectual and highly skilled potential development; research policy improvement and significant return on research investment; and industrial and public outcomes.

The new methodology should be responsive to the requirements and needs of all parties involved in conducting and supporting research. This would be an ideal methodology in the field of evaluative bibliometrics, a subfield of quantitative science and technology studies. It might also be a powerful tool for evaluating institutional research advancements, proficiency in science, and a key driver for scientific excellence in biomedical research.

References

Baneyx, A. (2008) "Publish or Perish" as citation metrics used to analyze scientific output in the humanities: International case studies in economics, geography, social sciences, philosophy, and history. *Arch Immunol Ther Exp (Warsz)*. 2008 Nov-Dec;56(6):363-71. doi: 10.1007/s00005-008-0043-0. Epub 2008, Dec. 1.

Gaspar, R., Aksu, B., Cuine, A., Danhof, M., Takac, M.J., Linden, H.H., Link, A., Muchitsch, E.M., Wilson, C.G., Ohrngren, P., Dencker, L. (2012) Towards a European strategy for medicine research (2014-2020): The EUFEPS position paper on Horizon 2020. *Eur J Pharm Sci*.

2012 Dec., 18;47(5):979-87. doi: 10.1016/j.ejps.2012.09.020. Epub 2012 Oct 6. Haeffner-Cavaillon, N., Graillot-Gak, C. (2009) The use of bibliometric indicators to help peer-review assessment. *Arch Immunol Ther Exp (Warsz)*. 2009 Jan-Feb;57(1):33-8. doi: 10.1007/s00005-009-0004-2. Epub 2009, Feb.14.

Manchikanti, L., Falco, F.J., Boswell, M.V., Hirsch, J.A. (2010) Facts, fallacies, and politics of comparative effectiveness research: Part I. Basic considerations. *Pain Physician*. 2010 Jan-Feb., 13, (1):E23-54.

Ovseiko, P.V., Oancea, A., Buchan, A.M. (2012) Assessing research impact in academic clinical medicine: a study using Research Excellence Framework pilot impact indicators. *BMC Health Serv. Res*. 2012 Dec 23;12:478. doi: 10.1186/1472-6963-12-478.

Pendlebury, D.A. (2009) The use and misuse of journal metrics and other citation indicators. *Arch Immunol Ther Exp (Warsz)*. 2009 Jan-Feb;57(1):1-11. doi: 10.1007/s00005-009-0008-y. Epub 2009 Feb 14.

Schapper, C.C., Dwyer, T, Tregear, G.W., Aitken, M., Clay, M.A. (2012) Research performance evaluation: the experience of an independent medical research institute. *Aust. Health Rev*. 2012 May, 36, (2):218-23. doi: 10.1071/AH11057.

Steen, R.G. (2013) Journal Impact Factor: baby and bathwater discarded? *European Science Editing* 64 August, 39, (3) pp. 64-65.

Zhumadilov, Z. (2012) Scientific Excellence in Biomedical Research: New Opportunities and Challenges in Kazakhstan, 15, (2), pp. 249-251..

WHAT DO EDUCATION CITIES AND REGIONAL HUBS HAVE TO OFFER?

Alan Ruby

Essentially this set of presentations and subsequent discussion began to explore the “*whys and hows*” of different strategies that rely on the creation of international programs or campuses in a host nation or region. These strategies all seek to enhance higher education capacity and quality in a nation or region by creating a local infrastructure, a physical space where learning opportunities are delivered directly to students. This distinguishes them from transnational programs that are delivered solely or largely by online or some other form of information technology. In terms of Sauve’s (2002) four-fold taxonomy of trade in educational services education cities and branch campuses are examples of Mode 3, a physical presence in another nation.

While our discussions and presentations centered on the benefits of these cross border modes of delivery to the host nations and explored some of the different models that were in operation around the world there was also a keen interest in the motivations of leading institutions to engage in the development of education hubs and branch campuses.

We began our discussion by looking at the phenomena of branch campuses from three perspectives: the host nations; the academic institutions and the student consumer. We debated what branch campuses or hubs or education cities can and cannot do for the host nation. And we explored the following questions.

1. Can they diversify provision by offering academic programs that are not available in the region, especially in areas of specialization or where cost structures justify centralization of infrastructure, like medicine or robotics?
2. Do they internationalize higher education by linking the local academic community to the global community of scholars and educators?
3. Is there evidence, or at least an aspiration, that knowledge transfer will take place and that expertise about teaching, learning and research, and the design and operation of modern world class universities will be shared with national universities?
4. Will they attract and retain talent in the student, faculty and research communities?
5. Are they able to, or expected to model new and innovative policies and practices in the operation of universities and of modern corporations, from boards of trustees to procurement procedures?
6. And are they to exemplify values like free speech, democratic practice, tolerance and equality?

The essence of the discussion and commentary was that the current phase of globalization of higher education which had stimulated the proliferation of branch campuses was still “*maturing*.” The effects and impact of diversification of provision in regions like the Middle East and South Asia had yet to be realized. A lot would depend on the employment outcomes for graduates and the articulation of first degree holders into post graduate studies and research. The destinations of the first cohorts of graduates from some of the more prominent and well-resourced institutions like KAUST are still developing their careers. KAUST’s first graduates were in 2010 while NYU’s Abu Dhabi campus is yet to have a graduating class.

Similarly the research output from these and other places is, understandably given the time scale, still emerging.

In the time available we were unable to even begin to address other questions facing nations as they consider investing in this form of higher education. We did not look at the contribution of research and development that flows from the presence of scholars and the creation of laboratory and other experimental facilities that come with the setting of branch campuses or regional education hubs or learning cities.

We also explored the issues facing universities who are, or are considering being, part of a regional hub or opening a branch in an education city. There is a growing array of transnational higher education arrangements and all are referred to as 'branch campuses' even though they differ in breadth of academic programming, in governance and in financing. The main distinguishing feature among branch campuses is the extent of operational control over academic programs, standards and faculty that is held and exercised by the home institution. It seems that the tighter the control of student admissions and faculty recruitment, and the closer the alignment of standards for selection, the stronger the role of the home campus and the less opportunity for local variation.

We briefly debated the strengths and weaknesses of the different models. One issue of particular relevance was the place of local languages, literature and history in institutions where the language of instruction was English, or French. There was concern that local students may graduate from their first degree without a solid grounding in or appreciation of the elements of national identity or a working command of the national official language. This issue is particularly acute in nations where the national language is being re-established after independence.

And finally we looked briefly at the student consumer. There concerns were seen to be primarily vested in issues of reputation and standards. They were perceived to be interested in the nature of the academic experience. Would a branch campus offer programs and learning styles and assessment regimes identical to that of the home campus? Will the entrance and graduation requirements be the same? Will the faculty be held to the same standards for recruitment, retention and promotion? Will the faculty be resident for the academic year or will they come in two-week blocks? Will the degree have the home brand or carry some geographic endorsement? What can they expect in terms of academic articulation between a branch campus and the "*home*" institution? The last was particularly salient for those models which envisage or encourage student movement between campuses.

Following the discussion of these themes we also explored the different modes of branch campuses. In particular we looked at the strengths and limits of the "*franchise*" model of branch campuses. Some equate the franchise model with the high control, high fidelity, tight specification of inputs and processes and standardization of product that is associated with the fast food industry. The critiques of this model include concerns that it does not allow for differences in student needs and learning style preferences. It tends to deliver material in a fixed sequence at a pre-determined rate limiting opportunities for faster progress or for needed revision as perceived by faculty members interacting with students. It is inherently a low trust model of deliver which favors specification to attain and maintain standards and consistency. Its defenders refer to the quality assurance processes embedded in the franchise model and the confidence the consumer can have that the learning opportunities are equivalent to those in other settings carrying the same name or brand.

Finally we touched briefly upon the due diligence procedures a national ministry of education or a higher education coordinating agency might apply when considering proposals for the establishment of a branch campus or an education zone. Some of those procedures are similar to those associated with the analyses a government might commission for any significant foreign direct investment. What are the costs and benefits to the nation? What risks are involved and whose interests are paramount, the investors or the host nation? Other considerations will be specific to education: will professional programs like engineering be internationally accredited? There is a need for further research and reflection in these areas especially as there have been recent instances of failed or unsuccessful branch campuses in the Middle East and in Singapore that have echoed the poor track record of branch campuses in Japan in the 1980s.

Overall the conference session produced some robust exchanges between the panel members and engaged many in the audience. There is more analytical work to be done on the ways the physical presence of an international institution of higher education influences the economy, the quality of education domestically and the choices and careers of young people in the region. As cohorts of graduates leave these institutions and go to work or further study there will be rich opportunities for scholarship and debate.

References

Sauve, P., (2002) *“Trade, Education and the GATS: What’s in, What’s out, What’s all the Fuss About?”* OECD, Paris. Retrieved from: www.oecd.org/edu/skills-beyond-schoolArr10.23.2013

GOVERNMENT SUPPORT FOR STUDENT MOBILITY: THE CASE OF KAZAKHSTAN'S INTERNATIONAL SCHOLARSHIP PROGRAM 'BOLASHAK'

Kadisha Dairova, Zakir Jumakulov and Adil Ashirbekov

Governments are increasingly subsidizing internationalization of higher education all over the world. It is taking various forms starting from including new elements of learning cultures and languages of other nations in the higher education curriculum to sending and bringing students, faculty and researchers from abroad. Countries may choose to emphasize one or other forms of internationalization depending on their national goals, which in its turn is dependent on their current development level, higher education quality. This article provides information on the history, purpose, administration, design, funding and impact of Kazakhstan's Bolashak international scholarship program.

After obtaining independence in 1991, Kazakhstan had radical changes in the social and political life, as well as in the economic model of the state. Transformation of Kazakhstan's economy to incorporate international market relations and international partners required a new generation of staff with high quality education. Among other problems the country faced was the brain-drain - highly qualified specialists were returning to their historical motherlands and some Bolashak graduates were in search of a better life with the result that higher education in Kazakhstan was not able to produce needed specialists. As Stetar and Kurakbayev state, *"following the collapse of the Soviet Union, Kazakhstan's public universities suffered from poor resources, low faculty salaries, and an outdated choice of specialties"* (2010. p. 28). Creation of the program came at a period when Kazakhstan was at its deepest economic recession in its recent history.

Under these circumstances, the President of the Republic of Kazakhstan created the Bolashak international scholarship program via national resolution dated November 5, 1993. In its various stages, the Bolashak scholarship aimed to match the needs of the country reflecting the socio-economic changes taking place in the society. When it was initially created, the stated goal was to *"train specialists to fill the needs of the country in transforming the economy to market economy and to build international relations"* (Presidential Decree, 1993).

In 2000, the government, reflecting on the need for the specialists in engineering and technical fields, reduced foreign language competence requirements for applicants of these majors. Another significant change in the program's goal was related to meeting the needs of the government when it was making a transition from planned economy to market economy and set new priorities for its development. In 2005, Kazakhstan aimed to create an economic model based on the competitive advantages of the country, and through rapidly growing its priority industries. It required specialists to advance industrial innovational development, education and science, management, marketing, logistics, information technologies and others. To meet these needs, the Bolashak program increased in scale and scope. The number of scholarships increased to 3000 and doing an undergraduate degree under the terms of the program became possible.

The change in 2011 emphasized the need for preparing specialists for specific government development programs. This change made the scholarship program targeted compared to previously providing the labor market with high quality specialists in various fields.

Although legally established in 1993, the first students were sent abroad only in 1994. The government saw a continuous need for the program and no official documents defined the ending period of the program. From the time the program started till March 2013, a total of 9250 scholarships were awarded. The number of awarded scholarships has varied at different stages of the program. From 1994 till 2004, a total of 785 scholarships were awarded; starting from 2005 it was decided to have 3000 scholars at any given time. Since then, the average annual scholarship award has been 1056.

Academic subject areas

The permissible academic subject area varied as the goals of the programs changed over time as has been mentioned above. From its early years, the Bolashak program has tried to train specialists in majors that previously had been offered by the Soviet Union and that were not available in the country, for example, in international relations and international trade.

From 2000, to increase the number of engineering and hard science majors, students in these majors were exempted from the requirement of fluent foreign language competence. Since then, students of these majors have been allowed to undergo language training in the country of study for up to two years before they start their formal academic study.

Currently, the Republican Commission on Training Abroad (Republican Commission) defines the list of permissible majors which may be studied through the program. The list represents the needs of the country in the majors identified, which are compiled by the Ministry of Industry and Trade along with the Ministry of Education and Science. They are aggregated into the following categories: economics and management; agriculture and agro-technology; hard and natural sciences, engineering sciences, healthcare and medicine; art; and social sciences. However, the study program options are not limited to the list. If a student is admitted to an academic program which is not included in the list, applicants can request the Republican Commission to consider his or her case and make exception from the rule.

The Republican Commission in its Bolashak Program Development Plan for 2011-2015 emphasizes the need for training specialists for the needs of certain governmental development programs – education and training of public servants, researchers, teachers, engineers and medical staff

Level of an academic program

The Program was initially targeted to Master's degree students but expanded to provide scholarships for students studying in doctoral programs in 2000, undergraduate programs in 2005, and short-term research internships for faculty in 2008. To account for the expected contributions to control program costs, and address other issues, the Program eliminated new awards for students at the undergraduate level in 2010. Reflecting Kazakhstan's engagement in the Bologna Process (since 2011), the Program is expected to begin providing funding to support short-term student mobility (one semester to two years in length) in 2015 (Foster, 2013).

Table 1 illustrates the shifts between 2005 and 2011 in the study-level of Bolashak recipients. In 2011, no new scholarships for students in undergraduate education programs were awarded; 86% of Bolashak scholarships were awarded for Master's degree programs,

3% for doctoral degree programs, and 11% for research internships. By comparison, 69% of Bolashak scholarships in 2005 were awarded to students at the undergraduate level, 27% at the Master's degree level, 3% in doctoral degree programs, and 1% in post-graduate student assistantships (Center for International Programs, 2012b).

Table 1. Number of Bolashak scholars by year

Study level	2005	2006	2007	2008	2009	2010	2011	2012	2013*	Total
Bachelor	1 243	441	97	636	419	543	-	-	-	3379
Master	478	299	138	607	561	881	447	560	6	3977
Candidate of Sciences (post-Soviet degree)	18	5	1	10	-	-	-	-	-	34
Residency	2	14	20	15	10	26	-	-	-	87
PhD	55	19	11	15	11	11	14	15	1	152
Internships	-	-	-	28	12	200	59	527	10	836
Total	1796	778	267	1311	1013	1661	520	1102	17	8465

Source: Official website of the Center for International Programs <http://bolashak.gov.kz>

* before March 2013

Participation and selection

Currently, only Master's degrees, doctorates, and short-term research internships are funded through the Program. The Program's 2011-2015 development strategy (Republican Commission for Training Abroad, 2011) defines five categories of applicants with a certain set of requirements for eligibility criteria. The categories are: 1) Self-admitted students, 2) Public sector servants, 3) Educational managers, 4) Fresh graduates, 5) Applicants for internship.

The selection process consists of five consequent examinations - foreign language knowledge, Kazakh language knowledge, a psychology examination, an interview with the Independent Expert Commission, all leading to the Republican Commission's final decision. The Bolashak Program does not discriminate against gender, income or ethnicity. Over the past eight years, scholarship awards have been shared equally between men and women. However, relatively few students from rural areas have received the Bolashak scholarship. The majority (85%) of applicants are from cities, with more than half (55%) coming from Astana and Almaty; only 15% are from other regions (Perna et al., 2013).

Post completion requirement

Recipients of the scholarship are obliged to return home after graduation and work in the country for five years, otherwise they are required to repay the full scholarship, plus a certain amount of interest payment. Employment is also conditional on the type of scholarship received. Provisions regarding post-completion requirement have changed over time. In the early years, graduates had to work only in the government sector. Later, from 2005 till 2009, graduates were allowed to work in any field regardless of their studied major. Since then, only work corresponding to the academic study major counts towards fulfilling the five-year-work requirement.

To guarantee the performance of this obligation scholarship holders are obliged to put down a collateral which has to cover the total cost of the scholarship. This provision could have

limited the participation to better-off families only has there been no guarantor agreement. Guarantors are required if the collateral does not cover the full cost of the scholarship. A required number of guarantors depends on what percentage of the scholarship cost is covered by the collateral. Up to four guarantors can guarantee the students keeping to their obligations.

To account for lower income population residing in rural areas where the value of property is lower, applicants are permitted to provide any number of guarantors (1-4) regardless of the property cost.

Administration

As other characteristics of the Program, administration of it had also evolved over time, changed and improved, always building on the past experience. As Figure 1 shows, there are three main bodies that administer the program. 1) The Republican Commission on Training Cadres Abroad (Republican Commission) that makes strategic decisions. 2) The Center for International Programs conducts operational management of the program. 3) Ministry of Education and Science provides the operation of the Republican Commission and owns the 100 percent of the CIP's stocks.

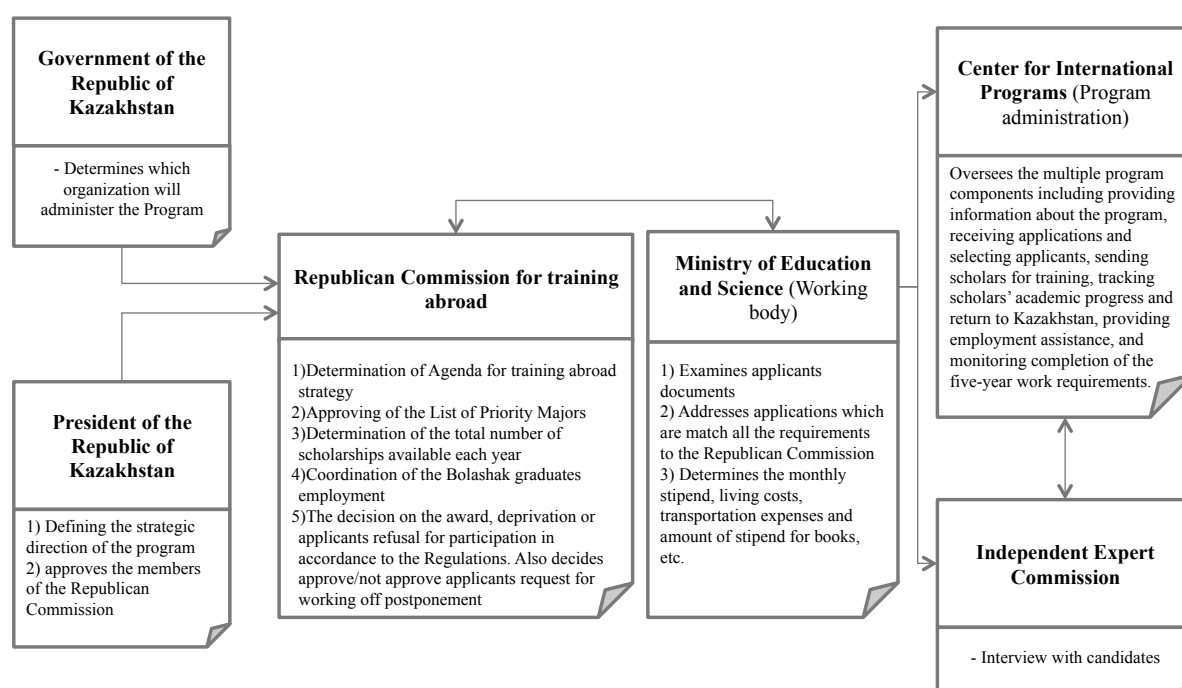


Figure 1. “Bolashak” scholarship administration structure (Adapted from official documents: Government resolution #355 to the Amendments on the Selection Rules, dated 03/27/2012 and Presidential decree #470 on Republican Commission dated 10/12/2000)

The President of the Republic of Kazakhstan plays important role in defining the strategic direction of the Program and approves the members of the Republican Commission. The Government of Kazakhstan determines administering body of the Program (CIP) and allocates funds.

The Republican Commission is a consulting body appointed by the President of the Kazakhstan. It is chaired by the State Secretary; the Vice Chair is the Minister of Education and Science; the full Commission consisting of 15 members, eight of whom are Ministers while the others are heads of committees resorting under different ministries and agencies. The Republican Commission determines the total number of scholarships available per each year, coordinates graduates' employment, makes a final decision on the awarding and cancellation of the scholarship, considers and decides on requests for exclusion from the provisions, determines the agenda for training abroad strategy; and approves the list of priority majors. As stated before, the Ministry of Education and Science owns the 100% of the CIP's stock and oversees its work. The Ministry also determines the size of the stipends, examines the applicant documents.

The Center for International Programs is a joint stock company established on April 4, 2005 to administer the Bolashak program. The CIP employs 140 people and has offices in the UK, Germany, Russia, China. Its strategic goal is to train a new generation of professionals who are able to bring the country to a new level of economic and political development through training highly qualified specialists in various fields, in line with the development strategy plan of the country. The CIP oversees the multiple program components including marketing and promotion, receiving applications and selecting applicants, sending scholars for training, tracking scholars' academic progress and return to Kazakhstan, providing employment assistance, and monitoring completion of the five-year work requirements (CIP, 2013a). Besides administering the Bolashak program, CIP implements a set of measures on promoting other international programs for training and retraining abroad.

Until 2007, foreign quasi-governmental agencies played a substantial role in the administration of the Bolashak Program, particularly with regard to placing scholars at universities abroad and preparing travel documents, and preparing students for a host country environment. Before creation of the CIP in 2005, the Ministry of Education and Science worked with partners to administer the program, and the CIP continued this practice for another two years. Independent audit revealed inefficiencies with the administrative structure involving partners, which led to terminating the contract with these partners, and the CIP taking full responsibility for the administration the program. The CIP reported a reduction in the budget by 2.8%. (CIP, 2013a).

Selection process

Bolashak Scholarship has a rigorous selection process that has evolved over time. Applicants are selected on a merit basis, with some positive discrimination towards engineering majors and some share of applicants representing public servants, workers in education and research. Eligible candidates (see attachment 1) may submit their documents directly to the CIP, or, starting from 2013, via the electronic government website (www.e.gov.kz), or through Public Service Centers.

There are five rounds of examination that measure: 1) the level of foreign language competence; 2) the level of competence in the state language 3) psychological preparedness, and IQ level; 4) Interview with Independent Expert Committee; 5) final consideration by the Republican Commission. The required level of foreign language proficiency may vary according to the category of applicant and the major they chose to study as was mentioned earlier. The psychological examination, among other measures, is used to evaluate if the student is mature enough to be away from the home country – a measure that has been especially useful when undergraduate study was available.

If an applicant passes language and psychological examination, they go through a personal interview with the Independent Expert Committee. It is established by the Ministry of Education and involves representatives of the various Ministries, the names of the members of the committee being held secret, usually being heads of departments and committees. In this interview, knowledge of the Constitution of the Republic of Kazakhstan, History of Kazakhstan, national symbols, and the level of professional training of the applicant are evaluated. Committee members also may evaluate the candidate's motivation and general preparedness for studying abroad. After the interview, the Committee provides a personalized recommendation for each candidate. A final decision on awarding the scholarship is made by the Republican Commission after considering the results of all examinations. Results are posted on the official website of the CIP.

Applicants themselves select the country and institution to study from the recommended list. As of 2013, there are 200 universities from 20 countries to choose from. Scholarship holders may study in universities that are not included in this list, but these institutions must be included in the top 100 universities according to the latest publications of world university rankings such as the Times Higher Education World University Rankings, QS World University Rankings and Shanghai Academic Ranking of World Universities (Center for International Programs, 2013).

There are also provisions that support graduates' employment opportunities. Bolashak graduates can apply for higher category positions in government service than those with the same educational attainment but with their degrees from local Kazakhstani institutions. This is in part done to retain Bolashak graduates in the government service.

Funding

The Bolashak Scholarship is fully funded by the Government of the Republic of Kazakhstan. Allocation of funds comes from the Ministry of Finance. One can be tempted to relate the level of financing of the Program to the oil revenue of the country; however, there is no stated direct relationship between the two. It is worth mentioning that the Program was started long before the country started to get revenue from its natural resources. The CIP does not announce the total amount of funds spent on the Program. The amount of funding spent is available for some years on the financial reports of the Ministry of Finance.

Scholarship coverage is considered quite generous. Bolashak students are fully funded by the scholarship; it covers examinations, three university applications, visa and travel related expenses, university tuition fees, accommodation in the host country, and the provision of living allowance. Variation of these expenses by countries and cities define the total scholarship amount. For example, the largest amount of monthly living expense is for students who chose to study in London - this equals 1200 USD. The lowest monthly living expenses is 400 USD for Malaysia. The average disbursement for training a student abroad was equal to 5.6 million tenge per year (about 37 thousand USD) in 2013.

Other grants available in Kazakhstan

Kazakhstan has 124 international agreements on equivalent student exchange with other countries. Through these agreements governments agree to send and receive equal number

of students between two countries. Currently only 8 of them are active and provide total of 172 grants: Egypt (7), Belarus (6), Romania (5), Ukraine (40), Kyrgyzstan (5), China (100), Slovakia (4), and Mongolia (5).

International Academic Grants for Kazakhstan

Grants are provided by other countries specifically to Kazakhstan, the total number of grants, at the moment, being 302. These are provided by the following countries: Russia (145), China (9), Turkey (125) and Egypt (23). (Ministry of Education and Science, 2013).

In 2011, in order to facilitate academic mobility at the postgraduate level, the Ministry allocated US\$1.37 million to send Masters students to foreign universities for short-term study (one term). In order to adopt the Bologna Process more actively, the Ministry has promoted institutions sending their postgraduate students to study principally in countries of the European Union (Sagintayeva & Kurakbayev, 2013).

There are also some international programs such as the Erasmus Mundus, Fulbright, Chevening programs and other similar ones which are available for Kazakhstani students, which do not match in scale with the Bolashak scholarship. The Bolashak scholarship is a prestigious program in Kazakhstan, and following factors contribute to this:

- High level of political support for the Program - President initiated the Program and he continues to support it;
- Amount of scholarship and financial coverage is more generous than those mentioned elsewhere;
- Large media coverage;
- Largest alumni association (that is, the Bolashak Association);
- Success stories of the Program graduates. Some graduates have become successful politicians;
- Support for the graduates from the Centre of International Programs.

Prior evaluation of the Program

There is a clear lack of attention by the scholarly community to the evaluation of the Program. There are some evaluations carried out by government agencies, however they lack theoretical grounding and in-depth analysis. For example, the Program was evaluated by the Accounts Committee, a committee that audits the appropriateness of government fund spending. The report recommended improving the forecasting of labor market demand, which might have been a trigger to introducing a new list of academic programmes based on current demands of the economy.

Government officials state that the program fully matches all the goals which were stated in the very beginning. Discussing the role of the Program, Former Ministry of Education and Science, Professor Bakytzhan Zhumagulov states: *“The program always aimed to prepare the specialists which are needed in the country. Most of them are at top positions in the government and in national companies. Today more than 20% of all [Bolashak] graduates work in the public sector, 21% in national companies, 55% in private sector and 4% in NGOs ... Mainly the effectiveness of Bolashakers work count to be very successful.”* (Ministry of Education and Science, 2013).

Apart from the economic benefit of the Program, officials also mention non-material benefits such as:

1. Promoting a positive image of the country, for a young country like Kazakhstan especially in the early years it was essential to be recognizable in the international community;
2. Ideological factors – the program became a social uplift amongst young; and
3. Advancing social capital - scholarship recipients expand their worldview and network.

One of the recent, on-going studies on the Program is done by Nazarbayev University Graduate School of Education in collaboration with the University of Pennsylvania. The researchers have interviewed scholarship recipients, former and present program administrators and policymakers and have reached following conclusions. The research highlights that the Program has evolved over time making the selection and administration process more open, *“with its longevity and evolution over time, the Bolashak Program is a potential model for other nations seeking to promote their nation’s human capital.”* It also calls to improve secondary education (especially in rural areas) so that more students are prepared to enter and succeed in higher education in Kazakhstan and abroad. (Perna et al., 2013).

References

Center for International Programs (2013a). History of the Program. Retrieved from: <http://bolashak.gov.kz/index.php/ru/o-stipendii/istoriya-razvitiya> Accessed October 20, 2013.

Center for International Programs (2013b). Retrieved from: www.bolashak.gov.kz Accessed on 28.10.2013.

Center for International Programs (2013c). List of Priority Majors. Retrieved from: http://bolashak.gov.kz/images/Pretendentu/Perechen_prioritetnyh_specialnostei.pdf Accessed on 28.10.2013.

Foster, H. (2013, August 26). Bolashak to add short-term student experience abroad to its degree-focused repertoire, Tengri News. Retrieved from: <http://en.tengrinews.kz/opinion/406/> Accessed on 30.08. 2013.

Ministry of Education and Science of the Republic of Kazakhstan, 2013. Minister’s speech. Retrieved from: http://www.edu.gov.kz/ru/about/o_ministerstve0/ministr/vystupleniya/vystuplenie/?tx_ttnews%5Btt_news%5D=4821&cHash=30513adc08e0ad410e85b6cbb8fb6492 Accessed on 28.10.2013.

Perna, L.W., Jumakulov, Z., & Orosz, K. (2013). The Role of an International Scholarship Program in Developing Human Capital in a National with a Transitioning Economy. Paper presented at the European Conference on Educational Research (ECER), Istanbul, Turkey.

Perna, L.W., Orosz, K., Jumakulov, Z., Gopaul, B., Ashirbekov, A., & Kishkentayeva, M. (2013). Promoting human capital development: A typology of international scholarship programs in higher education. Paper presented at the European Conference on Educational Research (ECER), Istanbul, Turkey.

Presidential Decree #1394 dated 11/05/1993 on “Bolashak” international scholarship establishment. Accessed 28.10.2013 from http://adilet.zan.kz/rus/docs/K930001394_#z0

Republican Commission for Training Abroad (2011, May 11). Bolashak Program Development Plan for 2011-2015, #03-5.4.

Sagintayeva, A., & Kurakbayev, K. (2013) Internationalisation of Higher Education in Central Asia: the Case of Kazakhstan. In Stiasny, M. and Gore, M. (2013) (eds) *Going Global: Identifying Trends and Drivers of International Education*. Emerald: Bingley, UK, 17-27.

Stetar, J., & Kurakbayev, K. (2010). Goals for Higher Education in Kazakhstan. *International Higher Education*, 59, 28-29.

STATE SUPPORT OF STUDENT MOBILITY IN KAZAKHSTAN

Sayasat Nurbek

In establishing the direction of “*Higher and postgraduate education*” of the State Program of Education Development in the Republic of Kazakhstan for 2011- 2020, the following objectives are noted:

1. Providing staff with higher and postgraduate education, relevant to the needs of industrial and innovative development of the country.
2. Ensuring the integration in the European Higher Education Area.
3. Ensuring the integration of education, science and production and creating conditions for commercialization of intellectual property and technology. Preparation of highly skilled scientific and pedagogical staff.

For the realization of these tasks, in particular the second task, two target indicators are accepted, related directly to the Bolashak Program and academic mobility:

- On Bolashak Program 100% of scholars will study at postgraduate level (Masters, Doctoral programs and research internships), at undergraduate level from one semester to one academic year.
- Mandatory, recommendation parameters will be executed within the framework of the Bologna Process:

For development of academic mobility, as one of the principles of Bologna declaration, students will study abroad for at least one academic term for the entire period of study, including the international scholarship of the President of the Republic of Kazakhstan “*Bolashak*”.

In 2011, the concept of academic mobility of students of Higher Educational Institutions (HEIs) of the Republic of Kazakhstan and Kazakhstani model of the European Credit Transfer System (ECTS) were developed and approved. For realization of the Law of the Republic of Kazakhstan “*On Amendments and Additions to the Law “On Education”*”, a joint order “On approval of destinations for studying abroad including the framework of academic mobility” of the Ministry of Education and Science and the Ministry of Foreign Affairs of the Republic of Kazakhstan was developed.

The relevant authorities co-coordinating academic mobility were created. In the Fall of 2012, the Center of the Bologna Process and Academic Mobility was launched (former National Accreditation Center of the Ministry of Education and Science of the Republic of Kazakhstan). At universities, structural subdivisions were created and coordinators of academic mobility programs were identified.

Every year, opportunities are provided for students and teachers to participate in internal and external academic mobility programs. For the first time since 2011, 200 million tenge was allocated from the Republican budget to train students in a foreign university for one academic semester. In 2012, at the state level, this amount was increased up to 500 million tenge. In 2011, 50 students of Al-Farabi Kazakh National University named, Gumilyov Eurasian National University, Kazakh National Agrarian University, Amanzholov East-Kazakhstan State University, Buketov Karaganda State University and Innovative University of Eurasia

were trained in foreign universities under the Erasmus Mundus Scholarship Program, Lane Kirkland Scholarship Program, DAAD and other educational programs.

Within the framework of the Bologna process, four working groups were created, in the ambit of which the following national experts are involved:

1. Working Group for report and implementation of the Bologna Process;
2. Working Group on Qualifications Frameworks, Recognition, Quality Assurance and Transparency;
3. Working group on the Social Dimension and Lifelong Learning; and
4. Working Group on mobility and internationalization.

It should be noted that this trend is supervised by the Department of Higher and Postgraduate Education of the Ministry of Education and Science of the Republic of Kazakhstan.

The Center for International Programs and the Center of the Bologna Process and Academic Mobility attend meetings of the Working Group on mobility and internationalization.

According to the Action Plan for the implementation of State Education Development Program of Kazakhstan, as from 2015, it is planned to implement the academic mobility programs within the Bolashak scholarship program

One of the aims of Strategy for Academic Mobility in the Republic of Kazakhstan for 2012-2020 is to ensure the openness and transparency of higher education and the achievement of balanced mobility. As realization of the Bolashak Program implies training students abroad, the Center for International Programs can carry out its activity only within the framework of external mobility. Among the indicators of external mobility (the most suitable for the “*Bolashak*” program which were identified in the Strategy as well) are the following indicators:

- an increased number of students traveling to countries of the EHEA for one training period by 50% annually (horizontal mobility);
- an increased number of students traveling to countries of the EHEA for the entire period by 10% annually (vertical mobility);
- an increased number of students traveling outside of the EHEA for one training period by 50% annually (horizontal mobility);;
- an increased number of students traveling outside of the EHEA for the entire period by 10% annually (vertical mobility);
- an increased number of graduates and postgraduates traveling to countries of the EHEA for one training period by 30% annually (horizontal mobility);
- an increased number of graduates and postgraduates traveling to countries of the EHEA for the entire period of training by 10% annually (vertical mobility);
- an increased number of PPP universities, traveling to countries of the EHEA on research and professional internship by 10% annually; and
- an increased number of PPP universities traveling outside of the EHEA on research and professional internship by 10% annually.

The first four indicators are directly related to student mobility.

The Center for International Program's plans within the framework of academic mobility programs

The rich and unique experience of the Center for International Programs has contributed to the creation of prerequisites for the internationalization of higher education and the acceleration of the processes of academic mobility in Kazakhstan. Analyzing the results of activity and achievements of the Center for International Programs for the last eight years (2005-2013), the Center can rightfully be called as one of the main reform participants in higher education system in Kazakhstan. Along with leading universities in the country, the Center for International Programs has helped to strengthen mobility creating a dynamic system of education management.

By carrying out the realization of the international Bolashak scholarship launched by the President of the Republic of Kazakhstan and other intergovernmental programs, the Center for International Programs' staff accumulated valuable expertise as well as methods and mechanisms have developed over the years (for instance, the academic program-targeted method of selection, the training and mandatory work policy of Bolashak scholars at their employers' settings, a multifunctional e-Bolashak information system, receiving documents through the Service Centre called "*Studying abroad*", information platforms for the Center for International Programs in social networks, etc.), which have become powerful tools for the creation and development of new educational projects in the framework of academic mobility programs.

Since 2015, under the State Program of Education Development in the Republic of Kazakhstan for 2011- 2020, in order to boost the development of academic mobility, students will study abroad for at least one academic term for the entire period of study (up to one academic year), through international Bolashak scholarship of the President of the Republic of Kazakhstan

As shown in Figure 1, for this purpose, it is planned to use the accumulated potential of the Center for International Programs with a construction on its base the Center for International Education with the following key functions:

- Operator training on intergovernmental grants;
- Development of student academic mobility; and
- Development of research mobility and exchange of teachers.

For the programs of academic mobility, it is planned to develop and approve a package of programs for different target groups, each with its own brand and memorable name using examples like the Fulbright or Muskie programs:

1. "*Satpayev*" program for research workers for research internships and joint development programs;
2. "*Kamkorshy*" program for administrative corps and boards of trustees to improve the quality of management and leadership in education;
3. "*Ybyray Altynsarin*" program for teachers of secondary schools and pre-schools;
4. "*Akhmet Baitursynuly*" for English language teachers;
5. "*Sheber*" program for teachers of vocational and technical education; and
6. "*Shakirt*" program for students of HEIs.

Table 1. Structure of the mobility programs for different target groups.

Satpayev Research Mobility Scholarship Program	A variety of intern programs <u>Analogue:</u> Tempuss
“Kamkorshy” University Governance Mobility Program	For Board of Trustees and administration <u>Analogue:</u> University Administration Support Program (UASP) – IREX
Baitursynuly English for Teachers Program	Subject Teacher Training in English
Altynsarin Teacher Mobility (Excellence) Program	For school teachers, university teachers and college teachers. <u>Analogues:</u> Teaching Excellence & Achievement Program (TEA), Junior Faculty Development Program
“Sheber” Vocation & Technical (VET) Scholarship Program	<u>Analogue:</u> Education and Training Programs Rogaland – RKK
“Shakirt” Student Mobility Program	<u>Analogues:</u> Global UGRAD – IREX ERASMUS ERASMUS MUNDUS

The Center for International Programs also plans:

- An acceleration of process of the deep participation in the exchange programs of ERASMUS (program of student and teacher mobility within the framework of the European Union); ERASMUS MUNDUS (global version of ERASMUS, designed to give an “*European*” orientation to global higher education); TEMPUS IV (2007-2013) (mobility program in the field of science education of the EU and partner countries);
- The conclusion of the memorandum of cooperation with the administrators of the above mentioned programs to exchange experience in the selection and placement of academic mobility scholars and to develop its own criteria for selecting, placing and monitoring them. If necessary, the Ministry of Education and Science, via the Center for International Programs can act as a donor of funding programs as ERASMUS, ERASMUS MUNDUS, Tempus for targeted placement of Kazakhstani students, faculty and staff of HEIs of Kazakhstan by European administrators of these programs. The Center for International Programs can monitor targeted disbursement of funds in relevant funding programs of the European Union.]; And
- Work in close collaboration with the IREX agency, which acts as an administrator of Global UGRAD programs, University Administration Support Program (UASP), Teaching Excellence & Achievement Program (TEA) and Junior Faculty Development Program (JFDP), with the purpose of adapting the administration experience of these programs for the realization of the new programs of mobility for the Center for International Programs for teaching students, teachers and employees of HEIs, schools and colleges of the Republic of Kazakhstan.

ACADEMIC MOBILITY IN KAZAKHSTAN: RHETORIC AND REALITY

Martin O'Hara

Kazakhstan joined the European Higher Education area in 2010. The implications are profound – the state and the universities will have to fundamentally change the way they conduct their business as the country adopts the three cycles of the Bologna Framework and the European Credit Transfer System – ECTS.

A key objective of the Bologna process is that students can move between different universities and different countries, with their previous learning explicitly recognized in terms of learning level and the number of ECT credits gained by previous study. Similarly, graduates can expect to see their qualifications recognised automatically across the European Higher Education Area and beyond, provided they were awarded by an accredited or recognized institution.

The Ministry of Education and Science (MES) has begun the process of implementing the Bologna agenda but there's a long way to go before the new required approaches become a reality.

KIMEP University has been a pioneer of the internationalization of higher education in Kazakhstan from its foundation, over 20 years ago. However, being a pioneer has meant that KIMEP has frequently been in tension with the regulatory basis of higher education in Kazakhstan, which is still deeply concerned with compliance requirements, as represented by the State Classifier of degree titles. Additionally, prescriptive GOSO requirements govern, for example, admissions, curricula, assessment patterns, and examination weightings for courses taught.

This paper examines some of the current tensions experienced by KIMEP University during the last year, because they illustrate the extent to which urgent change is still needed as the Ministry of Education and Science (MES) guides higher education into the new Bologna era. In particular, there needs to be clear articulation and implementation of the principals of institutional autonomy and academic freedom as applied to recruitment of academic staff, outbound and inbound mobility of students, admissions processes, and control of degree awards and curricula. This paper concludes that the compliance and control role of the MES should be to provide a flexible regulatory framework in which programs and institutions are assessed against the:

- quality and consistency of educational processes,
- adherence and achievement of Mission,
- quality of outputs, in terms of learning outcomes at course and program levels, and the knowledge and skill sets of graduates.

Current status of higher education in Kazakhstan

Currently the MES determines the degree purpose, degree structure and much of the degree content: basically the system is still one of compliance and control whereas in the Bologna Framework, the emphasis shifts towards systems based upon regulation, university autonomy and academic freedom.

Equally fundamental will be the shift from present didactic teacher-led learning based teaching to a new holistic learning paradigm based upon student-centered, outcomes-driven and innovative approaches to learning and assessment. The role of the lecturer will change from one of determination of what the student learns, to one based more upon encouraging and supporting the student to engage increasingly in independent learning and self-discovery, based upon a much wider range of learning and assessment techniques.

The MES is committed to Bologna reforms. It has established a Bologna Process and Academic Mobility Center to lead and co-ordinate the process of change. Various training workshops and other awareness raising events have taken place. Most recently, in July 2013, a short conference at KIMEP university was followed by a three day training program developed and run jointly by KIMEP University and the Bologna Process and Academic Mobility Center.

The MES has developed an outline National Qualifications Framework, which addresses the need to have a three cycle approach (Bachelors, Masters and PhD qualifications). The next step is to provide more detail with regard to ECTS credit hours; credit transfer mechanisms; teaching, learning and assessment strategies; and learning agreements and diploma supplements.

The sector is beginning to recognize that the Bologna agenda represents fundamental change. The MES has stated the intention to give universities greater autonomy and academic freedom by 2015. However, it remains unclear to what extent the current system of control of degree titles through the State Classifier and curricula controls being exercised through GOSO standards will remain in force. What is not yet clear is the extent to which inspections will remain focused upon compliance issues. What is essential is for the MES to establish how well institutional quality assurance and quality enhancement mechanisms deliver high quality learning outcomes.

Ideally, universities should be free to determine and develop degrees in response to both market demands and market opportunities with regulatory frameworks and inspection regimes focusing upon achievement of stated outcomes. In other words, the emphasis should shift from control to assuring an ever-increasing level of quality at institutional and subject levels. The Quality Assurance Agency (QAA) in the UK provides a good example of how to safeguard standards through a single national body without compromising the autonomy of universities to determine content and delivery of programs.

The QAA conducts reviews at both institutional and subject levels of institutions according to ensure that the sector meets students' needs; safeguards standards in an increasingly diverse UK and international context; drives improvements in UK higher education; and works to improve public understanding of higher education standards and quality (<http://www.qaa.ac.uk>). The QAA publishes a range of reference points and guidance, including subject benchmark statements in support of standards but does not dictate the structure, nature or content of academic programs, other than requiring them to be compatible with the UK Credit Accumulation and Transfer System (CATS): CATS maps easily onto the European ECTS. It is worth stressing that UK universities have the authority to award degrees, have the freedom to determine degree titles, degree content, and approaches towards teaching, learning and assessment. The focus during inspection visits is not upon compliance but how well the program is meeting the remit determined by the university itself. Inspection visits operate on the basis of *"You say you do this (in the self-assessment documentation) – now prove it. Show us the evidence."*

The value of this approach is that it encourages innovation and enable universities to respond rapidly to changing market conditions and market opportunities.

In contrast, in Kazakhstan, universities have to comply with excessive levels of control including program licenses, restrictions in degree titles and heavy controls over curricula. This is not helpful as it stifles innovation and distorts the links that universities should be building with their key stakeholders, the students and the employers. Higher education in Kazakhstan should move away from mechanistic controls requiring specific numbers of contact hours and assessments to an approach that enables universities to develop and deliver learning strategies that best meet the needs and aspirations of their stakeholders. The learning needs of increasingly diverse groups of students should be central, and how well their knowledge and skill sets at graduation meet employer and society expectations, needs and requirements.

Higher education quality in Kazakhstan should be evaluated in terms of process and outcomes while teaching and methods of assessment should become much more student-centered and outcomes driven. In the process, graduates become more desirable in terms of their subject and knowledge and analytical skills, their ability to engage with research demands, their ability to continue self-learning and to apply their knowledge and skills to new problem solving situations.

KIMEP university international experience

In line with the University Mission, as established by the President of the Republic of Kazakhstan, KIMEP aims to provide a high quality learning experience based upon best western practice. In September, 2013, all established programs received accreditation from AQ Austria, an international accreditation agency recognized formally by both the European Quality Assurance Register and the Ministry of Education and Science. Other international accreditations have been received from:

- Foundation for International Business Administration (FIBAA):
for the Executive MBA
- Asian Forum for Business Education (AFBE): Level 3 accreditation for all business undergraduate and graduate degrees
- European Association for Public Administration Accreditation (EAPAA):
accreditation for undergraduate and graduate programs in public administration
- American Communication Association (ACA): accreditation for undergraduate and graduate programs in journalism.

Over 10% of students and 40% of academic staff are international. The University has over 100 international partnerships with universities in Europe, Asia, North America and elsewhere. Around a third of partners are ranked in the top 400 universities worldwide. There are 9 double degrees whereby students exchange between partners and receive two degree awards, one from KIMEP and the other from the partner institution. A further 6 dual degree programs are due to be established shortly. In 2012-2013, there were 89 incoming and 175 outgoing student exchanges. There is little doubt that such exchanges add greatly to the student learning experience at KIMEP, adding value in terms of diversity, sharing experiences, broadening horizons, and enhanced employability of graduates.

KIMEP university academic mobility issues

Despite the clear commitment that has and is being made to progress the regulatory environment to one which better supports and is attuned to the Bologna Framework, there are several operational realities indicate that traditional control and compliance requirements continue to exert an unhelpful influence upon operational realities.

Problems are especially acute for KIMEP, precisely because the University is committed to promoting and developing its international mission. Yet, since becoming a University in January 2012, KIMEP has become increasingly subject to unhelpful and arguably unnecessary controls. These controls have made it increasingly difficult to deliver the University Mission because, in reality, they undermine the concept of academic autonomy and academic freedom which lies at the heart of the Bologna Framework. The remainder of this section explores some of the issues that have impacted adversely upon KIMEP during the last year.

Student mobility

KIMEP used to admit students throughout the academic year, this supporting and facilitating more flexible student recruitment within Kazakhstan but also, critically, enabling in-bound international exchanges based upon credit transfer and double degree arrangements with partner universities. However, admissions for the 2013-2014 academic year have had to comply with MES requirements, which restrict admissions to August only. Additionally, applicants have to take National Testing Center examinations in either Russian or Kazakh (academic programs at KIMEP are taught in English); the first degrees of graduate students have to be nostrified by the MES; and IELTS/TOEFL certificates are required, even when the students are coming from English speaking environments such as the U.K. and the U.S.A. In a recent case, the MES refused to nostrify a student with a first degree from Belgium, seemingly contrary to the commitment made by Kazakhstan as a signatory to the 1999 Lisbon Convention on degree recognition. Collectively, these compliance requirements undermine the Bologna expectation that universities have the academic freedom to determine their own admission standards and procedures.

Recruitment and retention of foreign staff

Recruitment and retention of foreign staff has become increasingly difficult. KIMEP lost several academic staff during 2013 because of work permit issues. Qualifications have to be nostrified, a process of formal recognition that can take between 4 months and a full calendar year. Nostrification is by no means guaranteed and the University has had to release staff whose qualifications have not been recognised.

The situation is worst for qualifications gained from universities in countries not recognised in partner agreements with Kazakhstan. KIMEP has encountered difficulties gaining work permits based on qualifications gained in countries such as Australia, New Zealand and the Netherlands.

The situation regarding initial appointments and promotions to Associate and Full Professorships has become more difficult in recent months with recent regulatory changes requiring such appointments to have MES approval. (Order 128, March 31, 2011). MES criteria include a requirement of a minimum of 10 publications in recognised local journals for Associate Professor and 20 for Full Professor appointments. This undermines the ability of

internationally qualified academic staff to move into higher education in Kazakhstan, yet such inward faculty mobility is a fundamental tenet of Bologna.

Other constraints include requirements that applicants for academic management experience have at least 5 years previous management experience in other institutions. This makes it difficult to make internal promotions to Dean positions, thereby undermining staff development within the University.

European credit transfer system (ECTS): implications of the Bologna agenda

To implement Bologna in a timely manner, so as to enable European accreditation and engage in the development of dual degrees, the following issues need to be addressed.

1. The MES should move away from the tradition of control and compliance towards a developed a system of greater autonomy and academic freedom at institutional level, within an accountable structure that holds universities accountable for the outcomes of their actions and decisions.
2. Regulation is necessary to ensure quality but the focus needs to shift from control and compliance to checking integrity of quality assurance and enhancement, and the measurement of process and quality of outputs against stated learning outcomes, benchmarking statements, professional requirements etc.
3. Academic mobility, both inward and outward, requires full adoption of the Bologna process. Specifically with regard to:
 - academic freedom
 - institutional autonomy
 - recognition of international qualifications
4. Specifically, universities need to be able to:
 - Determine student admission requirements
 - Determine university application and admission procedures
 - Determine criteria for academic staff appointments, promotions and contract renewals.

Conclusion

In conclusion, regulation is necessary to ensure quality of higher education programs but the focus needs to shift from control and compliance by government to only checking by an independent quality assurance agency recognised by the MES and registered with the European Quality Assurance Registry. This agency would check the integrity of the quality assurance and enhancement process and the quality of the outputs against stated intentions, benchmarking statements, professional requirements etc.

THE RELATIONSHIP BETWEEN PUBLIC FUNDING & PRIVATE SUPPORT

Gretchen Dobson

Another global trend is the relationship between public funding and private support for higher education. Decreased public funding requires institutions to attract and retain new sources of private support in the form of individual giving, individual and family estate planning, and corporate and foundation philanthropy.

What are the trends in education costs in the United States? According to the National Center for Education Statistics (of the U.S. Department of Education), for the 2010–11 academic years the annual current dollar prices for undergraduate tuition, room, and board were estimated to be \$13,600 at public institutions, \$36,300 at private not-for-profit institutions, and \$23,500 at private for-profit institutions. This is not the universal story for the U.S. as each of the 50 states sets their own rates at public institutions.

In the United States and Canada private giving to college and universities has been institutionalized in the 20th century with the formation of alumni associations, the promotion of capital campaigns, and the attractive charitable tax benefits afforded to both the donor and the beneficiary. More students are attending colleges and universities on scholarships, grants and financial aid.

The story is different in the UK. Academic fees are accelerating the pace of change for what is expected across England's higher education system. Once a public good provided at no cost to students, economic austerity measures introduced by ruling governmental parties have created new price tags for higher education institutions. The cost of education has grown exponentially since the inception of the first fees of £1,000 in 1998. Along with the most recent tuition spike of £9,000 come new requirements of universities to better serve underrepresented students. Access Agreements require universities to sponsor programs and initiatives that help students in lower socio-economic brackets get financial aid for higher education.

The culminating impact of these changes in England has raised two key questions: Will more bursary support offset the perception of an unattainable university education with a 200% increase in tuition and fees? Will institutions be able to raise more money from private sources to support a growing number of needy students? The majority of higher education institutions in England (excluding historical icons such as Oxford and Cambridge) have nascent alumni relations programs and this may affect fundraising. Have institutions invested enough in alumni relations *"up front"* to weather the forces produced by the newest era of tuition and fees?

A note on corporate and foundation philanthropy: corporations and foundations have succeeded in helping advance higher education goals within the country of origin, on behalf of a particular region, or by way of a wider internationalization agenda. Not all attempts, however, have been without controversy. In some cases, an equal share of negative attention has balanced an assumed expectation that all outside money is a good thing.

Finally, shifting more of the financial burden from the state to private sources created a new consumer relationship between institution and its undergraduates or future alumni. Across the world, students and alumni are more intentional than ever about how their degree impacts their employability. The university degree must bear utility. Universities must respond by creating more resources for both students and their recent alumni.

TRENDS IN HIGHER EDUCATION FINANCING: A VIEW FROM BISHKEK

Andrew Wachtel

My background gives me an unusual perspective on trends in higher education financing. In 2010, I moved from Northwestern University, one of the richer institutions of the world, where I was the Dean of The Graduate School, to one of the poorer private institutions in the world—the American University of Central Asia in Bishkek, Kyrgyzstan (annual budget approximately \$10M). Despite the enormous disparity between the budgets of these two institutions, there are some important commonalities. Both must contend with resistance on the part of students and parents to continued tuition increases, both must rely on philanthropy to make up the difference between what students can pay and what they must charge, and both must run balanced budgets on an annual basis.

Northwestern, a private non-profit institution with an annual budget of close to \$1B billion, relies, as do all major schools in the US, on a mixture of funding provided by tuition dollars (nominal tuition for undergraduates is close to \$40K per year), federal funding for research, and the contributions of alumni and friends of the university either in the form of immediately usable grants and gifts or to its \$7B plus endowment. AUCA, which began operating as a fully independent institution in 1997, lives in a desperately poor country with a per capita income of approximately \$1000 per year officially (perhaps more like \$2000 if we take into account the black and grey economies). Although we are an officially recognized university in Kyrgyzstan and give a Kyrgyz government accredited degree (along with an American accredited degree through our partner, Bard College), we do not receive any support from the Kyrgyz state. Even students eligible for state funded positions at other Kyrgyz institutions receive nothing if they choose to enrol in AUCA. Furthermore, the Kyrgyz government does not sponsor any competitive research competitions, thus we have no chance of support from the state in any way, shape or form. With no state support, we must rely exclusively on tuition dollars and philanthropy if we hope to provide a first-class education for our students.

Despite the fact that per capita income in Kyrgyzstan is low, we have been successful in convincing our students to pay tuition, which is not easy to do in an environment where students and parents expect higher education to be free. We spend a fair amount of time explaining to students and parents why we must charge them for their education, precisely where their tuition dollars go, and how much financial support they are receiving from the university, even if they are paying the average tuition of approximately \$2600 per year (nominal tuition is \$5400, thus the average local student receives a financial aid package from the university equivalent to a bit more than 50% of tuition – at Northwestern, by contrast the average undergraduate pays 70 cents on the dollar). We make our macro-budget available on-line, which is a good way to convince parents and students that we are not squandering their hard-earned tuition money. As a result, despite the fact that for many of our students and parents it is a struggle to pay even half of our tuition, we have succeeded in convincing them that it is worth paying for the education they receive. It should also be noted, that those students whose families do not have resources receive full tuition waivers for study at AUCA (approximately 15% of undergraduate students fall into this category). Overall, student tuition now covers approximately 40% of AUCA's budget.

Furthermore, in the past year, we have also instituted a university-sponsored loan program which makes it possible for students to defer a certain (relatively small) portion of their tuition

payments until after they graduate and find employment. We certainly do not want to have students going deep into debt to graduate from AUCA, nevertheless, we feel it is important for students to understand that they themselves should make an investment in their own education (that is, to understand that this is not merely the job of their parents or some abstract sponsors). It remains to be seen whether students will in fact pay back the loans after graduation, but we already see benefits from the program, as students unquestionably feel more of a sense of ownership of their education when they are paying (or at least promising to pay) for a portion of it. While we do not yet receive any significant revenue from this loan program, in the future it has the potential to provide another funding stream for university operations.

To make up the remainder of our budget, AUCA traditionally relied on two sources of support – the Open Society Foundation and the United States government through USAID. When I arrived in 2010, however, we decided that an overreliance on the support of only two funders, generous as they have been, was a mistake, and we recognized the need to find other sources of philanthropic support.

Unfortunately, the majority of the standard sources of such support are lacking. We do have a loyal alumni base, but the oldest of our alumni are in their mid-30s, so they have not had the chance to build up much personal wealth, and there is no tradition of support for private higher education in the region. We work closely with them, and we expect that over the next 20 years, they will become a reliable and helpful source of support. As opposed to Kazakhstan, there are practically no deep-pocketed international companies operating in Kyrgyzstan, so they cannot be a source of funding for us. And finally, the Kyrgyz Diaspora, unlike, say, the Armenian or Lebanese, is of recent origin and consists mostly of unskilled laborers in Russia and Kazakhstan.

Nevertheless, we have instituted an unprecedented (for Central Asia) fund-raising campaign, which is beginning to bear fruit. The main thing to stress is that we see this as a long-term activity, which is not merely a fund-raising but rather a consciousness-raising campaign that may or may not lead to direct and immediate support for the university. We take advantage of the fact that we are producing by far the most employable graduates in Kyrgyzstan, if not the region as a whole, to go to the companies that employ them and explain that they are free-riding when they hire our students (who cost us some \$22K a piece to produce and who pay us on average around \$10K). We explain that if they continue to do this, we will eventually either have to close or produce lousy employees for them. They have begun to respond with scholarship support, usually in the form of half scholarships, which we use to augment what students can pay us.

We have also used our position as one of the few reliable partner universities in the region to go after European Union grants, especially through our newly created Tian Shan Policy Center and our Institute for Central Asian Studies (the latter has also created what will be, I believe, a revenue generating MA program on Central Asian studies, the first of its kind in the world). And we have begun to target individuals around the world who have an interest in Central Asia with an eye to getting large-scale support for our activities. This has already paid off handsomely in one case, yielding the largest-ever private gifts for higher education in Central Asia.

At the same time, we are, by comparison to United States universities, incredibly careful on the spending side. As we all know, in the US, as soon as universities have money they spend

it, unless someone tells them that they can't. We try to avoid this, while still building a strong (mostly local) faculty and a competent (mostly local) administrative staff. We do encourage faculty to be active in research, but we do not allow big research to take over the university, and we insist that everyone (up to and including the president) teach undergraduates every year. We hire foreigners only when their expertise is truly necessary, and we avoid things like bringing to campus expensive visitors who make a big splash, but whose visits cost a lot and provide little in the way of educational substance for our students. In the near future, we will also move aggressively to incorporate open-source course materials into our curriculum when possible, with an eye to reducing personnel costs in areas in which faculty are not providing sufficient value added through their lecturing (we have the advantage over US universities that we do not have a tenure system at AUCA, so we can try some experiments that would be difficult or impossible in the States).

Overall, our strategy has allowed us to grow significantly over the past three years while keeping costs under control, and has put the university in a position where long-term financial stability is a realizable goal, especially if factors outside of our control, such as the stability, economic growth and reputation of Kyrgyzstan remain positive. In conclusion, I would say that it is possible to provide a first-class education for a reasonable price, but only if the university works hard to ensure that it does not waste money and that it educates its various stakeholders as to what precisely it does with the money that it collects. Using this formula, AUCA will probably never look like Yale, but it will continue to be able consistently to produce students who can, after four years of baccalaureate education, compete successfully on the local, regional and international job markets, provide the brains and leadership that will allow Central Asian countries to grow and develop successfully, and challenge the best graduates of other world institutions when they choose to enrol in MA and PhD programs.

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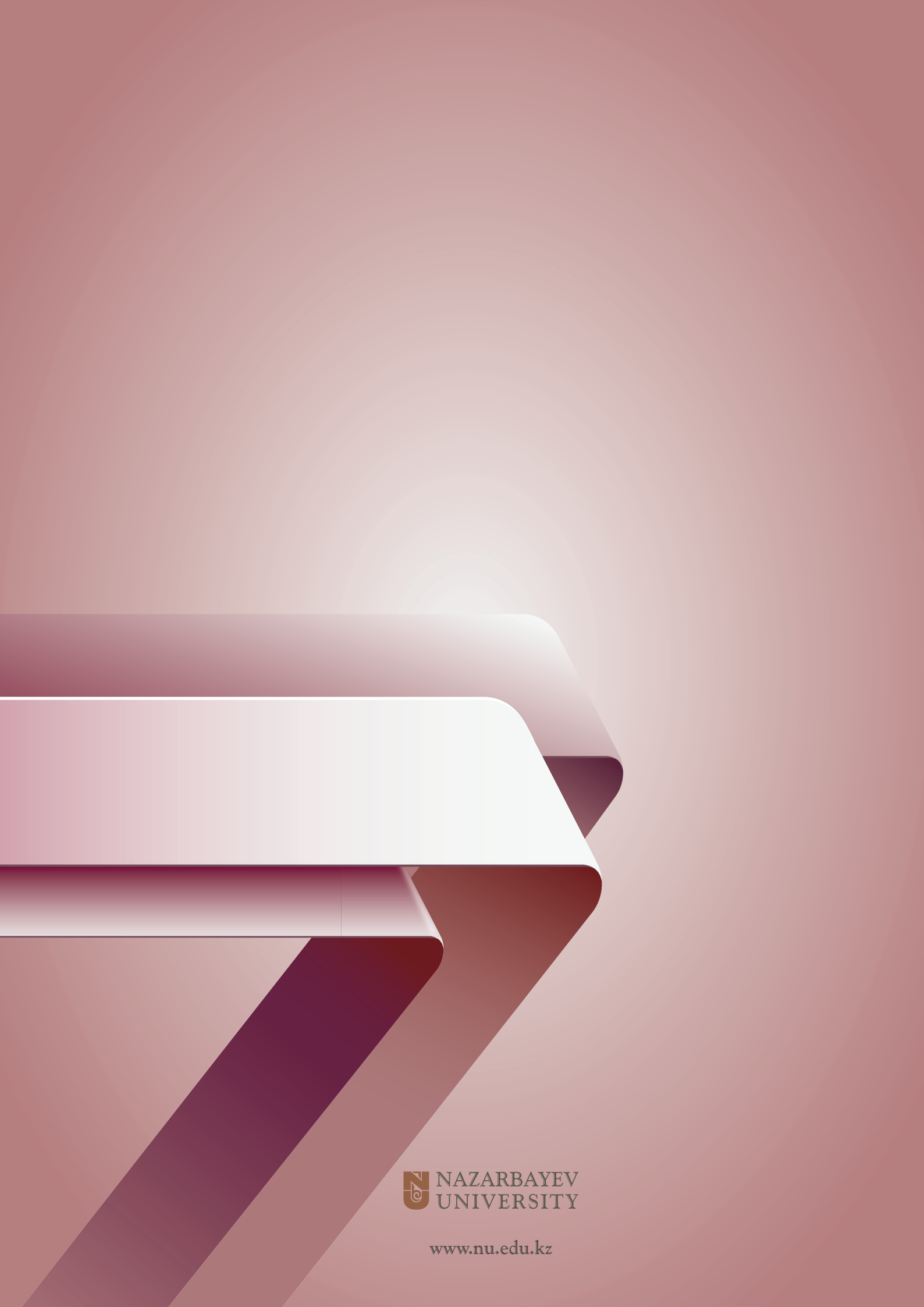


Nazarbayev University (NU) is a brand-new academic institution located in Astana, the capital of Kazakhstan. The University was founded in 2009 with the personal initiative of President Nursultan Nazarbayev to prepare the next generation of leading researchers and professionals.

To achieve quality education and research, the University is collaborating with the leading universities and institutions in developing its schools and centers among which are University of Cambridge, University of Pennsylvania, University College London, Duke University, University of Wisconsin-Madison, National University of Singapore, Lawrence Berkeley National Laboratory and University of Pittsburgh.

Currently, there are six schools at Nazarbayev University:

Graduate School of Business	www.gsb.nu.edu.kz
Graduate School of Education	www.gse.nu.edu.kz
Graduate School of Public Policy	www.gspp.nu.edu.kz
School of Engineering	www.seng.nu.edu.kz
School of Humanities and Social Sciences	www.shss.nu.edu.kz
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