4 Nazarbayev University

An Elite Institution or a National Model?

Nazarbayev University (NU) was established in 2009 by the first president of Kazakhstan, Nursultan Nazarbayev. It was built on a modest slice of the steppe between the rapidly growing government center and the international airport serving the new (as of 1997) national capital city of Astana. In 2022 NU enrolled 6,300 students, nearly all drawn from the nation, with 4,250 in four-year bachelor degree programs and 1,500 in graduate programs. Nearly all the degree programs are taught in English. A foundation program with 650 students smooths the transition from the national secondary schooling system, where most students study in either Russian or Kazakh, or both. The majority (70 percent) of the 520 faculty are expatriates, and most of the national staff have extensive international experience or qualifications. The university president and provost, and nearly all of the academic leaders, are expatriates. The academic offerings skew towards the physical sciences, with 65 percent of students following STEM or medicine pathways.

NU was founded on, and its initial years shaped by, a number of competing purposes. Its initial strategic plan aimed to create a university that would be "a model for higher education reform and modern research in Kazakhstan and contribute to the establishment of the new national capital as an international innovation and knowledge hub" (NU, 2012, p. 7). These goals were to be complemented by an emphasis on developing "the next generation of leaders of the Republic of Kazakhstan" who can shape the development of the country (NU, 2019). It was also expected to retain national talent by

The authors have been associated with Nazarbayev University as advisors to the founding team, and Alan Ruby has served on NU's board of trustees.

delivering high-quality higher education similar to that offered by top universities abroad (Akorda, 2013) and to be an alternative to Russian universities, which recruit Kazakh students from the northern border communities. Finally, NU was founded with the goal of reinforcing Kazakhstan's national identity as a newly independent State. In this way, the university is, in the view of one international scholar, very familiar with the region "intimately bound up with nation-building agendas, whereby citizens are to be made proud of their homeland, through promoting international prestige" (Koch, 2014, p. 48).

NU was designed when many nations' higher education agencies were focused on pursuing excellence and creating world-class university strategies. These policies usually concentrated resources and talents on a small proportion of the higher education sector, with the goal of having them attain global recognition through research productivity and academic reputation. The World Bank officials invited by Kazakhstan's political leadership to advise the team that established NU drew attention to different institutional and funding models, like those represented by the National University of Singapore and Carnegie Mellon University, as well to as the importance of national and international research partnerships (JERP, 2010). This further compounded the expectations associated with NU as it was developed and began operating; it was to be excellent on many fronts, and to become excellent quickly.

To examine how these different expectations and aspirations, often summarized as high quality or world class, shaped the institution, in this chapter we look at the steps leading to the creation of NU, its enabling environment, and its predecessors. We lay out some of the academic and logistical decisions made in the pursuit of "quality," such as forging multiple academic partnerships and programs and establishing an independent admissions process. These decisions became the basis of the institution's emerging ethos or culture, which is shaping the academic structure even as the economic and political priorities of the nation have evolved and changed.

NU'S ENABLING ENVIRONMENT

Nazarbayev University is a "greenfield" university in the sense that it was created on a new site, with considerable, even remarkable, autonomy for a post-Soviet State. Despite NU's relative autonomy, it is undeniably shaped by its enabling environment. One overarching legacy, as described by a minister

of education, is the Soviet principle that "higher education is a strategic area, this is ideology, this is new generations, this is the minds of people so this [needs to be, and] is under [State] control."

Other Soviet-era legacies in higher education in Kazakhstan included strong central policy control, with priorities and norms established by the national ministry with an emphasis on compliance (Ahn et al., 2018). Even after Kazakhstan became an independent State, the Soviet-era tradition of separate research and teaching institutions continued. Admission to, and graduation from, postsecondary education was not always a meritocratic or transparent process, and, subsequently, there was some debate about the value of academic credentials from Kazakh postsecondary institutions. These characteristics shaped the practices of government agencies in the newly independent nation. For example, until 2019, university rectors were appointed centrally by either the president or the minister of education. Similarly, national control of university curriculum offerings and standards only began to moderate in 2010 after Kazakhstan adopted the Bologna protocols to align with European academic norms and standards. The prevailing legal framework, as described by one of nation's leading specialists in educational law, was one that "didn't distinguish between the state enterprises that produce something and state enterprises that are providing services, such as education. [It] treated them [the] same, they are state enterprises, the factories, the same rules applied for the higher education."

There was limited education policy experience in the National Ministry of Education and Science, as became evident when the government adopted a market-based economy and looked to Europe and other Western democracies for institutional models and practices that aligned with greater economic competitiveness and freedom of movement. At the institutional level, there were, in the words of a senior official, "fundamental problems . . . there was lack of freedom, and a lack of autonomy. Curriculum was outdated, because universities didn't have freedom to change it, basically it was disconnected from the market."

In addition to an interest in greater economic competitiveness, the national government wanted to do something about higher education because society and the "real sector" were "not satisfied with the quality." There was also a marked increase in demand for access to higher education, as people responded to the move to a market economy and an evolving labor market. The number of tertiary enrolments across Kazakhstan doubled between 1991 and 2005, and there was growth in the number of higher education institutions, largely private entities (see Canning, 2017, for a survey

of the postindependence era, and Ahn et al., 2018, on the rapid development of private institutions).

As the national government steered towards economic diversification and encouraged the expansion of the nation's oil and gas sector, it was concerned about increasing employment opportunities for its citizens and ensuring that there was a skill base to underpin growth. The Kazakh government was also conscious of the outflow of skills as people left, because some could gain by German citizenship, or because there were possibly better employment opportunities in Russia and elsewhere, or because they wanted to exercise the greater freedom of movement that came with independence.

One response to the loss of talent was the creation of a generous and sizable scholarship program, the Bolashak program, for young people to study abroad at leading universities, with the understanding they would return to help with the development of the nation. We will not discuss these efforts here in any detail (but see Perna et al., 2014, 2015), but note that the government was keenly interested in strengthening the human capital of the nation.

Our interest in this chapter is in the government's steps to lift the quality of the nation's higher education institutions. It was not a one-step process, which is not surprising for a new State or even an unknown circumstance in more mature States. In fact, in Kazakhstan there were three distinct higher education projects prior to NU: the Kazakh Institute of Management, Economics, and Strategic Research (now KIMEP University), Kazakh-British Technical University (KBTU), and Eurasian National University.

LEARNING FROM THREE PRECURSORS

The Kazakh Institute of Management, Economics, and Strategic Research was founded in 1992 primarily as a business school in the then national capital of Almaty, which was also the financial center of the nation. It was founded by Dr. Chang Young Bang, who was sometimes referred to as an economic advisor to President Nazarbayev. KIMEP's initial programs were master's degrees aimed at preparing people for jobs in the corporate and financial sectors. Instruction was in English, and most of the faculty members were foreign nationals. The institution was constrained by the legislative environment, as well as by its operating structure. It was set up as a joint stock company, with Dr. Bang and the Ministry of Education as the stockholders, and while this legal status gave it some commercial independence, a former

minister of education and legal expert commented that KIMEP still needed to "stay with the state standards. They have to comply." In an attempt to moderate central control, legislation was modified to allow for the creation of "experimental" programs, but the KIMEP curriculum was still subject to inspection and, if approved, would become a State standard. Even this modest measure of autonomy created tension. As one of the central players in the creation of NU observed:

So, the history of KIMEP is like a history of fighting with the Ministry of Education. The new minister comes, he wants to exercise more power. Because the KIMEP has lots of finances, it is a big school, an important school, so all the time there was this clash with the government regulation, inspection, and tendency to control. Dr. Bang understood [this] was outdated, so there was always a clash and there was a point when they almost closed KIMEP, in 2007 when its license was suspended for several months.

Another observer, who had worked at KIMEP and later helped establish NU, emphasized the intricacies of the national standards and the accreditation process:

You have to have so many square meters for every student, I see, KIMEP at that time had 5,100 students and didn't have the square meters. You have to have so many library books for every student and KIMEP didn't quite cut it on that because they used a lot of electronic stuff. But it also got absurd, they didn't have a certain plaque that every university has to have, a flag, and a picture of Nazarbayev. That was one of the things that they didn't have. If you go in to KIMEP now and go into the second floor of the Valihanov building, you will see this now. And they needed to have all their signage in at least two languages, Kazakh and English, so it was from the petty to what the Ministry of Education thinks is important.

KIMEP's governance structure did not make its path easy. As a joint stock company, the university was constrained by the corporate law that protected the interests of the stockholder, notably Dr. Bang. This constrained capital investments in KIMEP, and even though it had good facilities, well located in Almaty, it was financially dependent on tuition. This tuition dependence led it to set up undergraduate courses to diversify the revenue base even though KIMEP was not recognized as an undergraduate course provider. The institution offered the courses in a manner one former government official described as "underground," and as a result, "people started to complain of

the quality." These concerns about the quality of unofficial undergraduate courses, coupled with some poor faculty recruitment decisions, further detracted from KIMEP's reputation. Faculty started to leave, and it became clear that KIMEP was not meeting all of the skill needs of the region and was not likely to transform higher education in the country.

The misalignment between KIMEP and the demand – especially from the oil and gas sector – for technical skills underscored the need for further investment in higher education to support industrial development. The result was the creation in 2001 of KBTU. Like KIMEP, KBTU was organized as a joint stock company, with the Kazakh shareholders encouraged by President Nazarbayev "to invest money into education and build a good university with private money." The Ministry of Education was also a shareholder. Significantly, the British Embassy and the British Council were closely involved in the startup phase. Additionally, UK universities with strong energy programs, particularly in the oil sector, offered advice and support, among them the University of Aberdeen.

KBTU was granted good facilities well located in the center of Almaty and was able to attract some foreign faculty. But the institution was competing with KIMEP for students who were able to undertake their studies in English. After some initial successes in faculty recruitment, the quality of international faculty declined. KBTU also struggled with its dependence on tuition and industry scholarships, which were influenced indirectly by volatile oil prices. In its early years, there were allegedly "some issues with transparency, some cases with corruptions reported, people say that you can buy the grades and pay for grades to faculty." According to the same source, "there are some cases of corruption, not widespread, but still [the] perception" of corruption lingered. These reputational problems did not help KBTU in its competition with other local universities, which were competitors for the same tuition revenue. Eventually, the national gas company became more involved and, in 2003, became the sole shareholder of KBTU Joint Stock Company. In 2018, a public foundation, the Education Fund of Nursultan Nazarbayev, purchased shares of the institution, which helped stabilize it financially.

The impact of KBTU has been confined primarily to the energy sector, and while it has grown by absorbing other institutions – namely the A. B. Bekturov Institute of Chemical Sciences and the D. V. Sokolsky Institute of Fuel, Catalysis, and Electrochemistry – it is still a relatively narrowly focused university specializing in the extractive industries, chemical engineering, and business. And it remains constrained by the legislative environment and the somewhat cumbersome governance structure. As one legal expert

commented, "KBTU was a step forward" in university governance because "there is more freedom in operating as a joint stock company, but still, joint stock law is densely regulated. Everything, every step of a joint stock company's operation is specified." Part of the problem, the expert continued, is that "joint stock company law was mostly prepared for the banks," and so rules about issues like financial disclosure and complex reporting requirements were applied to universities. With these operating constraints and its relatively narrow focus and small scale, KBTU was unlikely to lead a wider national program of reform and qualitative improvement in higher education. It also did not address the aspirations of many individuals for a broad educational experience. Nor did it seek to reinforce the burgeoning national identity.

Kazakhstan's third higher education initiative sought to establish a more comprehensive public university in the new capital, Astana. What is now Eurasian National University began with the amalgamation of a pedagogical institute with a civil engineering institute in 1996 to form a university serving the city and surrounding villages. In 2001 it merged with the Ministry of International Relations' Academy of Diplomacy and was given national status. Over the next twenty years, it grew to span fourteen schools, including economics, social sciences and history, physics and technical sciences, energy, and transport. These schools were augmented by numerous research institutes, including a center for Turkic languages like Kazakh and the national languages of some neighboring States. With a wider array of programs, the university grew quickly and now has some 17,000 students.

Building up Eurasian National University was a significant exercise, rearranging the machinery of government by transferring institutes, academies, and universities and their assets and a share of the State budget to a single Ministry of Education and Science. Each entity brought its own curricula, dating back to the Soviet era and the early years of independence. The creation of a large, comprehensive national university out of these various programs was viewed as a way to strengthen the new national capital. Funds were provided for buildings and infrastructure, as well as for hiring faculty to teach the growing number of students. Unlike KIMEP and KBTU, the languages of instruction at Eurasian National University are principally Kazakh and Russian, although a number of courses are taught in English at all degree levels. But the university faced the same national regulatory environment that limited the effectiveness of KIMEP and KBTU. And like those institutions, Eurasian National University did not meet individual and community aspirations for an international, English language-based, world-class education.

All three institutions - KIMEP, KBTU, and Eurasian National University that predate NU still exist and serve particular sectors of the economy and different national priorities. They struggled in their early years with the same legislative framework and inspection and standards regime. In the case of KIMEP, quality was compromised by its creep into undergraduate education and constraints on faculty recruitment. At nearby KZBTU, quality was defined very instrumentally, due to its industry connections. Simply put, despite their value to certain economic and national interests, KIMEP, KZBTU, and Eurasian National University did not satisfy the world-class aspirations of the government and an emerging cadre of wealthy families looking for educational opportunities for their children. In the case of Eurasian National University, the pursuit of quality was constrained by its operating environment. One longtime observer of higher education in the region commented, "It was the same system, [same] legal environment, state standard. Old system in new buildings, maybe with some better funding, and it was bigger ... [but it was not] an international university ... [or] an international level research university." These observations applied to all three institutions, and they shaped the founding of NU.

A NEW INTERNATIONAL RESEARCH UNIVERSITY

In 2006 the Ministry of Education and Science was assigned the task of creating a new international university, the New University of Astana, with an emphasis on research. This was not to be a branch campus like those in Malaysia, Qatar, and the United Arab Emirates, but a national institution created with the help of multiple international partners. Progress was slow, and the ministry sought advice from the World Bank, which facilitated a substantial study tour for the team assigned to the task and convened prominent higher education consultants and leaders of two new institutions – Olin College of Engineering in Boston, and Aga Khan University in Karachi. The synthesis of the expert advice was to rethink the use of multiple partnerships, as it would risk having competing academic models and cultures. One international expert observed:

What was worrisome in the beginning was to have separate deals for different pieces of the institution on the assumption that everything will come together, which as we know is very difficult . . . I mean if you have a School of Engineering with the British approach and the School of Science and Technology with the US approach, it's not necessarily the same thing. Not to mention, even if you are in

the same field, each institution has its own culture and if you bring pieces from different cultures and bring them together, you have to work on them too.

The counterproposition was that it would be better to proceed by appointing the initial rector, preferably someone with sustained leadership experience at a prominent institution, and let a single academic ethos emerge. This might include partnership with a single institution. According to one expert familiar with this line of thinking, "it would be better to have a wholesale partnership with one institution and then develop, learn from that institution and work together to develop your schools and your program."

By the summer of 2009, the ministry had made little progress. There was no dedicated project team, and officials working on the task part-time came from different directorates and had different priorities. None of them had direct experience with a project of this kind or scale. Nonetheless, they initiated some new building work with the assistance of a local corporate donor, who was also head of a leading construction company working on many of the new buildings in the city. Even while construction was underway, there was no strategy for the university detailing how it would be staffed and what curriculum model it would apply. One of the principal actors described the situation by saying that "there is this building project but there is no concept, there is no plan." The National Analytical Center was assigned the task of creating a project plan for the opening of the university. It generated three options: a branch campus with international support, a consultancy model where international experts advise a national institution, and a larger-scale version of KIMEP, with more research, more sciences, and a mostly foreign faculty on site full-time. After these options were considered by the national leadership team, the feedback, as summarized by one of the analytical center's staff, was direct.

The President wanted this international partnership, no branch campus idea. He wanted a Kazakh university, but international level, he doesn't want any crap offices of other universities here. So that's the model, so focus on this model. So we focused on that. An international ... Kazakh university but international level [and standard]. Then it became this partnership model, an obvious choice. There should be some brand [names] that will support it.

To advance the project, an implementation team was appointed that was separate from the Ministry of Education and Science, and the prime minister assumed direct responsibility for progress. To add impetus, President Nazarbayev wanted the university to be opened in ten months' time.

Having learned from the difficulties faced by the three previous initiatives in managing the regulatory environment, the leaders of the implementation team made two tactical choices. First, they convinced the prime minister to serve as chair of the board overseeing the project. Second, they designated the new university as a national company. This designation eased the challenges of procurement, which is less tightly regulated for national companies. But the startup team concluded from observing KIMEP and KBTU that a joint stock company model "is not the right thing . . . we needed our own law." Eventually this led to a law that transformed NU from a company into what the university's leadership described as "an autonomous education institution. It is a law, which enshrined for the first time in Kazakhstan, academic freedom, and institutional autonomy for a high education institution."

STRATEGIC PARTNERS AND STRATEGIC CHOICES

While construction was still underway, the implementation team began recruiting strategic partners to serve as academic guides and to accelerate the creation of degree programs and the hiring of international faculty members. Building on relationships developed by the World Bank-guided study tour, the University College of London (UCL) agreed to offer a foundation-year program for the first cohorts of students and to help establish an engineering degree program. According to the first provost, the foundation year was regarded as a necessary startup strategy

to bridge the gap between the secondary school program in Kazakhstan's public schools. It is much more fundamental, because our students need to get used to a totally new education system, to move from rote based learning systems to one where they have to take the initiative, critical thinking, problem solving and all this in a foreign language and also learn how to do research properly, all of which they have never done.

This introductory program continues to operate, although it is now an NU program rather than a mirror of UCL's program. It will continue for some time as the national school system moves to a twelve-year cycle and adopts new curricula. But there is now a provision for merit-based direct entry into the NU undergraduate programs from the Nazarbayev Intellectual Schools, which is a network of twenty academic secondary schools that operate under the same law that made NU autonomous. Direct entry is also possible for

students from some international schools in Kazakhstan that follow a sixyear secondary cycle and offer classes in English.

Other partners recruited for NU's first undergraduate programs included I-Carnegie, a commercial arm of Carnegie Mellon University, which offered programs in robotics, and the University of Wisconsin-Madison, which led work on the Social Sciences and Humanities School and drew on its expertise in the study of Turkic languages, including Kazakh. The inclusion of a humanities program was a significant step. Much of the initial policy-level debate about the shape and scope of NU emphasized the technical and scientific fields and the need for a stronger national program of medical education. In the months before NU opened, however, it was decided to include the social sciences and humanities in its curriculum and to delay work on the medical complex. The inclusion of the humanities came in response to views of the international partners and advisors about the need to prepare leaders to be conversant in both the sciences and the humanities. It was an echo of C. P. Snow's (1959) plea for UK higher education to include science and engineering as part of the intellectual discourse instead of focusing solely on the humanities. The decision to delay the medical program was shaped by two arguments. The first was that it added a layer of complexity to the project and could slow down the progress in other schools. The other was the belief that it would be better to allow other reforms in the national health system and the medical insurance scheme to be more fully implemented.

Partners like Lawrence Berkeley National Laboratory were also recruited for some of the laboratories and research centers to be associated with NU and to assist with the formation of graduate schools, which would reinforce the research-intensive character of NU. Duke University fostered the development of the Graduate School of Business, and the National University of Singapore guided the development of the Graduate School of Public Policy. The University of Pennsylvania (Penn), which initially served in an advisory and training role for members of the joint stock company setting up NU, also helped establish an education policy center at NU. This subsequently formed the basis for a Graduate School of Education, with Penn and Cambridge University serving as strategic partners. The Graduate School of Education admitted masters and doctoral students in 2013, and master's degrees were awarded to a small number of candidates at the same ceremony for the first cohort of students receiving bachelor degrees.

NU continued the practice of establishing academic programs with help from strategic partners. The Universities of Pittsburgh and Duke serve as strategic partners to the medical complex, and the Colorado School of Mines is the founding partner of the School of Mining and Geosciences, which opened in 2017. NU has looked to international strategic partners as a way of establishing internationally recognized degree programs quickly. It deliberately recruited multiple partners. This was to minimize risks that come from relying exclusively on a single partner. It also had the advantage of enabling the university to select the best provider in support of particular academic programs, like a business school or an engineering program, rather than taking bundled services of uneven quality from a single source. Partnering with top programs across many fields helped NU gain global recognition as a high-quality organization, which would in turn bring prestige to an emerging nation seeking international standing through its educational institutions (Asanova, 2007). Simply put, relying on multiple partners was a quicker path to creating a high-quality postsecondary institution.

An additional benefit of multiple strategic partners is that they are all prestigious, internationally oriented institutions. This is no accident. The partnership model enabled NU to signal quality to a variety of external audiences. It would convey to parents the message that NU is a worthwhile place to send their children. It would help attract international faculty members and crossnational research colleagues. The presence of the first strategic partners also helped attract other strategic partners who could assume that the original partner had done intensive due diligence into the financial and organizational reliability of NU. Also, the partnership approach allows NU to become its own national brand rather than falling under the shadow of a well-known partner university, or being cobranded with another national education system.

The use of strategic partners accelerated the establishment of NU's academic programs and the recruitment of faculty. But the strategic partnership approach was not merely a copy-and-paste approach to institutional development. It also needed to accommodate the burgeoning interest in national identity and national priorities if it was to be successful. As one longtime observer of the region commented:

Too often we believed in taking the models of western institutions and parachuting them in the non-western cultures and expecting them to survive and they didn't. I knew sort of from the start, NU could not be that model . . . It was not set up that way. It created . . . tensions between outside cultural interests and inside cultural interests, [we have to] bridge these. But if we don't get that right, we don't have Nazarbayev University.

The presence and direct involvement of the partners also added credibility to the emerging institution. As the founding provost observed: When your first cohorts graduate, the kids will be asked "Is Nazarbayev University in Kazakhstan? Where is this? What is that?" ... they can say "Yes, but it's working with a strategic partner, with University Wisconsin–Madison, it's under their principles we were educated ... they advise on curriculum and they helped hiring faculty." It gives the context for those first groups of students.

It also signaled to potential students that NU was going to be a widely recognized institution, which would help them gain access to other institutions for their graduate studies. This recognition and its affordances were particularly helpful in the recruitment of the first intake to NU's undergraduate degree programs, which would be the first test of the institution's commitment to academic integrity and standards.

RECRUITING THE FIRST COHORT

NU was explicitly designed to serve only a small percentage of the national population. By enrolling 700 or so new undergraduate students a year, NU is taking less than 1 percent of the national first-year university population. Selection was and continues to be merit based. NU does not rely on the national high-stakes exit exam, the Unified National Test (UNT), that is used for admission to public universities and pedagogical institutes, as well as allocating State grants for postsecondary studies (Jumabayeva, 2016). The NU entrance examinations are designed to select students on the basis of intellect and English-language proficiency. The entrance tests include an initial screening test of English proficiency, followed by two subject-specific tests and then an official International English Language Testing System (IELTS) test. NU deliberately and systematically recruits from all parts of the country and from all forms of secondary schools. It also monitors enrolments by province, by school, and by language of instruction. Admissions processes are designed to be blind to ethnicity, religion, gender, and location. The process is highly competitive and has been so since the first intake, which the leader of the admissions team described thus:

We were very lucky, we got 3,500 to 3,600 applicants in the first year. I was surprised ... We went around to every province and visited as many schools that would let us in, [and] had the Akimat's [municipal level] Department of Education organize schools, so if we went to a school, there were usually two or three others that were bussed in.

At the time the difference between the prevailing system of admissions and NU's process was stark. For NU, recruitment and admission took place

during the school year rather than after the UNT, which was offered at the end of the school year. As one member of the NU startup team commented, "the country was caught by surprise, by those new requirements. Because never ever in Kazakhstan, not a single university ever used that kind of admissions criteria, and the admissions process, entrance examinations were never offered during the school year." Many of the unsuccessful candidates for the first cohort failed a test of critical thinking (Seidimbek, 2013, p. 684). There was also widespread disbelief that the affluent and the privileged could not get preferential treatment. Commenting five years after the first cohort, a very senior member of NU's leadership described the challenges generated by the strict adherence to merit-based admissions: "We still have to continue to explain to the public, again and again, we are only accepting on a merit basis, you know according to very clear admission criteria, and we are not bending those simply because people have connections or people are rich or whatever, because those myths continue to exist." NU has maintained roughly the same degree of selectivity for its undergraduate programs since the first intake, even when the incoming class increased from 500 to 700 places in 2015. Direct-admission students (i.e., those who do not have to go through the foundation program) are also subject to a merit process to confirm English-language proficiency and reasoning capabilities. About one in four applicants is successful in gaining a direct admission.

As well as being selective, NU's student recruitment and selection process is inclusive. It aims to attract applicants from every region of the country to underscore the national character of the institution. It recruits from both Russian- and Kazakh-speaking communities, and it draws students from public and private schools, as well as from the Nazarbayev Intellectual Schools. The ready availability of State scholarships makes NU affordable, and its dormitories are accessible to students from remote communities and widely dispersed villages. The emphasis on a transparent, competitive, and merit-based admission process has been an important element in establishing the culture of NU – as has its commitment to serving all ethnic groups and all parts of the country.

BUILDING A CULTURE

One of the challenges for a new institution is establishing an organizational culture or ethos. This challenge is amplified when there are multiple partners from different academic traditions, and it is further compounded when the faculty members come from fifty different countries. The founding provost spoke of the different approaches to what might on the surface seem like straightforward issues, such as counting credit hours in academic programs: "I mean, it was a deep down a gap, which I have not seen so starkly before between American and ... British Universities because there are principles they both hold dear and believe to be self-evident. It is illustrated in the way policies or practices are labeled. Do you refer to 'pastoral care' or to 'student life'?" Reflecting on the first years of NU's academic operations, the founding provost commented on the challenges of creating policies and procedures appropriate to the mission and aspirations of the university's sponsors while dealing with the day-to-day challenges of procuring simple things, such as lettuce for use in science laboratory sessions. The initial academic architecture of NU was conventional, with separate science and engineering schools and a distinct division between those schools and the humanities and social sciences. The Russian tradition of separate research institutes was echoed by the creation of research centers for energy and life sciences sectors of the economy.

Even within schools there was a tendency to adopt traditional forms and nomenclature. A proposal for an interdisciplinary, problem-based, integrated engineering program was not well received by leading national political figures, who were used to conventional specializations like mechanical and chemical engineering. There was also an expectation that these specializations would be more aligned with the demands of the extractive industries that underpinned much of the national economy. It was also believed that conventional labels and structures would help with faculty recruitment and international recognition of NU's degrees.

There was a need to create university-wide structures like an academic senate that could articulate some common policies about graduation standards and assessment practices. This internal regulatory architecture was a way to encourage the different schools to collaborate and reduce duplication of effort in the creation of academic processes and procedures. The need for such a structure was reinforced by the profile of the first faculty recruited, who tended to be early in their professional careers and from a variety of academic traditions.

But by 2012 there was sufficient common ground to establish a set of core values for the institution. One crucial element was the passage and subsequent operationalization of a national law that made NU an autonomous education organization. This law safeguarded the institution's academic freedom. The president of the university described a meeting of senior government figures where

[o]ur provost was actually also doing her part to explain what academic freedom actually meant. I think she went back all the way to Galileo and she had to stand up for this belief, and President Nazarbayev, probably to this day he remembers this part. He smiled and commented, "Thank you Miss Lonsdale, Miss Provost, you made your point very clear."

Academic freedom is captured in the inclusion of "integrity" and "transparency and openness" as two of the six core values underpinning NU's strategic plan for 2013–2020 and repeated in the strategic plan for 2018–2030. The latest plan also observes that "[t]his autonomy allowed NU to aggressively pursue global governance standards and merit-based admissions and hiring policies. It also allowed the creation of a Board of Trustees with international and national members" (NU, 2018, p. 20).

Transparency and openness are echoed in the core values of "equal access to education" and "merit-based" processes. Analyses of the composition of student intakes show that NU admitted undergraduate students – in roughly equal numbers of males and females – from across the nation and across all socioeconomic groups. But Kazakhstan's ethnic minorities, like Uzbeks, Ukrainians, and Uyghurs, are underrepresented in the student population. There are also few international students, under 2 percent of the total enrolment. In response to these outcomes, NU has invested more time and effort in reaching all communities within the country and adopted an internationalization strategy. These developments dovetail with the goal of almost doubling the size of the university to 8,000 students by 2025, with the aim of having up to 10 percent of the student body come from other nations.

NU's bifurcated administrative structure – namely, a largely international faculty and an administrative staff who are largely national citizens – has also presented challenges for the young university. There is a persistent "cultural gap" between the faculty and staff, which can produce misunderstandings that can in turn be heightened by regulatory requirements and procedures that are unfamiliar to many faculty members. The cultural gap is especially wide for faculty members who are living and working for the first time in a post-Soviet State and who have no experience working in an institution with an explicit national purpose of economic and social development.

The institution's aspirations for growth and internationalization rub up against the different cultural norms and the silos of the individual schools, which formed very quickly. These goals are also shaped by sharp and rapid shifts in national economic and social priorities. Just as the missions of Japanese national universities were formed by different economic and political circumstances

(Anzai & Matsuzawa, 2013), NU has responded to a charge to shape the future direction of the economy. It has developed an innovation cluster and a business incubator and is placing greater emphasis on the commercialization of research and supporting entrepreneurs in starting new businesses (NU, 2019). Its graduates are expected to be key actors in "the country's modernization efforts" and "to promote innovation and entrepreneurship, which will underpin the diversification of Kazakhstan's economy" (NU, 2018, p. 23).

Economic and political shifts in Kazakhstan are shaping, and being shaped by, the university and are being captured by subtle but discernible shifts in the national mission of NU. One element of that mission is to reinforce national identity, which is well illustrated by the inclusion of the Kazakh language in the core curriculum for undergraduates. While the university grapples with issues of identity, language policy, and faculty recruitment, NU's wider role as an actor in the transformation of the quality of the nation's education system endures. As the university's president put it, the challenge is that

[w]e have to be a Kazakhstani institution, otherwise we would not be able to fulfill our mission of also reforming the whole education system. So, how do you grasp almost or develop something which is international in its outlook, international in terms of its projection, and bringing in and being the window of science and technology and research on the one side that has to be brought in and at the same time also being very national in character?

CONCLUSION

In summary, NU aspires to be a "world-class" institution and to have a big impact nationally and regionally. It is grounded in a widely held economic and social vision of the future of the country that depends in large measure on the human capital and the research base of the nation. These goals echo the aspirations of many research-intensive universities globally. Yet NU is also helping to forge a national identity both as a symbol of national prestige and as a way to offer high-quality education to all communities. It has a clear goal of serving students from all parts of the country and from all income levels and language backgrounds, and it attends to that goal by recruiting from every province and by offering a foundation year as a bridge for those who have not had access to a robust secondary education.

As well as serving economic and sociopolitical goals, NU has the task of serving as an exemplar to other national and regional universities. It models the benefits of institutional autonomy with its marked degree of independence from the Ministry of Education and Science and other regulatory bodies in the higher education system. It is expected to share the lessons of its experience with national and regional universities.

NU's success is judged on all these dimensions of quality: on the academic hallmarks of selectivity and research productivity, on the utilitarian metrics of the destinations of its graduates and the contributions they make to the nation, and on its efforts to foster national cohesion and inclusiveness. And it is to pursue these ends in its own distinctive, local, cosmopolitan way, not by simply – and likely unsustainably – emulating other global institutions.