Internationalisation Strategies and Best Practice in Emerging Countries: Case Studies from Central Asian Universities

Stephen Hagen

Professor *Emeritus*
University of South Wales, UK

Vice-President (Honorary) East Kazakhstan State Technical University

Board Member: Voronezh State University

`

Definition of Internationalisation

- 'Internationalisation' can be described as the opening up of higher education institutions, faculty, staff and students, to international influences and experiences from other countries.
- Internationalisation in many emerging countries is often a process by which universities change and adapt in response to external conditions, become more competitive globally by adopting structures, methods, processes and practices from other countries
- These ‘imported practices’ serve to enable greater convergence and compatibility with Higher Education systems in other countries, thereby enriching the experience of students, staff & faculty

‘Extended’ Internationalization

- The introduction of *extended* internationalisation involves the incorporation of the international dimension into the University’s mission and strategies, its curriculum, its delivery methods for teaching and learning (including new languages, notably for instruction, and joint/dual degrees/diplomas with foreign universities)
- This leads to greater student and staff mobility (exchanges, study abroad, visiting professorships), research and innovation, as well as evidenced in the more externally-facing investments, such as partnerships formalised by MoUs, dedicated International Offices, international staff and off-shore campuses.

Background to Internationalization in Central Asia

- Central Asia has been open to absorbing international ideas and practices from other countries for many years.
- For example, it has examples of international universities, e.g. Kazakh-British University, the International Kazakh-Turkish University, American University of Kyrgyzstan and many universities following the Slavic/Russian traditions
- There are recent examples of overseas campuses: Turin Polytechnic (I), Westminster University (UK) .
- There are strong connections prior to Tempus IV, such as with South Korea, where some universities have been sending staff and students (e.g. to learn English) for many years.
- Russia is a popular target country for international links and continuing PG education

Action-lines of an International Strategy

- Four Types of internationalisation action-lines or ‘components’:

- Type 1: Policy and Institutional development
- Type 2: Curriculum Innovation & development
- Type 3: Mobility of students and faculty/staff
- Type 4: Research Engagement

Type 1: Policy and institutional development

- Evidence of the impact of Bologna (or similar international regulatory framework) on internationalization (national and/or institutional);
- Evidence of setting up permanent features of internationalization by creating new dedicated international departments (mentioned by a quarter of projects in this category);
- Sustainability of reforms (arising from internationalization) and/or expansion of international activity;
- change of wording in the university mission in order to be more international, or formally adopting a written international, or internationalization, strategy
- adopting a new international HR strategy
- creating the new post of Vice-Rector of International Affairs (or similar international responsibility).

QA Frameworks

- The adoption of internationally recognized quality frameworks and accreditation systems (e.g. Bologna and/or international accreditation systems) in ‘emerging’ universities allow foreign universities of high standing in the EU and other countries to link up and with universities in emerging universities more easily.
- This is because the statutes of many leading universities located outside emerging countries would not permit the formal establishment of academic links with universities whose quality system is not internationally recognized and/or whose rating is poor (NB few will adm.

Case studies of Internationalization in Central Asia

- The EU Tempus IV Project *CANQA* introduced a system of internal Quality Assurance Management into many Central Asian universities in line with the European Standards and Guidelines (ESG), leading to the adoption of the European Foundation for Quality Management (EFQM) model – an internationally recognized quality system offering the evaluation of academic programs following ESG standards

- Without the Quality Assurance methods adopted as part of CANQA, Karaganda Economic University in Kazakhstan, for example, would not have been able to acquire accreditation for its programs from the Independent Kazakh Quality assurance Agency (IQAA).

- This successfully led to 18 of its bachelor's programs and 13 of its master's programs receiving international accreditation. As a result, the University now has 98 international collaboration agreements operating in 14 countries: 13 MoUs with international universities directly arose from this project.

Type 2: Curriculum Innovation and Development

Common features:

- International character of programmes, including joint degrees between universities in the country and universities abroad
- compliance of the newly developed curricula with the Bologna requirements (or other international standard)
- teaching activities in a second ‘global’ language, normally English, but also Spanish, Chinese etc.
- summer schools and study-visits offered

Type 2: Case Study: Introduction of English as New Teaching Medium

- The National University of Uzbekistan, for example, now offers the following courses in English: *Scientific Computing, Data Visualization, Programming, Applied Mathematics in Natural Science and Technology*.

- Tashkent State Technical University, within the project AIDA, also revised its courses to give them an international focus. Jointly taught courses with universities abroad have resulted directly from the Project and lectures are now given in English by the Department of Industrial Process Automation, including the course 'Fuzzy Logic'.

- Kazakh National University (KNU), in Kazakhstan, now teaches a number of courses – *Algorithms and Data Structures, Databases,* and *Program Engineering* – in the English language.

- The tendency is to start by offering taught master's degrees in English because of the higher probability that graduate students will have a command of English.

Type 2, cont: The following curriculum development activities are examples of best practice:

- relevance to the needs of the labour market and industries including employability and access to labour market
- orientation towards the learning outcomes approach
- new and innovative teaching methods and content, including multidisciplinary approach and practical-laboratory works
- quality assurance procedures (e.g. monitoring of implementation)
- role of students/business sector in curriculum development and implementation.

Case study

- In Kazakhstan, in 2017 there were over 37 HEIs operating double-diploma or degree programmes and over 75% of HEIs use ECTS.
- Allocation of ECTS is based on learning outcomes and student workload. The Bologna Diploma Supplement is issued to students in approximately three-quarters of Kazakh institutions and study programmes.
- For example, most recently we have monitored an increase in the number of international agreements signed by the MES in Kazakhstan with other countries in the field of education and science
- There is an overall increase in the number of agreements, notably Memoranda of Understanding, signed by HEIs in Kazakhstan, of which there are around 8,000 in place. (Source: *EACEA, 2013*)

Type 3: Mobility of students & faculty & staff

Criteria of assessment: we would check the numbers of:

- Students (out-going and in-coming) on short-term mobility programs (i.e. 'credit mobility') and/or on long-term mobility (i.e. "degree mobility") at Bachelor, Master and Doctoral/PhD levels
- staff trained abroad
- teaching activities by a foreign professor
- participation of students in international networks
- alumni working abroad after their degree.

Type 4: Research Engagement

Common features: we would review:

- International research projects resulting during, or as a result of, international projects with partners abroad
- research links created with universities abroad and formalized through EU proposals, such as *Horizon2020*.
- exchanges of research professors, research students
- development of dual or joint research programmes, including co-supervisions by foreign supervisors, leading to joint PhDs.

Assessing Research Engagement

- It is therefore important that professors and researchers become engaged in international cooperation because doctoral teaching and supervision requires highly qualified academic staff, with a PhD, DSc., etc.
- Therefore, a critical success factor in evaluating successful internationalization is whether the project has reached and enthused the university professoriate and attracted members of the international academic community to work in the University
- The professoriate is, in many cases, the main academic ‘influencer’ group who lead the academic developments of the university and teach on most of the master’s and doctoral programmes.

Tempus projects with the greatest sustainability in terms of internationalization impact tend to …

- combine several features from Types 1-4;
- e.g. compliance with the Bologna processes,
- 3-cycle degree schemes, adoption of international accreditation frameworks, quality assurance standards and the adoption and/or adaptation of a foreign curriculum, or programme,
- This leads more easily into optimizing sustainable international mobility, including double degrees/dual programmes, visiting professors, staff and student exchange & placements/study abroad
- Co-supervised PhDs requires the 3-cycle degree scheme.

Case Studies

- The study includes summaries of exemplar TEMPUS projects, including references to:

- *STUDIK, DoQuP, CIBELES,*
- *EDUCA, ERAMIS, ESHA, NMPLIS, Entrepreneurial University,*
- *TuCAHEA*
- *CANDI* and *CANQA.*

Findings

Internationalization case studies ('exemplars') in terms of *knowledge transfer, innovation, impact, adoption, sustainability across international borders found that* :

- **Internationalisation led to cross-institutional university reforms with examples as follows:**
- Embedding of Quality Assurance systems & processes national level adoption with presidential decrees
- Adoption, integration of new technology like *Moodle* for new e-learning courses
- Curriculum: Transfer of new subjects from abroad, syllabuses & awards (e.g. PhD) approved & listed by Ministry & classified as 'new subjects'
- Student engagement in self-governance
- Introduction of electronic (research) libraries
- Embedding of business (research) development processes, innovation centres.

Project DoQuP

- **As a result,** the **L.N. Gumilev National Eurasian University**, for example, restructured its *International Relations* course as a modular programme using Dublin descriptors and the European Qualification Framework.
- 85% of *International Relations* is now taught in English, which has, as a result, now received international accreditation from ACQUIN and ASIIN.
- The Kazakh National Technical University (KNTU), a national lead-university for other technical universities in Kazakhstan, is now in the process of setting up joint and double degrees with international universities.
- The quality of programmes, *Professional Education, Chemical Technology of Inorganic Substances, Nanomaterials and Nanotechnologies, Computer Engineering* and *Software* were evaluated under the DoQuP framework by its international partner universities in English.

DoQuP cont: Sustainable Outcomes include

- In addition to setting an internationally-recognized regulatory framework for Bachelor's and Master's degrees,
- DoQuP has proven invaluable to the introduction of new international award schemes such as the PhD degree programme in both Kazakhstan and Kyrgyzstan, replacing the earlier Soviet-style awards of '*aspirantura*' and '*kandidat nauk*'.
- The project had a significant impact on H.E. policy and practice in Kyrgyzstan. It has led to the creation of the *Kyrgyz National Council of Accreditation*.

CIBELES: The Importance of International Accreditation

- As a result of Project *CIBELES*, the Kazakh-British University's (KBTU's) programs achieved international accreditations from IMarEST (*The Institute of Marine Engineering*, *Science and Technology* Great Britain), ABET (*Accreditation Board for Engineering and Technology, Inc*. USA) and the *National System of Education Quality Assessment Agency*.
- In 2012, the Kazakh Marine Academy of the Kazakh-British University (KBTU) started a joint programme with the STC-Group from the Netherlands, funded by the Tengizshevroil Company.

CIBELES cont.

- Over 20% of the staff of KBTU are now international, not only lecturers, but also including council members.

- There is now a policy of recruiting only international specialists or Kazakh citizens with a degree from a foreign university in order to enhance the internationalization at the University.

- Structural changes include: a new *Department of International Cooperation* and the post of *Vice Rector for international Links.*
- Additionally, the University has appointed an International Advisory Council with representatives of national and foreign businesses.

PROJECT: ERAMIS

- The **Sustainable Outcomes** are the development of new programmes of study in the field of *IT and Informatics* as double degrees (e.g. KazNU).

- ERAMIS led to the development of tests for a common assessment system for double diplomas and the creation of distance learning systems also for students on double diplomas

- International accreditation was acquired for the *Information Systems and Informatics* programs, using the ***Akkreditierungsagentur für Studiengänge Ingenieurwissenschaften der, der Informatik, der Naturwissenschaften und der Mathematik*** **(**ASIIN, Germany) at the Kazakh National University (Al-Farabi KazNU) and a joint master's degree in Informatics was created with an international component.

- The University, KazNU, adopted a new strategy of active recruitment of international students, and now collaborates with many Central Asian universities in the area of student mobility. A number of courses – *Algorithms and Data Structures, Databases,* and *Program Engineering* – are now being taught in the English language.

ERAMIS cont.

- The expansion of mobility has been significant at KazNU: there are annual two-week summer schools for 5 to 10 master's students at the Lublin University of Technology (Poland), Berlin University of Applied Sciences (Germany) and Savonia University of Applied Sciences (Finland).
- One student from Czech Republic has completed a month's internship program at KazNU.
- PhD students completed two-month internships at the Lublin University of Technology and the University of Alicante.
- One bachelor's degree student completed a semester-long course at the Lublin University of Technology. One master's degree student completed a dual degree program in 2012-2013.

Entrepreneurial University Project

- **Al-Farabi Kazakh National University's** administration developed a roadmap of internationalization as the basis for enhancing its competitive ability in which the new post of *Vice-Chair for Research, Innovations and International Links* was introduced.

- The new Departments for the *Strategy and Monitoring of International Research and Educational Activities*, and for *International Academic Mobility* were introduced.

- The University has obtained accreditation from *the Foundation for International Business Administration Accreditation* (FIBAA).

- The University's position in QS global university rankings improved from 600 in 2011 to 275 in 2015 mainly during the course of Tempus IV. There was an increase in international conference papers/presentations (over 200 in 2014-2015).

Entrepreneurial University Project cont.

- At KazNU, international professors are being recruited for two-week lecture courses, to teach PhD students, and for longer periods of time for one semester and more.
- A dormitory was opened for international lecturers.
- The University opened a joint Chemistry Laboratory with the University of Rostok in Germany
- A Phytochemistry Laboratory was also established at the Karachi International Center in Pakistan.

TuCHEA

- The International University of Kyrgyzstan (IUK) introduced an internationalization strategy with immediate results
- It launched a joint programme of study in Business Management with Arnhem Business School of the Netherlands
- Beyond Europe, IUK started negotiations with universities in India and Pakistan on setting up dual degrees
- Its master's degree students in International Business are now taught wholly in English as is a significant part of the Year 4 undergraduate programme which is also in English.

TuCHEA, cont.

- **Overall Project Result –**
- Cross-regional collaboration
- TuCAHEA achieved the first steps towards creating a *Higher Education Area in Central Asia* with concrete examples of increases in both international mobility, internationalized curricula, the expanded use of English, as a medium of study, and cross-border study across all five countries of Central Asia with additional international benefits for partners beyond the Region.

Kazakhstan: Internationalization Summary at the National Level

- In early 2016 there were 37 HEIs operating double-diploma or degree programmes and over 75% of HEIs using ECTS.
- Allocation of ECTS is based on learning outcomes and student workload. The Bologna Diploma Supplement is issued to students in approximately 75% of Kazakh institutions and study programmes
- For example, the number of international agreements signed by the MES in Kazakhstan with other countries in the field of education and science mid-cycle during Tempus IV was rapidly increasing (124 in 2011)
- In Kazakhstan, the number of foreign students amounted to 8,982 in 2011
- In total, over 28,000 young Kazakhs are currently studying abroad, including over 3,000 in over 20 countries under the ‘Bolashak‘ study-abroad Scholarship Programme

Kyrgyzstan: Summary

- In Kyrgyzstan, internationalization is advancing rapidly; there are, for example, some 20 institutional agreements with other CIS countries and about 50 agreements with non-CIS countries

- Over 3000 young Kyrgyzy are currently studying abroad at universities in Russia, USA, Germany, France, Turkey and Malaysia on accredited exchange programmes, many as a direct result of Tempus IV projects

Challenges, Weaknesses and Causes of Failure

- During the research, there were six commonly-held views as to why internationalization projects had encountered difficulty and/or did not fully succeed were:

- ***Incompatibility with National Priorities***
- ***Language Barriers* (primarily lack of English)**
- ***Project objectives not optimally adaptable to local conditions***
- ***Regional variation in adoption and compliance with international systems and standards (e.g. Bologna)***
- ***Incompatible accounting/procurement systems***
- ***Low volume of student mobility***

Many projects found ways of addressing and, indeed, overcoming these barriers by adopting a series of actions or measures.

Impact of internationalization on curriculum development and related academic activity:

As a hallmark of internationalization successes, it is possible to say that Universities tend to have

- Developed and localized new curricula (and academic awards) in association with international partners relevant to the needs of the region's labour market and industries, enhancing students' employability
- Increasing the adoption of English as a medium of study and increasing the opportunity for students and staff to study English, empowering them to study, or train abroad.
- Increased the number of double-degree and joint award programs offered by Central Asian universities in partnership with international universities
- Acquired international recognition for courses and transferred internationally recognized quality assurance procedures making courses more attractive to foreign students, as well as stakeholders
- Adopted a learning-outcomes approach, making courses more acceptable for linking to foreign universities and credits, associated with them, more 'transferrable'
- Transferred new and innovative teaching methods and content from abroad, including multidisciplinary awards.

Barriers to International Mobility

- There are three barriers which have restricted student mobility in Tempus IV projects in Central Asia:
- It has proven complicated to incorporate Study Abroad into local degree schemes, largely due to the relative incompatibility of the ECTS system with university regulations and it remains difficult for local CA universities to transfer credits from periods of Study abroad in international countries which formally count towards most Central Asian degrees;
- The lack of English skills has already been mentioned above. It relates not just to English: in the project AIDA, for example, French was needed and classes supplied by a lecturer from Grenoble. English courses and training have significantly increased as a result of TEMPUS IV. Furthermore, outgoing students often find that the standard of English teaching in some European universities is poor.
- Finding suitable, compatible university partners in other countries willing and able to join in student exchanges with Central Asian universities can be difficult. Why?
  - *Geographical distance, lack of compatible programmes, language*

Recommendations from Research in Central Asia

- **Work with Ministry to achieve reforms and changes in regulations:** Universities in emerging countries need to work with their Ministry to enable state universities to overcome complex hierarchy of state approvals required to embed and sustain change
- (e.g. The Kazakh Ministry has now introduced a program for recruiting foreign academics and administrators by offering salaries at western rates)
- **Language Barriers**: : Ensure Language Skills are adequate to overcome language barriers and recruit foreign students
- **Adoption of international standards and systems**: e.g. *QA, Bologna principles, ECTS, PhDs, modularization, international accreditation systems, credit based learning*.
- **Ensure compatibility** of European *documentation* & standards with local curriculum, national standards and/or Ministry priorities
- Map programmes to **professional & occupational standards** from recognized professional bodies and obtain international accreditation
- **Ensure quality and availability of Equipment** in laboratories & **financial support to attract foreign students**

Recommendations, cont.

- Without implementing the frameworks and tools available for international accreditation and quality assurance models, universities in emerging countries will have much more difficulty achieving sustainable internationalization.
- In EACEA Projects, some 40% of the project teams referred specifically to the importance of implementing Bologna to achieve internationalization.