In recent decades, globalization, advanced technologies and international socio-economic trends have brought challenges to universities worldwide. Some of these have resulted in major changes in how universities are perceived within a society, operational management structures, and financing models. Some are even questioning the value of higher education degrees for the individual, and the return on investment for the societies that in the public domain, finance these institutions.

These challenges, have led to a call to audit existing operational structures and explore educational and operational adaptation, if not transformation. Driven partly by the influence of often financially or politically-driven national and international university ranking systems processes, one challenge is how to respond to comparative league tables, and the competition these encourage, through international engagement, branding and innovation. These and other challenges have driven universities to both re-define quality criteria, and have it used to build quality control frameworks, particularly with respect to international engagement.

International engagement is commonly realized through student and staff mobility, institution-industry partnerships, co-sharing taught programmes with partner universities and institutions, widening access to new ways of teaching using technologies, and strengthening research-focused cooperation projects.

The bedrock for enabling universities to respond to the challenges present, and the strategic opportunities in sight, includes the role of language. International engagement requires access to a lingua franca. Across the world at present this lingua franca is invariably English.

Using English for academic, research, and other forms of specialized interaction and communication should not be viewed as an assumed competence. The same applies to the use of any additional language. For instance, because we speak a language does not automatically mean that we can use it for expressing or exploring higher order thinking and communication. So when university staff use English for the purposes of realizing international engagement whether through teaching, research, publishing, stakeholder relations, or other forms of communication, special awareness and skills are a pre-requisite for success (Díaz Pérez & Marsh, 2017:11).

Key reasons on why European Union universities launched English-taught programmes were reported for 2014 as: removing obstacles for the enrolment of foreign students; improving the international competence of domestic students; sharpening the international profile of the institution; attracting highly talented students to the institution (both domestic and international); altruism (providing opportunities for students to study from countries receiving development aid); and compensating for shortages of the institution (see, for example Wächter & Maiworm, 2015).
It could be assumed that these would also be found in any similar study carried out during 2018-2020, but with the addition of inter-university competition (largely based on retaining public finance and attracting external funds such as through student fees), and quality (with respect to identified knowledge and competence-based outcomes, curricula, teaching, and graduation preparedness for working life).

Developing the conditions and competences for successfully launching teaching and learning sequences (modules, projects, degrees) in an additional language (such as through French in Spain) requires the use of specialized methodologies if the risk of quality deficit is to be reduced. This is because of contextual shift on the cline of student homogeneity towards greater heterogeneity (where teaching in an additional language is likely to involve greater individual variation in linguistic fluency, and more extensive intercultural diversity).

Content and Language Integrated Learning programmes in higher education require consideration of external, internal, and intrinsic forces. External forces include megatrends that are now re-shaping the role of languages, including digital literacies in higher education. Internal forces relate to features unique to the systems operating within an institution of higher education. Intrinsic forces are those considered essential for achieving quality in context-bound examples of teaching and learning.

The external forces include socio-demographic changes; scientific and technological innovation; new work and organizational cultures; new knowledge and competence demands; and competition for regional, national, international, and sector resources. The largely internal forces involve pressure to adapt and change existing systems of operation within a university, from student teaching and assessment through to organizational hierarchies, decision-making and resourcing. The intrinsic forces concern high impact practices that elicit successful learning and development performance in different contexts.

Provision of higher education in an additional language can be done through the deployment of integrated content/language practice, or through adoption of the additional language without adjustment to teaching, learning and research practices. Globally, the extent to which this type of teaching is offered ranges from highly limited (a few modules of programmes at Master or Doctoral level), to extensive (almost all courses in English).

Regardless of whether adoption of an additional language is done through bilingual or monolingual perspectives, there are specific drivers enabling higher education organizations, and individuals, to respond to the internal, extrinsic and external forces. These include adapting teaching and learning methods to suit the newly emergent cognitive, motivational and social bases of learning; utilizing technologically advanced learning environments; enabling learning through value-creating peer, community and other network relationships; timely engagement with clusters of innovation and working life; and focusing curricula on technology-based working and operating environments.

These forces are relevant to contexts taught through a national (first) language. But when an additional language is introduced quality assurance requires a choice to be made. This is to opt for the monolingual methodological option (often called English as Medium of Instruction), or the Bilingual methodological option (sometimes called Teaching Content through English).

If the bilingual option is selected a set of actions needs to be considered. Some of these are to do with competence building in integrating content and language for teaching and learning. Others are to do with using the introduction of teaching in an additional language
as a catalyst for introducing largely intrinsic and systemic change. Put together these form key change agents that can have an impact on university functions, systems and operations.

Changing the language of teaching and learning may lead to outcomes deemed more or less positive, or more or less negative. What we can see is that opting for English as the Medium of Instruction without diligence is likely to lead to negative impact, or in cases where standards were already low in first language operations, little change (see, for instance Marsh 2013). Introducing Teaching Content through English, using a CLIL-type approach, is likely to lead to some degree of disjuncture when first introduced because it can lead to changes of the status quo, especially in largely monolingual educational environments.

This disjuncture needs to be pre-empted and managed because it can lead to resistance that can hinder the development of innovative practices. Innovation practices, just as with strategy, cannot be based on assumption. The future of any innovation depends on the identification of knowledge pathways which report on existing experience, and which can inform future decision-making. These knowledge pathways are now growing because in some countries universities have a long experience of adopting an additional language for teaching and learning, and there is much to be gained from examining the positive and less positive prior experiences encountered (see, for instance, Marsh 2005).

The steps towards adoption of an additional language need to be based on a holistic understanding of how the university and its faculties operate as systems, and which parts of these systems are weak, or otherwise at risk of failing to support the introduction and eventual functioning of new practices. This understanding leads to viewing the university operations as an ecosystem where certain actions need to be taken to nurture adaptation, reduce disjuncture, and create new forms of functioning. Once this understanding is achieved, tools can be created to enable the creation of change management framework leading to, for instance, the successful introduction of teaching and research programmes through English.

The AGCEPESA project in Andalucía, which has prompted this monograph, is one example of an initiative to create such tools. Another recent example of a change performance framework has been developed through an ecosystem-based analysis of the introduction of CLIL in a Latin American higher education context (Díaz Pérez & Marsh, 2017). This has drawn on earlier work conducted on reporting of how European universities have responded to the need to introduce English-taught degree programmes with respect to the formation of a European Higher Education Area and the Bologna Declaration (Marsh, 2005), and an earlier description of framework parameters (Marsh, Pavón Vázquez, & Frigols Martin, 2013).

Marsh & Díaz Pérez (2017) have identified actions that need to be considered, and constructed these as a time-specific Key Performance Indicator (KPI) Framework. Based on development processes implemented over 2014-2018 in a large Spanish-medium public university (University of Guadalajara, Mexico - 270,000 students; 17 000 staff, 2017). The thematic categories of this KPI framework *Shaping the Future: Building CLIL Environments* are ‘Governance (administrative decision-making processes); Management (how processes are implemented with key stakeholders such as students and academic staff); Praxis (the methods and activities designed to enable CLIL to be realized in practice); and Performance Outcomes (in relation to the learning of both academic subjects and language).

Each framework is time-bound for a specific period, and thus indicators may vary year by year, and the weighting accorded to each subject to change. Each category has a number of indicators. A high value overall indicates a balanced ecosystem. The values
of each category indicate the nature of where and how that balance is being achieved. As the CLIL programme matures then the number of indicators is reduced but the categories remain constant.

The categories are considered as key elements in realizing a quality ecosystem where academic subject matter taught through English plays a complementary role alongside teaching, learning, research and publishing in other languages within a higher education institution.

As an example, taken from the 2017-2018 University of Guadalajara KPI Framework, Governance has nine indicators based on the introduction of courses where content is taught through English by faculty trained in CLIL. These are generalizable to other universities globally. In the case of English language, many also apply to universities in English-speaking countries that attract students who are studying in an additional language.

The set of Governance indicators cover how programming in an additional language, henceforth English, aligns with existing university international strategy. International offices may neglect consideration of pragmatic aspects of realizing internationalization such as the capacity to provide quality teaching and learning in English. This can be due to a dis-connect between staff involved with mobility and formalized memoranda of cooperation, and teaching and research departments required to implement teaching and other activities.

One means to overcome this is to establish a language policy at the university that is directly linked to the internationalization strategy. When the policy has been created, then an Action Plan stating what should be done to implement the policy over a given period is optimal. Resourcing is required, mainly for up-skilling staff in methodologies and possibly language, but also for other investments. It also applies to staff incentives and other forms of investment in human capital.

The development of programmes in English need to be linked to quality assurance and accreditation processes. This is usually driven by external requirements such as national and international analysis and ranking systems. The indicators include how offering programmes in English fits with the research and development strategy of the university. When these indicators are active and aligned, governance serves to act as a vital top-down support mechanism for systemizing, resourcing and recognizing the value of introducing programmes in English.

The thematic category of Management generally involves faculty and department decision-making processes. These include academic staff selection; scoping of methodological and language competences, teaching and learning resource accessibility and creation, facilitation and coordination of staff teamwork, ICT ease of access, usability and technical support, international staff networking, inter-organizational partnerships and ventures, provision of opportunities and appropriate conditions for staff development, and student intake processes.

The Praxis category concerns the use of content/language integration to facilitate teaching and learning in English. Identifiable programme intended outcomes, alignment of the teaching of English as a subject, use of scaffolding to support higher order thinking alongside other identified high impact teaching and learning techniques are given attention alongside plagiarism management.

The fourth category, Performance Outcomes, relates to measurable parameters of student and staff satisfaction, grade levels achieved (especially against similar courses taught in the first language of the university), and how the profile of the university is enhanced or otherwise in ranking systems.
A Key Performance Indicator Framework of the type described is geared to reducing fragmentation by systemizing the launch and long-term establishment of quality programming in English. Although initial investment is required at the outset, the need for this diminishes over time. If the push to introduce English as a medium of teaching and learning at a university neglects appropriate attention given to the overall ecosystem then opportunities may be lost, quality reduced, and an overall level of dissatisfaction by all stakeholders becomes likely.

REFERENCES


