Section 2 Re-thinking Comparability

Introduction

What does it mean to compare? Is it possible at all to establish equivalence by comparing educational qualifications? Who does the comparing, and to which specific ends? What are the broader purposes of comparison? Is comparison even possible for qualifications obtained in vastly unequal resource contexts? What exactly is 'being compared'? Is it possible to compare 'things' that are not accessible to standard instruments of assessment, such as complex teaching and learning processes focused on demonstrable 'outcomes'? How are comparisons validated? How does one use the data derived from the comparisons? One of the most visible effects of globalisation has been the mobility of skilled professionals across national borders. With such increasingly rapid movement of skills-carrying people, come the inevitable questions about qualifications and readiness to labour within another national context. This is one of the driving forces behind the growing acceptance of qualifications frameworks that clarify the meaning of a particular qualification within a single country (hence national qualification frameworks, such as the South African National Qualifications Framework), but also among nation states (hence regional qualification frameworks, such as the European Qualifications Framework). By making explicit the learning outcomes achieved at the end of a programme of study leading to the award of a qualification, it is argued that such transparency enables judgements to be made about the levels of training that led to such an accomplishment.

In a national context, therefore, a student moving from institution X where she obtained a Bachelor Degree in Commerce, would present a qualification that enables institution Y to decide whether to admit the student to a Masters Degree in Commerce, based on the specification of the learning outcomes attained. In a cross-border context, a receiving institution in country A would be able to make decisions about a teaching qualification obtained in country B that could lead to employment to teach primary school children in country A. In a perfect world, the explicitness and transparency of what a qualification means would enable swift decisions to be made about entrance to higher education studies or employment in the labour market.

That is, in a perfect world. This chapter argues that meaningful comparison is near impossible and that any uncritical acceptance of the case for comparability threatens the integrity of institutional training and can, in high-risk professions, spell catastrophe. With the limited technologies available, the meaning of two qualifications can at best be understood as an approximation of meaningful comparison for what is not known through the evidence attainable, might in fact be much more consequential than what might be knowable through existing instruments. This does not invalidate the quest for comparison – quite the opposite. It suggests an ongoing search for the kinds of theories and technologies that make comparison much more meaningful than is possible at the present time. For the moment, however, comparison should be treated as a limited and high-risk endeavour.

The Theory of Action

How is the process of comparison supposed to work? What is the underlying theory of what is required to happen in practice? A theory of action is not a description of actual consequences; rather, it makes explicit what is often assumed (or poorly conceptualised, if at all) about implementation. Taking a range of documents into consideration, the theory of action that underpins efforts at nailing down comparability could be summarised as follows:

At national level:

- A country defines its qualifications in terms of learning outcomes.
- These learning outcomes are presented as statements of 'what a learner knows, understands and is able to do on completion of a learning process'.
- The learning outcomes offer a *common language,* making it possible to compare qualifications.
- The country commits to a process of *quality assurance* to ensure that the qualification conveys what it claims to in terms of the learning outcomes.
- The commitment to quality assurance builds *mutual trust* in the stakeholder community (such as employers), leading them to accept the qualifications.

- The placement of individual qualifications on a *national qualifications framework* ensures consistency in the meaning of different qualifications across a country.
- The employer or the institution receiving the qualified learner can be confident that the qualification and its associated learning outcomes are *comparable* to what is required for work or further study.

At an international level:

- The region develops a *regional qualifications framework,* such as the European Qualifications Framework[2].
- The overarching regional framework *specifies the learning outcomes, achievement levels and credit specifications* for each phase of education.
- The individual or country concerned can then *measure a qualification against* the regional qualifications framework to confirm compliance or identify gaps in knowledge or skills.
- The measurement of a qualification against such specific criteria enables the individual or institution to make decisions about the *transferability of that qualification (or units thereof) across borders*.
- The regional framework, in specifying learning outcomes, levels and credits, also provides for the *validation of non-formal and informal learning*.
- The clarity of specification *minimises confusion and enables trust* in institutions across national borders when it comes to comparing and assessing foreign qualifications.
- The transnational *mobility* of professionals and workers is hence facilitated through transferable credits or passes (such as the Euro-pass), matched against a transparent, regional qualifications framework.

The theory of action at both national and international levels cannot be faulted as a technical specification of how comparison is done. By comparing qualifications against a set standard, developed based on consensus, with the transparent specification of learning outcomes that are in turn validated through quality assurance. Individuals, institutions and countries can make choices about the meaning of qualification, the knowledge/skills/dispositions acquired, the training gaps that need to be filled, and the acceptability of that qualification in another institutional or national context. All things being equal, the theory of action cannot be faulted. However all things of course are not equal, as will be shown later.

The Language of Comparison

To judge the claims of comparability, it is important to first gauge the meanings of three key terms surrounding this key construct, which are sometimes (wrongly) used interchangeably:

- **Transparency** is the degree to which the value of qualifications can be identified and compared in education, training, the workplace and more generally (Commission of the European Communities 2006:3). It is the degree of explicitness about the meaning of a qualification (outcomes, content, levels, standards, awards). It implies the exchange of information about qualifications in an accessible way within and outside the country of award. When transparency is achieved, it is possible to compare the value and content of qualifications at national and international level (Deane 2005).
- **Recognition** is the formal or legal specifications that a qualification must meet in order to be accepted (recognised) as fulfilling the (transparently) set standards, such as are often defined for the professions. Such recognition can be mutual and automatic where two or more states agree upon, for example, qualifications achieved or the minimum conditions of training being met, as is often the case for doctors and nurses.
- **Comparability** is the comparison of one qualification with another, based, most often, on a common format or instrument - such as comparability tables - that enables the 'face value' of a qualification to be established. The act of comparing enables judgements to be made about the equivalence (sameness) of qualifications. The greater the transparency with which a qualification is presented, the easier it is to compare one qualification with another, and the more reliable the system of recognition by which a qualification is accepted by the state, professions or an individual.

Transparency is a necessary condition for claims about comparability, but these two constructs are not the same. So too, recognition can be achieved without the necessity of detailed comparison - for example through legal agreements between institutions or nations that a

2 Another example will be where a grouping of countries that are not necessarily in the same region or geographic proximity, develop a transnational qualifications framework.

medical degree from one context will be deemed to be equivalent in standing to a medical degree from another content. The three constructs are conceptually if not operationally linked, and therefore misrecognising one for the other is a common mistake in literature.

Limitations of Comparison and Comparability

1. *Learning outcomes are inadequate proxies for education quality*

The first limitation of comparability lies in what is being compared. At base, the comparison of learning outcomes achieved, is an indirect measure of individual accomplishment. Even if every country were to state its qualifications in an outcomes-based format, we intuitively know that this indirectness of measurement cannot tell us about the quality, depth and significance of the educational experience that underpins the outcome. An outcome is a terminal statement of what is presumed to have been achieved. Nobody has been present in the classroom of the school or vocational college or university to directly witness what it was that had led to the claimed outcome; the outcome is trusted as an honest and genuine statement of achievement. However, this assumption is fraught with danger.

Valuing learning as an outcome over teaching or resources as an input is an indication of the educational changes sweeping the modern state. Prior to 'outcomes', everyone was in the dark about the meaning of a qualification. Coverage of content was obviously not enough, nor was the reputation of the training institution. Judgements were remarkably inconsistent across different contexts, and there was little on which to peg statements of comparability until outcomes were discovered as a technology for capturing and organising the educational experience in a simple and tangible way.

Outcomes-based achievements were, therefore, a massive step forward in the quest for comparability. While the advent of outcomes-based education and training is an important trend on the world stage, learning outcomes in and of themselves say little about the meaning of that outcome in vastly disparate contexts (more about this later).

Nations and institutions have become quite adept at stating learning outcomes achieved, as various versions of competency- or outcomes-based education took off in global education reforms everywhere. Yet we know from experience in outcomes-based education and training systems that examination or assessment schedules that list achieved outcomes are not automatically trusted or accepted in the marketplace for a simple and logical reason: there is not sufficient evidence to back up the claim that the outcomes have been achieved. The nagging question 'how do I really know' in the mind of the receiving institution or nation will not go away.

2. *The greater the detail of specification behind an outcome, the more elusive the comparability question*

The moves towards greater transparency in the declaration of qualifications and their outcomes implicitly recognise the limitations of outcomes as a profound statement of achievements actually attained. For this specific reason there is a push towards defining content covered in a particular qualification; notional hours of training; internship experiences; levels of achievement of those outcomes; associated assessment criteria and the like. In other words, the more we can say about a qualification, the better we are able to judge the quality and adequacy of the outcomes achieved.

Such a quest for detail is a step in the right direction and is certainly more useful than relying only on outcomes stated. However here, the measures remain indirect. How do we know, for example, that the content claimed to be covered was actually covered? Nobody actually witnessed the coverage. Since judgements are made at some distance from the sites of education and training, who is to know that content claimed equates as content actually covered?

The answer to these questions is to specify in greater detail. Comparability instruments therefore probe for actual or notional learning hours; surely, if we know the time commitments made, we are better equipped to make these comparisons? Then it is recommended that content areas be specified and outlined. If we know what was taught (and learned), we would know more about the educational experience of the learner. It would also help if the associated experiences such as internship hours or placement experience were to be detailed. The more technical specifications, such as credits associated with the qualification (the more credits, the more time or greater complexity) are of additional help. It adds value to specify the level descriptors, that is, the level of complexity for the achievement.

However, how much detail is sufficient? Clearly, the added information is much more valuable than learning outcomes alone. The problem is that the more information gathered about a qualification, the more the process of evaluating it becomes weighed down by data, and that is for one qualification only. Since countries and institutions often hold hundreds of qualifications, these generate a massive bureaucracy that multiplies geometrically when multiple institutions and nations are held to the same account. The ideals of simplicity, communicability, and accessibility are hence essentially lost in the inevitable information overload.

There is, however, a more serious problem. Even with all the information gathered, there is always critical information that is not amenable to direct observation. In other words, what counts – or should count – in making judgements about comparability, is often not the kind of information easily retrieved for making such assessments.

3. Pedagogy matters

One of the most important and direct measures of the quality of education, and therefore of the power of a learning outcome, is how teaching the claimed content actually proceeded. It is common cause that someone can achieve even a complex learning outcome through rote teaching or rote learning. A teacher could literally read through 'notes' and assess learners on the basis of what was read. A lecturer can teach all the content required, but tell learners that only chapters three and five, for example, will be examined in the upcoming test. The learner will hence pass with flying colours (this is a very common practice in many countries). A lecturer could supply 'notes' and the learners could, as in low-level distance education courses, pass a test of content knowledge all by themselves. On the one hand, a professor teaching biological science, owing to the absence of specialist laboratory facilities or much-needed chemicals, reduces this important experience to paper-and-pencil-tests based on textbook knowledge (this is not at all uncommon in poor countries). The teacher could, on the other hand, faithfully labour through the curriculum content but then set such a ridiculously easy examination that everybody passes anyway (more about this later). Therefore, in essence, pedagogy does matter.

It is, of course, unreasonable to insist that pedagogy is directly measured. This is logistically impossible when comparing qualifications on a global scale. It is even difficult within one country, except as a sampling exercise. Yet not doing so is to concede a stubborn complexity: we cannot really know what a learning outcome in terms of educational experience is, unless we know what went before in terms of the pedagogical experience.

Pedagogy is, of course, much more than how one teaches. It is also about expertise and experience lodged within the one who teaches. The qualifications of the teacher and, separately, the competence of a teacher matter greatly in teaching simple (and even more so complex) subject matter. However, since competence cannot be read off a certificate, especially in developing countries, once again the meaning of qualifications comes into question. Where professions license their workers, this problem is partly resolved; but since many occupations (and even some professions like teaching) in developing countries do not license their professionals or workers, the problem remains.

Comparability means little unless there is at least critical information about the qualities and adequacy of the teaching that precedes and indeed shapes and defines the meaning of a learning outcome.

4. Institutions matter

Learning outcomes are not produced in a vacuum. They are attained in and through educational institutions. Here one faces an unpleasant reality: institutions within and across countries do not carry the same reputation, do not harbour the same resources, do not attract the same quality of teachers, do not admit the same quality of students and, in quality terms, do not and cannot produce the same results.

Institutions are, whether one likes it or not, deeply unequal. The ideological distinction is an important one – institutions are often not only unequal empirically, they are also inequitable politically. Underdevelopment, colonialism, racism and long histories of allocating privilege and disadvantage among institutions are not easily reversed, whether it concerns 'black' and 'white' universities in a place like South Africa or poor and rich nations in the Commonwealth system.

Despite these legacies of inequality, all institutions will claim that their learners achieve the learning outcomes set at either an institutional level or a national level. This is routinely observed in countries with national qualifications frameworks.

Here lies a major problem. The general public (reluctantly, the market) knows that this is true, namely, that institutions are unequal and therefore, in most cases, their products (measured in outcomes) are unequal, irrespective of what the paperwork says.

Of course, in some cases this is an unfair way in which to compare institutions. Schools or universities with low reputations could in fact be making massive investments (of time and expertise, if not resources) to ensure that every student learns and indeed attains the learning outcomes set. However, how does one know this when outcomes are so easily marked off by all institutions?

While institutions continue to trade on market value and present themselves in the public mind based on historical reputations, it will remain difficult to reverse powerful perceptions - if not uneasy realities - that differential outcomes result from differential institutions.

5. Examinations matter

How exactly are learners examined and what confidence does such examinations and assessments yield in terms of learning outcomes? This question is crucial since the depth and quality of learning can easily be 'washed out' or concealed by examinations where the standards set are so low that almost anyone can achieve them.

One area in which there is consistent research on comparability and which might shed some light on the question of qualifications, is in the area of comparing between-subject examination standards. One aspect is clear from this research - even within one country and within one education system, unequal examination standards seriously compromise the overall meaning of, say, a school qualification (Newton 2008).

What this means for efforts to gauge comparability is that examination papers and assessment protocols must be carefully scrutinised on the basis of which learning outcomes are validated as having been achieved. However, once again, the arguments about practicability arise: it is simply not possible, given the millions of examination papers written across the world – sometimes two or more per subject within a qualification – to determine whether the evaluation of achievement is of a sufficiently high standard to trust the stated outcomes.

This is obviously not an argument for doing the impossible. It is simply to point out, once again and understandably so, that compromises are being made in judgements about comparability and that the use of proxies for quality might not provide sufficient or trustworthy information about the meaning of a learning outcome. Moreover, the argument being presented here is that the sheer complexity of what lies between the admission of a student to a course of learning and the graduation of that student for whom attained outcomes are claimed, should at the very least receive attention, rather than the enthusiastic and uncritical endorsement of the stated learning outcomes. This is particularly the case in developing countries, where research shows that the assessment tail, over time, tends to wag the curriculum dog with some consistency. In contexts where examinations therefore override the curriculum, the learning outcomes are more likely to be an artefact of what is assessed than a reflection of learning experiences lodged within the content that had been taught.

A Modest Attempt at Comparing Qualifications

There is no doubt that comparison and comparability of qualifications is a limited endeavour, even under ideal circumstances where qualifications frameworks are in place and information on qualifications is readily available. Some of the limitations can be addressed – at least in part – and in a perfect world, by acknowledging that learning outcomes are inadequate proxies for educational quality; by avoiding over-specification; by considering pedagogy, and assessment practices. However, the need for greater transparency of qualifications remains.

Naturally, we do not live in an ideal world, and what remains, is to make a modest attempt to open what, to date, has been a 'black box' of comparison, steered in part by national information centres and competent recognition authorities. By acknowledging that this is largely a technical exercise, and drawing on earlier work on comparability, this research proposes a theory of action within which information on initial teacher qualifications offered across the Commonwealth is gathered and presented in the accessible and structured format of a comparability table. In turn, it is envisaged that the comparability table will provide a basis (albeit one that will require further development in the future) for pathways for the attainment of fully qualified status for teachers within and between Commonwealth member states.

Three main components make up the overarching conceptual framework for the comparability table:

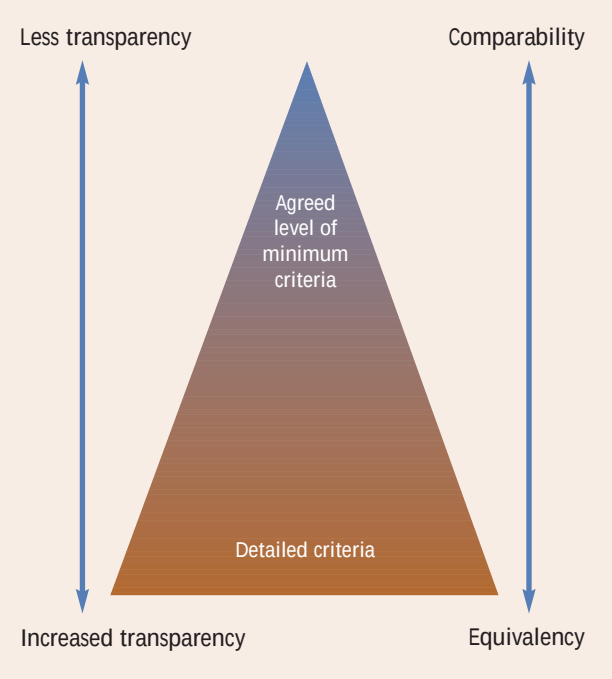
- Refining the language of comparability;
- identifying a meta-framework, and
- acknowledging that the work is of an ongoing nature.

In the first place, a refinement of the language of comparison is required. Early debates focused on the need for increased recognition of teacher qualifications. Within this context, recognition meant the formal or legal specifications that qualifications must meet to be accepted within the countries that offer them. This takes place predominantly on a national basis, and requires the country to commit to quality assurance processes, which in turn builds mutual trust, and results in the qualification being registered or pegged at a specific level of a qualifications framework. With increased migration and globalisation, the need for cross-border recognition has increased, and has resulted in regional qualifications frameworks being developed in a number of regions across the world. However, not all countries and regions are engaged in developing qualifications frameworks, nor are all qualifications being offered across different countries. Yet there are some professions such as teaching, in which highly skilled professionals are becoming increasing mobile, where qualifications of a similar nature are offered across a range of countries.

As the need for recognition becomes more important, similar qualifications offered across various countries need to be compared to ensure fair treatment of migrants, and also to avoid unnecessary disregard of valuable skills in the receiving country. In order to compare qualifications, a common format or instrument is useful to enable judgements to be made about the 'sameness' of the qualifications. In this respect, qualifications located within national and/or regional qualifications frameworks are usually formatted in a similar way, and, in most cases, are based on learning outcomes. Drawing on the characteristics of such qualifications, a range of criteria can be used to compare the qualifications, such as the eight criteria that were initially considered during the pilot study on teacher qualifications conducted in 2007 (SAQA) (see page 13).

The depth of information needed to compare qualifications within this format poses significant challenges on a number of fronts, and more so when some qualifications are not located within qualifications

Figure 4: Transparency of qualifications



frameworks. As noted by UNESCO (2006b), it becomes virtually impossible to directly assess and compare the content of qualifications following this approach in an internationally consistent way. UNESCO concedes that 'international curricula standards' are not available to compare qualifications in such great detail, and suggests a more pragmatic route using a format called the International Standard Classification of Education (ISCED).

This move to a manageable comparison of qualifications, although it has a number of limitations, is facilitated by differentiating between two levels of comparison, one at a greater level of specification than one at a lower level of specification:

- **Comparability** – determining the face value by using a set format and criteria; and
- **Equivalency** – determining the extent to which qualifications are the same, also using a format and criteria, but in this case requiring a measure akin to international curriculum standards.

Further refining the language of comparability and, in keeping with international trends in this area, it becomes even more useful to talk about transparency as an overarching term that includes both comparability and equivalency. Transparency is the degree to which qualifications can be identified and compared (European Commission 2006) (see Figure 4).

Figure 5: Overview of ISCED levels[3]

ISCED Level	Typical Name	Typical Entry Requirement	Typical Duration (full time)		Characteristics
0	**Pre-primary education**	At least 3 years	Depends of local age of entry to Primary schooling		
1	**Pre-primary education**	Between age 5 and 7	6 years		Studies characteristics of primary education – e.g. reading, writing and mathematics
2	**Lower secondary or second stage of basic education**	Completion of Level 1 (or 6 years of primary schooling)	2A	3 years after Level 1. Usually more subject orientated	Provide access to 3A or 3B programmes
			2B		Provide access to 3C
			2C		Preparing for direct access to the labour market
3	**(Upper) Secondary education**	Completion of Level 2 Entrance age typically 15 or 16 years	3A	3 years after Level 2	Direct access to 5A programmes
			3B		Direct access to 5B programmes
			3C	Variable – fewer than 6 months to more than 2 years	These programmes lead directly to labour market, SCED 4 programmes or other ISCED 3 programmes
4	**Post-secondary non-tertiary education**	Completion of Level 3 (but often not significantly more advanced than programmes at Level 3)	4A	From 6 months to 2 years	Programmes that prepare for entry to Level 5 programmes – typical examples are pre-degree foundation courses
			4B		Designed for direct labour market entry
5	**First stage of tertiary education**	Completion of Level 3A, 3B or Level 4A	5A	Minimum duration – 3 years after completing Level 3	Largely theoretically based – provide qualifications for entry to advanced research programmes (Level 6) or professions with high skills requirements
			5B	Minimum duration – 2 years after completing Level 3	More practical/technical/occupationally specific than 5A programmes. Do not provide access to Level 6 programmes
6	**Second stage of tertiary education**	Completion of Level 5A	Variable		Leading to an advanced research qualification

Basic Education – 9 years

This leads to the second part of the conceptual framework: identifying a meta-framework wherein comparability of initial teacher qualifications in the Commonwealth can be located. For this purpose, the ISCED levels developed by UNESCO and the OECD (UNESCO 2006b) are useful:

- Level 0: Pre-primary education
- Level 1: Primary education or first stage of basic education
- Level 2: Lower secondary or second stage of basic education
- Level 3: Upper secondary education
- Level 4: Post-secondary non-tertiary education
- Level 5: First stage of tertiary education
- Level 6: Second stage of tertiary education

Each level is further defined by the typical entry requirements, typical duration and general characteristics (see Figure 5).

It is important to realise that ISCED levels, just as outcomes, are not unproblematic, with application and interpretation widely criticised in literature. The main challenge in the application of the ISCED criteria is that they are regarded as time based and open to multiple interpretations; in essence, it is argued, ISCED represents a return to thinking that preceded qualifications frameworks and outcomes-led developments which strongly reject duration as a reliable indicator of the breadth and depth of learning. On the one hand, on many levels, this argument is entirely valid and has been validated by new developments over the past twenty years or so, more so in the accelerating trend towards outcomes-led qualifications frameworks (see Section 1). On the other hand, as has been shown in the earlier part of Section 2, outcomes are not without flaws, either. The point here is that both technologies have limitations, but this does not mean that the benefits of both have to be discarded. While ISCED is a blunt instrument unable to make fine differentiations, and with an undue reliance on time-based learning, outcomes, on their own, are inadequate proxies for the quality of education.

3 Source: UNESCO 2006b.

It is at this point, where we acknowledge that both technologies are limited, that it is important to reflect on the purpose of the research at hand, namely to provide the basis for pathways for the recognition of qualifications of teachers when they move across borders in the Commonwealth. The purpose is clearly not to make far-reaching judgements of the educational quality in other countries, but rather a much more modest attempt at improving transparency, albeit with some risks and limitations. It is here that ISCED, rather than outcomes, comes to the fore as a pragmatic and available technology with which to consider the (limited) transparency of qualifications on the level of comparability. Where increased transparency is required (on the level of equivalence), ISECD levels will undoubtedly fall short, and additional and new technologies, including, but not only outcomes, warrant further investigation (see Section 4 for recommendations for further research).

In addition to locating teacher qualifications at ISCED levels, some additional criteria, based on the pilot study discussed in Section 1, and considering the criteria applied at the time, are proposed for this study:

- Contextual data. Summarised as 'key facts' in the table itself, the decision is taken to locate country data on teacher qualifications within the broader context of the country in which the qualifications are offered. This includes the population, the expenditure on education, enrolment figures, the number of teachers in the system, the estimated number of un- and under-qualified teachers, and the estimated number of foreign teachers.
- Professional requirements for teaching. Qualifications are regarded as one component that is required for fully qualified status. For this reason, it is important to gather data on other requirements and to consider the overall approach to teaching in the country. Specific aspects include continuing professional development (CPD), professional licensing/registration, the screening of criminal records, and induction programmes.
- The ISCED level of the qualification.
- The duration of the qualification in years or full-time equivalent (FTE).
- The practical/workplace component included in the qualification (measured in weeks over the full duration of the qualification).
- The entry level of the qualification (ISCED level).
- The qualifications pathway wherein the qualification is located. In many cases, fully qualified status requires more than one qualification to be completed. The most common example is an academic degree followed by a professional postgraduate qualification.
- Primary and secondary (including both junior and senior secondary) teacher qualifications are analysed separately.

In terms of sampling, the framework described is limited to initial qualifications for primary and secondary school teachers. A more comprehensive analysis that includes postgraduate, vocational and early childhood development (ECD) qualifications could have been pursued, but this lies outside the scope of this research. In retrospect, the more limited sample provides an opportunity to refine the methodology without undue clutter from multiple sources.

A regional or transnational qualifications framework will offer many of the benefits of the framework proposed for this study. In effect, there are many similarities between the broadly defined ISCED levels and the level descriptors of a regional or meta-framework. A regional qualifications framework is usually based on voluntary participation and mutual trust, and provides at best a reference point for countries included in the region. The benefit of the ISCED-based framework that is proposed for this study, while similar to existing and emerging regional qualifications frameworks, is that it provides a neutral reference point removed from the context of a specific country or region. This factor undoubtedly contributed to the high response rate for the survey: 35 out of 53 countries provided detailed information (66 per cent); a further nine countries participated but were unable to complete the survey in time (17 per cent); and only nine countries did not participate (17 per cent).

The last aspect of the conceptual framework within which this study has taken place, is an acknowledgement that the work is of an ongoing nature. In this regard it has been argued that data on qualifications can contribute to increased transparency, but complete transparency will remain out of reach whilst using available technologies with a few exceptions where instruments are designed for specific qualifications that take aspects of pedagogy, institutions and assessment into account.

Qualification systems tend to change over time as local and global contextual factors impact on countries and regions in general, and on professions in particular. For this reason, the proposed conceptual framework encourages a flexible output in the form of a comparability table that can be updated regularly with country-specific data owned by the country in such a way that one can defend and improve the data as required.

Concluding Comments

This section has provided an opportunity to rethink the notion of comparability. Achieving explicitness and transparency in stating what a qualification means across institutions and borders is close to impossible. At best, the relationship between two qualifications can be understood as an approximation of a meaningful comparison by using the limited technologies available today. However, comparability is a high-risk endeavour, so attempts at determining comparability with limited technologies may emphasise inconsequential factors and, as a result, obscure the factors that are most important.

Having located the debate within the limitations of comparability, the point is made that the quest for comparison should not be discarded. On the contrary, an ongoing search for new technologies and theories that make comparison more meaningful should be pursued. Following from this overarching focus, a proposed technology is located within a theory of action that draws from a range of international developments, mostly from the global distribution of qualifications frameworks.

The proposed technology is described as a comparability table with three main components: on the one hand, the first requires a refinement of the language of comparability, suggesting that the transparency of qualifications can be achieved at different levels, ranging from limited (termed comparability) to very detailed (termed equivalency). In this regard, equivalency represents the ideal position largely unobtainable with existing technologies. Comparability, on the other hand, represents a state obtainable with existing technologies, but fraught with limitations. The second component requires the identification of a meta-framework that will guide the research and enable the data to be presented in a coherent manner. The proposed framework consists of:

- ISCED level of the qualification;
- contextual data;
- duration of the qualification;
- practical/workplace component included in the qualification;
- entry level of the qualification (expressed as an ISCED level); and
- a qualifications pathway wherein the qualification is located.

Further, considering that the work is of an ongoing nature, the data are presented in a narrative and graphical format that gives the reader an overview of initial teacher qualifications offered at a glance in a specific country.