

National Qualifications Frameworks: solving the education/labour market 'mismatch'?

Stephanie Allais

Centre for Educational Sociology, University of Edinburgh

Paper presented at the
Education and Employers Taskforce Inaugural Research Conference
University of Warwick, Friday 15 October 2010

Acknowledgements

This paper is based on research conducted for the International Labour Organization (ILO), in collaboration with the European Training Foundation (ETF). I am grateful to Christine Evans-Klock at the ILO, who oversaw the management and conceptualization of the research, and gave me the opportunity to lead the project. Michael Young, senior research advisor to the project, and David Raffé, advisor to the project, contributed considerably to the design of the research, the theoretical frameworks developed, and the data analysis. Borbene Chakroun and Arjen Deij led the contribution from the ETF. They and many other individuals made substantial and valuable contributions to the research and final report produced. This paper is the result of my analysis of the case studies and literature, and does not necessarily reflect the views of the ILO or the ETF.

Introduction

Raising skills levels, reforming education and training systems, and improving qualifications systems are among the policy priorities of most countries around the world. A particular concern for many countries is improving the relationships between education and training systems on the one hand, and labour markets on the other. Increasingly, qualifications frameworks have been seen as a useful policy tool to achieve these and other goals. The popularity of NQFs has grown dramatically in the last five years. Over 100 countries are now implementing, developing, or considering NQFs, or involved in regional qualifications frameworks. The adoption of the European Qualifications Framework in 2008 seems to have added considerable impetus to countries' interest in this policy direction, and the implementation of qualifications frameworks has also been widely endorsed by influential international organizations and bilateral agencies, and is often supported by aid money and even loans.

But there is little research evidence about the impacts, strengths, and weaknesses of NQFs, particularly for developing countries. Most documents and publications about qualifications frameworks include suggestions about what qualifications frameworks are *supposed* to achieve, but often give little information about the problems which have occurred with their implementation, or evidence of actual achievements. In this context, the International Labour Organization designed an international comparative study, the first of its kind, hoping to answer two primary questions:

To what extent are qualifications frameworks a way of achieving the various desired policy objectives associated with them?

What models of qualifications frameworks and which implementation strategies and approaches (including broader policy agendas and institutional

arrangements) are most appropriate in which contexts, in order to achieve the various desired policy objectives associated with qualifications frameworks?

Sixteen case studies were produced, on qualifications frameworks in Australia; Bangladesh; Botswana; Chile; England, Northern Ireland, and Wales; Lithuania; Malaysia; Mauritius; Mexico; New Zealand; Russia; Scotland; Sri Lanka; South Africa; Tunisia; and Turkey. This is the first international study in which detailed case studies have been produced to attempt to understand how NQFs are being implemented around the world, and what their impact has been. In asking these questions and examining them through actual country experience, this study made an important contribution to an under-researched but increasingly important policy area. The full report has been published by the ILO (Allais 2010), and is also available at www.ilo.org/skills. This paper presents some of the findings and insights from the study.

Selection of cases

The selection of cases was based on an attempt to balance a range of criteria. Firstly, countries were chosen to ensure inclusion of four regions: Africa, the Americas, Asia and the Pacific, and Europe. Within regions, cases had to meet the criterion of there being at least some progress in terms of implementing an NQF, so that there would be something of substance to research. The study also aimed to include countries which were outside of the Anglophone tradition which has dominated a lot of NQF literature. The selected countries also represent a wide spread of levels of economic development, and a range of differences in terms of geographical and population size, and so on.

Five cases were included because they have been in the forefront of the development of NQFs, and are sometimes referred to as ‘first generation NQFs’, or ‘early starters’: Australia; England, Northern Ireland, and Wales; New Zealand; Scotland, and South Africa. The first ever officially-titled NQF was in New Zealand. This was followed closely by Australia and South Africa. Scotland, though, is often seen as preceding these three countries, even though the Scottish Credit and Qualifications Framework was officially launched in 2001, because the reforms which led into the framework began in the 1980s. Shortly after the first of the Scottish reforms, in 1987, the National Vocational Qualifications (NVQs) were launched in England, Wales, and Northern Ireland. The NVQs have been used as the model for many qualifications frameworks around the world, and were the first national attempt to base vocational qualifications on the idea of competences or outcomes. Although they have been criticized and changed in various ways, they have been very influential, and were therefore included in this study, without the inclusion of other developments with regard to qualifications frameworks in England, Northern Ireland, and Wales.

The histories of all five of the early frameworks are important: their different origins and aims, how the frameworks were implemented, what changed as implementation progressed, and what, looking back, was achieved. They are important because despite substantial differences between them, and despite limited evidence of what qualifications frameworks have actually achieved, policy-makers in ‘later starter’ countries have tended to look to the five ‘early starters’ for models to follow.

Malaysia, Mauritius, and Botswana can be described as ‘second generation’ NQFs; although they are relatively new, in all three countries there was some history to be examined. Sri Lanka, Turkey, Lithuania, Tunisia, Bangladesh, and Russia have more recently started developing qualifications frameworks, with Russia being the most recent. In these instances, the focus of the study was on how the frameworks are being developed, as impact and even use could not yet be considered.

The study also deliberately included two countries which have not yet started developing national qualifications frameworks, but have many years experience in developing frameworks of occupational competencies, Chile and Mexico, having started work on the development of Labour Competence Frameworks in the late 1990s. The frameworks of occupational competencies in these countries have much in common with NQFs in other countries, and sharing lessons from Latin American countries was seen as important. Vargas (2005) argues that the competency-based training systems in many of these countries can be seen as part of the long term development of NQFs, and indeed, the English NVQs were directly drawn on in both countries.

Two additional countries were selected: Colombia and Germany. Unfortunately, reasons beyond our control led to these case studies not being completed.

Practical considerations also affected the selection of countries—primarily, locating appropriate researchers in a very short time frame. Individual researchers were expected to have a minimum of three years of professional experience at the national level in education or skills development research or policy implementation, demonstrated ability to undertake research and excellent analysis and writing ability, proven ability to be constructively critical and objective, knowledge of local policy environment, and ability to secure meetings with key role players. One of the more challenging criteria was to identify researchers who were knowledgeable about skills development systems in those countries but had not been directly involved in the development or implementation of NQFs and thus were more easily able to take an objective view.

Data collection and analysis

The case studies on the five ‘early starters’ were produced on a review of literature. As qualifications frameworks in these countries have been under implementation for some time, there is a broad existing body of research, literature, evaluations, policy analysis, and official documentation, on the basis of which the case studies were produced. The 11 remaining case studies were based on fieldwork that was conducted by researchers contracted by the ILO (Bangladesh, Botswana, Chile, Lithuania, Malaysia, Mauritius, Mexico, Sri Lanka), and the European Training Foundation (Russia, Tunisia, Turkey) who partnered the ILO in this study.

Researchers were asked to provide an analytical description of why a qualifications framework was decided upon, how the qualification framework in question has been/is being designed, the progress that has been made, and the problems that have arisen. Researchers were asked to focus on the main design features of the qualifications framework, the ways in which it is intended to achieve its objectives, and how it will overcome weaknesses of the existing qualification system. They were asked to comment on the likelihood of their respective framework achieving its goals and what changes might be needed. Researchers were asked to learn from employers, training providers, workers, government agencies the extent of their use of the qualifications frameworks and the extent to which they felt it was serving their needs. Exploring the extent of the use of the qualifications framework was a necessary first step to exploring how well they were achieving some or any of their broader goals. If the framework in question was still in the initial stages of development, researchers were asked to attempt to understand the extent to which stakeholders feel that, given the design and implementation strategies, it is likely to be used and to succeed in achieving its objectives.

For the five case studies which were purely literature-based, researchers were asked to summarize the debates about what has and has not been achieved by qualification frameworks in their respective countries and why. They were also asked to comment on

what they saw as the lessons that might be learned from the experience of introducing a qualification framework for countries at very different stages of political and economic development. For the other 11 case studies, fieldwork was conducted in two stages. For the first stage the focus was on a description and analysis of the qualifications framework and on the existing system of qualifications that it is designed to reform. Researchers collected and summarized official documentation, and conducted interviews with key officials. For the second stage, the focus was on implementation, use, and impact of the qualifications framework. Interviews were conducted with a wider range of stakeholders and important role players/users, with a focus on understanding the use, implementation, and impact of the qualifications framework (in some cases this may be only in the implementation stage), as well as further information on what those interviewed felt the framework would achieve. Key interviewees included union and employer representatives.

A mid-research intensive workshop was conducted with researchers, senior advisers, and ILO and ETF staff, and draft research report was discussed by a workshop of an international experts meeting held at the ILO from 13-14 May, 2010.

Analyzing qualifications frameworks is complicated—and many of the complexities are captured in the full report (Allais 2010). As the case studies confirmed, there is great diversity in the types of policies which go by the name of an NQF. Understanding what is involved in qualifications reform and its likely consequences is complicated. There are few, if any, places in which successes and failures of the framework are brought together in a clear and accessible format for practitioners and policy-makers in the countries themselves, or in other countries, to learn from. What constitutes success is also contested, and it is difficult to clearly argue whether or not a success can be seen as due to the NQF or to other policy or institutional reforms. Impact analysis of any policy is a highly contested and complex endeavour, and one which seldom enjoys the existence of a clear base line with regard to well developed indicators. Starting from the assumption that qualifications frameworks may differ substantially in different countries, with respect to aims, design, development, approach to implementation, and use, specific evaluation criteria were not developed. Instead, researchers were asked to focus on three main issues:

- What systems or approaches exist for monitoring or analyzing impact? How do the designers and managers of the framework expect to see and evaluate impact?
- Is there, in the view of designers and managers of the NQF, evidence of impact, and what is it?
- How do stakeholders view impact? What do/did they expect from the NQF, and did it meet/is it meeting/do they think it is likely to meet their expectations?

Researchers were provided with an indicative list of possible positive and negative outcomes, and possible indicators for them.

Limitations

As with all research, this project had considerable limitations. Perhaps the most substantial limitation was time: the research was conducted and completed in less than a year, giving case study researchers and lead researchers severe time constraints. This inevitably limited the amount of information which could be collected, the amount of analysis which could be conducted, and the possibility of engaging with theoretical literature and available documentation on NQFs.

Any comparative educational research is a limited, complex, and fraught endeavour. There are difficulties of terms used in different ways, as well as institutions, systems, and processes which are taken for granted inside a country and not made explicit, but may lead the same policy to be manifested very differently. As Noah and Eckstein (1998) point out, even if studies are ‘merely’ descriptive, a tremendous amount of effort has to be exerted simply to acquire systematic parallel data on different educational systems. Qualifications frameworks are particularly problematic as they are arguably the product of global comparisons and internationalization as much as they are an object of study within these areas.

Another limitation was that many of the qualifications frameworks were in the early stages of development. More was learnt about design and implementation of qualifications frameworks than about impact. A further limitation was that researchers in many instances tended to interview the experts who were involved in the design and implementation of the NQF, arguing that others did not know enough about the area to comment on it. This leads to a tendency to assume that NQFs are at the centre of policies and practices of education systems.

Inevitably, then, the conclusions which can be drawn from this research are tentative, open to revision, and raise many more questions.

Despite these limitations, this research provides important information and analysis about a policy mechanism which is untested, and yet being adopted with increasing enthusiasm. Strong claims continue to be made about what NQFs can do. This research makes some initial contributions to understanding whether they have in fact achieved their objectives, and how.

Aspirations and achievements

Countries seem to have similar reasons for introducing qualifications frameworks. This in itself is an interesting finding, because the countries in this study had dramatically different contexts and histories. They included wealthy industrial (or ‘post-industrial’) countries and poor developing countries; small islands and the largest country on earth; countries with very small populations (1 million) and countries with very large populations (150 million); the 2nd highest ranking country on the United Nations Human Development Indicator list, and the 146th ranking country. All these countries are attempting to introduce qualifications frameworks, and in all of them, stakeholders and policy makers talk about them in similar ways, seeing them as mechanisms to improve communication of existing qualifications systems; increase transparency of qualifications; improve relationships between education and training and labour markets; support learners to move between sectors as well as to enter or re-enter education and training; enable the recognition of prior learning; improve quality as part of quality assurance systems, as well as by involving industry in the setting of standards or learning outcomes; increase the flexibility of provision of education and training; and increase the status of qualifications from vocational education and training and workplace-based training. These goals are in turn linked to even more ambitious goals for improving relationships between education and the economy, and in turn improving economic competitiveness and lowering unemployment levels.

There were, of course, differences of emphasis. Perhaps the biggest difference is between cases where frameworks are seen as ways of clarifying and improving existing arrangements, and where they are seen as tools for reforming education and training, developing new qualifications, and stimulating or enabling the development of education and training. Some countries aimed for improving how their qualifications system is used

and understood, while other countries were more focused on achieving transparency for individual qualifications. There were also differences with regard to the level of expectation placed on the framework.

There is a stark contrast between the hopes and dreams that countries have when they introduce qualifications frameworks, and the stories uncovered in this research. The case studies conducted tell a range of different and interesting stories, but the one message they seem to have in common is that the ambitious expectations about what qualifications frameworks can achieve in relatively limited time periods seem to be ill-founded.

Our research found little evidence that NQFs are achieving their goals. In many instances this was because NQFs are a recent intervention, and it may be simply too early to tell. It could also have been the failure of our researchers to locate available evidence. Nonetheless, the absence of clearly available evidence of successes, particularly for the older frameworks, is an important finding for a policy that has been so widely accepted internationally. Some specific evidence of qualifications frameworks having failed to achieve their goals was found. Considerable evidence of difficulties associated with implementation was found. The framework which emerges from this study as the most successful, the Scottish Credit and Qualifications Framework, had relatively limited ambitions and may also be the most difficult to replicate, especially in developing countries, because of the very long term incremental policy reform process of which it was a part, and the relatively strong educational institutions in Scotland.

The research found little evidence that NQFs have improved communication between education and training systems and labour markets. In Scotland, there are some indications of success—for example, framework is used by a national career guidance service. Most of the case studies were not able to find evidence demonstrating that employers found qualifications easier to use than they had been prior to the introduction of an NQF, nor were other data found to demonstrate that qualifications frameworks have improved the match of supply and demand between education and training institutions and the labour market. Representatives of qualifications authorities, government agencies, and industry bodies interviewed, did not have concrete evidence, evaluations, or research reports to show that there had been achievements in this regard, and publically available information from these organizations also did not contain such evidence.

With regard to articulation amongst educational providers there was greater evidence of success, although there were also suggestions that qualifications frameworks have in fact reduced learner mobility in some countries. There was some evidence of increased numbers of awards of certificates which recognize existing skills, knowledge, and abilities of workers and potential workers, although this was on a small scale in most of the countries in the study. In a number of the countries with longer experience of NQFs, a common problem seemed to be that many new qualifications (the word is used here in the sense of formal specifications related to different qualifications) had been designed and registered on the frameworks but not used.

How can the vast gulf between expectation and achievement be understood? This paper provides some of reflections and conclusions reached in this study, through an analysis of the case studies.

Tensions and difficulties

The case studies in this study, comprising many of the countries which are most advanced in terms of qualifications framework development internationally, reflect considerable difficulties. In many cases, these difficulties are related to very specific contextual factors, as well as institutional arrangements and traditions in the countries, which this research could not investigate in great depth. Raffe (2009) suggests that NQFs are more likely to be successful if, while attempting to implement the intrinsic logic of the new reforms, they recognize the institutional logics that exist in the countries. The Malaysian case study argues that NQFs are inherently dependent on established institutions, and by drawing on the strengths of institutions, NQFs can be stronger. New policies for qualifications seldom succeed in breaking enabling a particular country to break out of a particular path, as education, training, and labour market relations are deeply embedded in institutional, social, and economic relationships and realities. These contradictions are evident in some of the case studies.

There is a ‘chicken-and-egg’ kind of problem with regard to stakeholders in many of the countries: the NQF depends on the effective participation of social partners and stakeholders. But the lack of participation of social partners and stakeholders is the problem that the NQF is trying to solve. The case studies on Bangladesh, Lithuania, Sri Lanka, and Turkey all argue that more employers would become involved if more information were provided, so that they could become aware of the potential benefits; yet, the system is, in theory, designed precisely to meet their needs. Further, the definition of ‘stakeholders’ may be contested. For example, the case studies of New Zealand and South African show how bodies set up to administer and develop a qualifications framework, or sub-framework, become stakeholders in their own right—with the accompanying vested interests. This could explain at least partially why qualifications frameworks survive despite critical reviews and dissatisfaction from some key ‘stakeholders’ and ‘role players’.

What is striking in all the case studies is how little success was achieved in involving employers. It is also striking that nearly all case studies suggest that the lack of employer involvement in the existing education and training systems is a key reason why qualifications do not meet industries’ needs, and many cite lack of willingness of employers to participate in education and training systems as a reason for introducing NQFs. Many of the countries in the study had attempted to implement competency-based training prior to the introduction of a qualifications framework, often with considerable donor support. Except for one instance where the NQF was described as being created on the basis of a previously successful competency-based training reform, in most instances it was hoped that an NQF would solve the problems that previous reforms had not solved. However, in many cases the approach seems to be similar to that of previous reforms.

While NQFs are in some countries characterized as ‘employer-led’ systems, and in most are described as stakeholder and dialogue-based, it is hard to avoid the conclusion that they are driven by policy makers. The picture which emerges is patchy employer involvement, usually driven by a few major employer associations nationally or in specific sectors, in most instances weak trade union participation, and in most instances (with the strong exception of Scotland) antipathy from educational institutions. The case studies on Malaysia and Turkey reflect some positive experiences with engaging employer bodies, although some sectors have not been involved. In Russia there is a strong role for industry, as the NQF is driven through the Russian Chamber of Industry, and a National Agency for the Development of Qualifications has been established in the

Russian Union of Industrialists and Entrepreneurs. This agency has developed a model for the development of sectoral frameworks based on the national framework of levels and level descriptors. What is not clear, though, is how this initiative will be coordinated with the many other initiatives trying to improve or reform the various classification or regulatory systems and mechanisms.

An interesting irony can be observed in the systems under design in Lithuania and Turkey, where, because of a strong focus on the introduction of accreditation and contractualization, and separating assessment from provision, both countries seem to be moving *away* from a centralized assessment model whereby the Chamber of Industry and Commerce plays a major role in the assessment system.

A considerable problem for industry involvement in many of the countries was involvement of trade unions. There were instances where trade unions had strong aspirations for what qualifications frameworks could do for their members and workers in general, and instances where trade unions were not involved, or were disillusioned with qualifications frameworks. The weakness of trade unions in many countries was a particular concern. If employees' interests are going to be addressed in NQFs or other education and training policies, clearly there needs to be more public concern for building and supporting the involvement of trade unions.

Some countries see NQFs as ways of getting employers to contribute to the financing of training, assessment, and certification. The difficulties with employer involvement as well as lack of take up of qualifications and competency standards is cause for concern about the likelihood of this being achieved. It is also in contradiction with the fact that employers see NQFs as ways of getting governments to publicly fund assessment systems for the workforce. Another contradiction with regards to financing is that while NQFs are argued to be necessary to increase access to education and training, they are often associated with the introduction of user fees, both for training, and for assessment and certification.

Even the role of government in qualifications frameworks was contested and contradictory. There were instances of strong support from governments, instances where governments appeared to not be in the driving seat, and instances where different government bodies were at odds with each other.

The experiences from the various countries in the study suggest that far more thought needs to go into considering what roles different stakeholders can and should play, in what types of structures, and in which processes. Mexico's Labour Competence Framework, for example was initially developed through a complex project which attempted to bring all relevant stakeholders and roleplayers on board. This led to structured and arrangements which were unworkable, and power struggles among persons who had similar levels in their official positions or did not accept authority of others. South Africa has similarly struggled with stakeholder-based processes, after the failed attempt at an extremely inclusive and consultative approach. There has been considerable debate in that country about where and how stakeholder participation is useful or appropriate. In general, while stakeholder consultation is very much valued in South Africa, the new structures which have been created are not primarily stakeholder-driven, and there is a greater emphasis on expertise. Interviewees in Mauritius, including employers and representatives of private providers, stated that while they have been involved in the process it has been very time consuming and lengthy and that this impacts on the extent to which they can offer the process their full commitment. One

interviewee is reported as observing that, “I have been to 47 meetings, there are a few qualifications, and it has been two years!”

In many of the countries in the study the economy is dominated by informal employment. Although the OECD (2009) suggests that better qualified individuals are more mobile and are more likely to succeed in the informal sector than less skilled individuals, the need for qualifications in this context is arguable. The case is sometimes made that recognizing workers’ skills, and giving them qualifications will help them move to the formal economy, but this presupposes that there are jobs in the formal economy to which they can move. Many other policy interventions would be required in order to build the formal economies of countries.

There is considerable focus in NQF policies on awarding workers with certificates for skills that they have, in the hope that this will increase their prospects, and encourage further study. Our study found firstly, that this is a costly and expensive endeavour (even relative to training), that numbers of certificates awarded were generally relatively low, and that the value of such certificates was questionable. A poignant example from the case study on Botswana. Government agencies went to considerable lengths to design standards for traditional dancers, assess individual dancers, and, with much ceremony, award them with certificates. But the dancers found that, having obtained these certificates, all that they were qualified to do was be traditional dancers—something they were already doing, with out the certificate. There were instances, such as in Chile, where workers felt gratified by the certificates. But clear evidence of increased prospects in the workplace or encouragement and enhanced ability to further studies was not found.

The role of education and training institutions was a point of concern in the study. In many instances, how educational institutions and systems are governed and managed is affected by NQFs, and in turn, existing governance structures at times conflict with NQFs. Many of the case studies reflected dissatisfaction from educational institutions with regard to NQFs and related reforms. This leads to an interesting irony where employers see the frameworks as something coming from education institutions, and dominated by educational thinking, with which they are being asked to comply, but education institutions see frameworks as something alien, coming from industry.

In many of the countries education and training providers are described as ‘offering resistance’. In Sri Lanka, for example, it is argued that institutional traditions and the previous culture of training delivery interfere with the introduction of new systems and measures for quality control and accountability. This is attributed to earlier independence in determining the content and non-accountability for content or quality of training, and internal and external efficiencies not being visible to external third parties. It is also reported that trainers are very concerned that sufficient funds will not be forthcoming to make implementation possible. Some trainers claim that the new curriculum is a straitjacket and is unrealistic given existing resources. The authority in charge of the Labour Competence Framework in Mexico argues that the competency-based approach has not permeated education and training in Mexico because of the ‘rigidity’ of educational institutions. In Turkey the Qualifications Authority anticipates that there may be resistance from those who it describes as having a monopoly in some sectors for training provision, testing-assessment, and certification. The Lithuanian study suggests that it is higher education providers who are likely to resist working with occupational standards (as happened in New Zealand). In South Africa and New Zealand dissatisfaction of providers, particularly in higher education in New Zealand, was a key factor leading to the collapse of the original NQFs. The new NQF in South Africa looks as if it will be much closer to educational institutions, and reflect their concerns more

directly. The countries in which providers seem to be the most supportive are Malaysia and Scotland, where the NQFs are driven by either providers or educational agencies such as awarding bodies and quality assurance agencies. These studies also emphasize that 'providers' are not a homogenous body. Some clearly have more power than others, and they may therefore have different relationships with qualifications frameworks and authorities.

This raises many questions about educational institutions: Are educational institutions just another stakeholder in education and training systems? Are they just users of systems which should be designed by others? What motivates people who work in educational institutions? What types of arrangements are likely to lead to high quality education? Should policy not be more focused on improving or supporting education and training institutions? These questions which policy makers and development organizations may want to consider when designing interventions.

Other contradictions which surfaced were, for example, that the study on Russia described a strong culture of valuing formal education in that country; even regulatory frameworks specify that qualifications must be linked to formal education and training. This conflicts with the desire to recognize prior learning (although it is obviously valuable to strongly value education). Similarly, in Lithuania, educational awards are very strongly linked to time spent studying. There is no experience in developing or offering modular based programmes that could enable learners to move between institutions. While the study on Lithuania suggests that this is a challenge that needs to be overcome, there is much debate in the research literature on the value and possibility of modularization. In addition, in Lithuania there is a history of a centralized system, a command economy, and little social dialogue. The case study suggests that even industry at times argues that government should regulate human resource development with state planning, based on the old central planning models. There are difficulties for employers to be involved in training or supporting vocational education and training institutions schools unless all employers buy-in to it, as poaching is a concern, and working with these institutions is an investment in time. (However, poaching is even more likely to be a problem in more free market systems.) Similarly, Sri Lanka has a history of a large public sector run economy with centralized systems of education and training.

The desire to promote short courses and greater responsiveness on the part of providers may be in tension with the desire for more regulation, standardization, and quality in context of many different providers. While unit standards or competency standards are supposed to lead to flexibility, in some cases they are seen as rigid. The desire for making educational programmes shorter in order to meet short-term requirements of the labour market (described as cost-effective quick start/accelerated short-term employment-oriented training activities for priority jobs) may conflict with the idea of improving quality, and may make it less likely that learners who complete qualifications will acquire a sufficient basis to move up the education and training system. Some countries are trying to use NQFs as a way of developing the supply of lower level technically qualified workers. This may be in contradiction with the 'knowledge economy' idea of 'knowledge workers', and seems more related to deskilling and subcontracting than the broad notions of improving skills levels in the NQF rhetoric.

Another problem which emerged through some of the case studies is that the various aims of qualifications frameworks can be in tension with each other. In Malaysia, for example, industry is largely happy with the skills qualifications, but policy makers feel that learners need pathways to higher levels of skills, and that the current qualifications set-up does not allow this. But improving pathways between vocational education and

training and higher education may be in conflict with improving pathways between education and training systems and the labour market. In Scotland, as Higher National Diplomas became more accepted as a route to a degree, they started to lose their character as an exit qualification leading into employment. This is a tension that many countries have to face. Improving the possibilities for progression from vocational education to higher education is a major way of improving the esteem with which vocational education is held in society, and the likelihood that learners will enroll for vocational education and training programmes in countries where it is not well regarded. This is a feature of all countries, even those with highly respected systems of vocational education and training; however, it is likely to be particularly true for developing countries as in the case of South Africa. However, equally important, or perhaps more important, may be changing the conditions, remuneration, and career paths in the working world.

Finally, there is an inherent tension between the desire to classify and describe all competences and all qualifications versus the desire for simplicity and transparency. Some frameworks end up with thousands of qualifications; as a consequence, detailed stipulation of occupational standards and qualifications at all levels leads to very long and cumbersome documentation.

Learning outcomes

Claims about the role of learning outcomes in reforming qualifications and thereby education and training systems are at the heart the development of NQFs. Outcomes-based qualifications are seen as a way of driving curriculum reform, changing the management and delivery of education and training systems, and changing the processes and bases for awarding qualifications, thereby improving relationships between education and the labour market, as well as achieving broader socio-economic goals. In theory, decisions about which level to place a qualification at are based entirely on an analysis of the competencies or learning outcomes comprising a particular qualification, particularly as these are in fact supposed to be designed based on the level descriptors.

The main mechanism to create transparency in most of the countries is the specification of learning outcomes or competency statements, as well as broader outcomes in level descriptors. Official sets of levels have been created in all the countries, and level descriptors in most of them. While there are considerable expectations about what level descriptors can achieve, the study found little specific evidence from any of the countries that they are useful in making decisions about the location of qualifications on the framework, or about credit transfer, with the exception of Scotland, where they are described as assisting professional judgements.

As discussed above, the intention in many of the countries is that once industry is involved in developing qualifications, the standards or outcomes will be more appropriate, more learners will get better jobs, and industry will get the skills that they require. In most countries there is *some* evidence of increased involvement of employers in *defining* qualifications and *identifying* valuable knowledge and skills. As discussed above, in all countries, participation of employers in the processes of identifying skills needs and defining outcomes and qualifications is mixed, with more success in some areas than others.

All qualifications in some sense involve outcomes—because they represent a statement about what the holder knows and can do, and therefore are an outcome of *learning*. Educational ‘outcomes’—such as, how many people have qualified to become engineers in a particular year in a particular country, or what the graduation or throughput rate of a

particular institution is, or what levels of mathematical ability are obtained by school students—are obviously of concern to all governments. Furthermore all NQFs seem to work with the notion of learning outcomes, albeit in different ways. But in some instances NQFs attempt to use outcomes in a very specific way, as providing an exact and transparent description of occupational competences, and at the same time, providing an exact and transparent basis for the development of learning programmes, for the conducting of assessment, and for evaluating educational quality. The National Vocational Qualifications in England were the first clear example of an attempt to use an NQF in this manner. Many countries have subsequently attempted to use qualifications frameworks in this way in vocational education and training. In the current study, the frameworks in Botswana, Bangladesh, and Sri Lanka could be seen as largely fitting within this approach in terms of how they have been designed, as can the vocational sub-framework in Australia, the skills sub-framework in Malaysia, and the vocational sub-framework in Mauritius. The South African and New Zealand NQFs initially attempted to use this type of approach for all qualifications at all levels. The Turkish, Chilean, and Mexican frameworks also fit within this type, although initially focused on assessment of workplace learning (and training in Turkey), with only indirect attempts to change the education and training systems. What seems to be in common in these countries is high expectations about what qualifications frameworks and outcomes-based qualifications can achieve. For example, in Bangladesh, the Technical and Vocational National Qualifications Framework includes a specification of pre-vocational qualifications. The hope is that once qualifications have been specified, provision will be developed using them, as institutions take them up and start offering them, thereby increasing access to education and training.

In many cases the implementation of outcomes or competency-based approaches seems to necessitate very elaborate and detailed rules and specifications, which may account for why so many qualifications and competency-standards were developed but not used. Many of the current studies (as well as other studies on NQFs and competence-based assessment¹) show that outcomes or competence statements tend to proliferate over-specified, detailed, unwieldy, narrow documents which are supposed to be the basis for assessment. The very length and complexity of the standards makes them relatively unintelligible to anyone other than those involved in standards design. This is often the reason for qualifications not being used at all. Where they are used, it leads to narrow forms of assessment which drive fragmented learning experiences. In theory the problem of over-specification could occur in any area or practice which is regulated by performance statements. But the specific problem within education and training is the structure of educational knowledge. A rigid separation of outcomes and competences from syllabuses or learning programmes has been shown to lead to the marginalization of the knowledge that learners can acquire (Allais 2007a; Wheelahan 2010). Forcing curricula to be ‘designed down’ from outcome statements trivializes knowledge, and can easily reduce it to pieces of unrelated information. This may explain the low take-up of such qualifications in general and particularly at higher levels. It is also in direct contradiction to policy goals related to ‘knowledge economies’ as well as broader notions of raising educational levels of the workforce, as it leads to narrow qualifications without theoretical components.

¹ See for example, Wolf (1993; 1995; 2002), Allais (2007a), Young (2005), Lugg (2007), Wheelahan (2010; 2008)

The case study on the English NVQs points out another raised by researchers in the United Kingdom: that assessment is always about making inferences on the basis of performance. Even assessment in workplaces does not show how a given candidate will perform when the assessor is not present, or in a slightly different situation, or even, simply when the candidate is asked to repeat the same task. In an outcomes-based framework assessors have to draw inferences about the underlying competence of the candidate, based on their performance. It is never a straightforward matter setting an assessment task, or judging a candidate on one. There may be situations in which assessment which concentrates on knowledge and understanding may provide better grounds for inferring competence than a specific number of observable performances, and implies that this is more likely to be the case the higher up the qualification ladder one proceeds. The case study also argues, in direct contradiction to the claims often made by advocates of outcomes-based qualifications, that knowledge of the learning process which leads to an outcome may in many instances be essential in order to make a reliable judgement about an observed performance.

The studies on the English NVQs, the South African NQF, and the Mexican Labour Competence Framework suggest that employers often prefer old, 'tried and tested' qualifications, even when industry was involved in the design of the new qualifications.

There seems to be some acceptance that the Competency-Based Training model or a strong outcomes-based model will not work for full time schooling and higher education. In South Africa and New Zealand where it was attempted, Ministries/Departments of education have reverted to syllabus/curriculum-type models. However, the NVQ experience, as well as the problems experienced in Botswana and Mauritius, suggest that even when this approach was confined to vocational education and training it has experienced difficulties. With regard to the Competency-Based Training system in Australia, reviews have argued that the training packages are too detailed and lengthy, and are not user friendly to educators, and that they have outlived their usefulness. The Labour Competence Framework experience in Chile and Mexico also suggests that this approach has experienced difficulties even for the much more limited aim of enabling recognition of existing skills in the workforce. And the Australian and Botswana studies suggest that if this approach is used in vocational education and training and not the rest of the system, this introduces a new division between schooling and vocational education, and between vocational education and higher education. This could further accentuate the low status of vocational qualifications.

These difficulties raise questions about the future possibilities for NQFs. Can NQFs be designed without learning outcomes? Can broader notions of learning outcomes be used? Can NQFs be developed through broad statements of outcomes or competencies that avoid the problems of the over-specified models? It may be the case that NQFs are inherently linked to outcomes (or some other generic form of description which leads to similar problems). It does seem as if broader notions of outcomes or competence, either, say, in the form described in the Scottish case study, or in the traditions in countries such as Germany, seem to be better. 'Better' here is used in the sense that they have broad acceptance, and seem to be used. The Scottish case suggests that outcomes can inform and aid professional judgement, although they cannot replace it. This broad understanding of outcomes cannot, and usually does not claim to, achieve the specific claims about transparency of qualifications claimed by some NQF advocates. This implies limitations to what NQFs can achieve. In developing an NQF the only alternative to outcomes or generic descriptors of levels is for the levels of qualifications to be determined primarily with reference to existing qualifications, and the accepted

relationships among them. Of course this is a circular solution, and does not provide a mechanism for resolving disputes. On the other hand, in practice, this approach is used to some extent even in outcomes-based NQFs; in practice, level descriptors and outcomes do not replace implicit and generally accepted judgements, although they may make it possible to challenge these judgements. Decisions in the end revert to balancing professional judgements and stakeholders' (especially employers') ability to assert their interests.

Accreditation systems in the context of weak provision of education and training

The case studies on the English NVQs, Australia, Botswana, New Zealand, Russia, South Africa, Sri Lanka, and Turkey, suggest that governments tried or are trying to use outcomes-based qualifications frameworks to shift what was/is seen as a 'provider culture' or a 'provider captured' system, to a 'user-led' or competition-based, marketized system. This can be located within broader trends in public sector reform, such as new public management. My own research (Allais 2007a; 2007b), as well as Phillips (1998) and Strathdee's (2009) research on New Zealand, suggest that NQFs may indeed be primarily about neo-liberal public sector reform, using outcomes as the basis of a regulatory role for the state, and emphasizing governments contracting rather than providing education. With regard to the English NVQs, the broader neo-liberal programme of the government was also explicit, as government was directly trying to reduce the influence of trade unions and increase provision, competitiveness, and efficiency, through a marketization strategy. In Australia, unions were a key part of the process that led to the establishment of the qualifications framework, but even here the policy aimed to explicitly develop a market in education and encourage 'industry-led' competency-based qualifications that were independent of educational providers in vocational education and training.

Here (and in many other instances) Scotland is an outlier—although it has not been free from neo-liberal influences it has a stronger tradition of free public provision of education, and its more consensual political culture may have allowed educational providers and professionals to retain more influence. Sri Lanka has a strong government-based delivery system, but is trying to shift towards a greater regulatory role, and sees the NQF as part of this process. What is common in many cases is an emphasis on treating state and private institutions in the same way through contractualization and the introduction of accountability measures in the belief that this will increase efficiency and effectiveness. However, managing contracts and evaluating the performance of contracted institutions, whether public or private, demands enormous regulatory capacity from the state as well as possibly leading to many additional expenses for the various players in the education and training system. For example in Lithuania, each school would have to contract assessing institutions to conduct assessment for each of their programmes. In addition, 'management by contracts' could lead to inefficiencies and perverse, albeit unintended, consequences, such as lack of coordination among the different systems. For example, in Mexico because the criteria to become an assessing or awarding centre are stringent, there are few assessment agencies, and these bodies charge high prices for assessment. The National Council for Standardization and Certification of Labour Competence would like to relax the criteria, to widen the assessing and certification possibilities, but there are concerns about relaxing standards. Industry representatives interviewed in Lithuania argue that competition between providers may be unhealthy, and that the introduction of a market-based competitive system can fail to make use of the experience and know-how of established bodies and lead to a big waste of financial and human resources. In the case of assessment, the Chamber of Industry

feels that it has exceptional experience in the assessment of competences and has a regional structure which covers the country.

One of the problems with competence based approaches is that setting up a viable accreditation system is a costly endeavour, and is based on the assumption that bureaucracies which are putatively incompetent at delivering good training are likely to be good or at least better at contracting it out and managing quality, or, that new institutions created for this purpose will be able to do so with no track record or institutional history. Conducting meaningful institutional quality assurance is very costly and time-consuming, and demands high levels of professional capacity amongst staff. In the context of vocational education systems which are underfunded, countries need to make serious choices about the contribution that quality assurance can make to improving quality, and the extent to which their focus should be on improving institutional capacity. The model (as in the South African NQF and NVQs) of individual assessors and verifiers turned out to be complicated and unwieldy, and was not successful in guaranteeing reliability and quality. In many instances, there has been a return to national examinations.

The case studies in this study, comprising many of the countries which are most advanced in terms of qualifications framework development internationally, reflect considerable difficulties. In many cases, these difficulties are related to very specific contextual factors, as well as institutional arrangements and traditions in the countries, which this research could not investigate in great depth. Additional problem with a focus on outcomes, quality assurance, and accreditation, is that they could shift attention away from learning processes, and the need to build and support educational institutions. Quality assurance systems do not *build* quality, they build procedures that claim to measure quality. But they can end up being a substitute for building quality. Poorer countries, and countries with weak institutions, may find themselves facing a whole new set of problems if they rely too much such mechanisms. This issue may be most stark in TVET, where considerable infrastructure of workshops and other facilities is required in order to ensure quality. Models which narrowly link funding to learner enrollments and outcomes-based qualifications may not encourage institutions to take a long-term perspective, or provide the necessary incentives for building and developing institutions. NQFs are often introduced with the aim of promoting the ‘autonomy’ and ‘empowerment’ of TVET institutions. However ‘autonomy’ without increased capacity, without increased financial support, and with a series of new ‘accountability’ requirements may turn out to be rather less empowering for institutions than is claimed, and governments may not get the desired results.

Loose (2008) argues that one of the biggest problems with the promotion of competency-based training in developing countries is that these countries have been in desperate need of an effective training system which includes the development of institutions, programmes, and curricula. These are just the things that competency based training does not address: it provides “*the definition of competencies and the methodology for assessing them*”, but it *failed* to provide the “T” in CBET, a learning process as the basis for the creation of *training* itself” (Loose 2008, p. 76, emphasis in original).

These doubts about competence-based approaches suggest that it may be more useful for poorer countries, or countries with weaker education and training systems, to concentrate on building or supporting institutions that can provide education and training. Similarly, poorer or weaker states should be cautious when assuming that adopting regulatory models which rely on contracts and accountability mechanisms will solve the problems that they have had in delivering education and training.

Policy borrowing and internationalization

NQFs have been the object of considerable policy borrowing internationally. Models, titles and formats of qualifications, level descriptors, statements of competence or unit standards, structures, processes, and sometimes entire NQFs are 'borrowed'. The borrowing country tries to replicate what it saw in the original country, sometimes adapting it, usually because official documents in the origin country make strong claims about what policy-makers hope will be achieved. But, in most instances, what is not available from the official documents, or even easily found out, by the policy borrower, is whether or not any of the aims of the NQF in the origin country were achieved. If some of the goals have been achieved, what is also not apparent from official documents is what led to success - what were the conditions, contexts, other policies in place, processes, and so on, in the origin country.

Official documents do not capture for the outside world the debates, conflicts, and problems experienced in a particular country. This is compounded by the fact that qualifications frameworks clearly touch on important power relations in each country, whereas official reports tend to be political documents, designed to present a consensus. But, from the point of view of policy borrowing, the consequence is that the policy borrower often does not see the problems. An important lesson from the case studies in this research is that things are 'never as they seem'. Often what is borrowed is a snapshot of a moving target. NQFs are complex, dynamic, and evolving policy instruments. All the NQFs have seen changes and developments and in some cases very substantial changes. This is important because often what is 'borrowed' or 'learnt from' another country is the model as it is described on paper at a particular time and the desirable goals associated with it, and not the model as it was implemented in practice with all the problems, experiences, and changes made to the model along the way. Policy borrowing can be dangerous, especially without the full picture in the country that is being borrowed from, and careful consideration of differences in contexts.

Policy borrowing emerged as a strong reason why NQFs are being introduced, as well as playing a significant role in how they are being developed. Many countries appear to be influenced more by the claims made about NQFs in other countries than by their proven track records, without considering differences in contexts, and without understanding all aspects of how the framework was developed and implemented. The English National Vocational Qualifications in particular were mentioned in many of the country studies as having played an influential role in the adoption of NQFs or competence frameworks. Donor and development agencies seem to play influential roles, in some cases with regard to decisions to adopt a framework as well as which model to adopt, and in others with financial support.

The English NVQs are widely seen as a problematic model within the United Kingdom, and have been changed many times since their introduction. One of the consequences of the English NVQ model was to perpetuate and even accentuate a view of vocational qualifications as inherently inferior to those obtained at school or university. One of the striking findings of this research, therefore, is how much this model has influenced other countries, and how it continues to be used in some of the most recently developed NQFs. It may be significant to note the obvious: that the first five NQFs, and the models of NQFs which have spread to many other countries, emanate from five English-speaking Commonwealth countries all of which have liberal market economies, which influenced each other and which have education systems with a partly shared history. But the spread has not been limited to the Anglophone world, as the Labour Competence Frameworks in Chile and Mexico both were very influenced by the English

NVQs. It also seems possible that, paradoxically, countries with more regulations of occupations may be seduced by the ‘anglo’ model, which claims to provide a neat fit between education and training and labour markets.

What is equally striking is how the same problems seem to have occurred in many of the countries which have adopted this model. The NQFs in New Zealand, South Africa and Botswana, the vocational component of the NQF in Mauritius, and the Labour Competence Frameworks in Mexico and Chile have all encountered considerable difficulties, and all of them have very few concrete achievements to show. As in England, Wales, and Northern Ireland, in all these countries, qualifications were created, but very few used. Providers in the main continued offering existing qualifications. However, policy makers and technical experts elsewhere, such as in Bangladesh and Sri Lanka seem to be confident that they will be able to overcome the problems that other countries have experienced with the NVQ model. There are, of course, differences in how these countries are adopting NQFs, as will be discussed in the following section. For example, centrally developed curricula and assessment instruments are an important feature of the Sri Lankan system, as opposed to the decentralized assessment attempted through the English NVQs and the South African NQF.

Often, as the case study on the English NVQs points out, a policy is designed to overcome or alleviate particular problems that have arisen in a particular historical and political context. But, when aspects of the policy are adopted elsewhere, these contextual factors are easily forgotten or remain unknown. The Botswana study argues that Botswana borrowed models from countries like New Zealand or South Africa, without taking time to learn what happened in those countries. In Lithuania and Russia, stakeholders are described as tired of reforms which are perceived as borrowed, and tend to be passive and indifferent to them, or see them as leading to more administrative work and bureaucracy.

The case study on Scotland suggests that the Scottish framework has gained “an almost moral authority among NQFs”. Aspects of the Scottish framework, such as its level descriptors, are used (sometimes in an adapted form) around the world. But what appears in an official policy document will inevitably play itself out in different ways in different contexts. For example, in addition to the fact that the Scottish qualifications framework was developed incrementally, over a very long period of time, it was developed in a *context* with strong institutions, a relatively strong economy, and relatively high employment, especially compared to many of the developing countries which are now attempting to develop NQFs. Scotland also has a small population (about 5 million) and a relatively small and homogenous policy community. The development of the qualifications framework was strongly driven by educational institutions including universities. Level descriptors developed by the people who might actually use them are more likely to be trusted, and are likely to mean something to the users, not because of how well they are articulated on paper, but because of the shared process engaged in arriving at them. Taking official documents on their own is unlikely to replicate the Scottish successes. In countries with larger populations and greater diversity and contestation among stakeholders and policy makers, the consensus which was the basis on which agreement on the framework was achieved in Scotland may be very hard to replicate. Furthermore, general statements of outcomes such as level descriptors, designed to apply all qualifications are so open to interpretation that they can become meaningless. Their impact therefore depends on the context in which they are generated and in which they are interpreted and used, and the shared understandings in a particular context. Countries which ‘borrow’ or adapt the Scottish level descriptors, without

directing energy and resources at improving the quality of their institutions, or without providing financial support for students to access education, may find that they do not play the role in improving educational standards or levels of qualifying learners that they had hoped.

As discussed above, the current study includes countries described as rich, ‘developed’, having many strong education and training institutions, and having robust economies with relatively low unemployment, as well as countries which are described as poor, ‘underdeveloped’, having weak or uneven education and training provision, and high unemployment. Yet, all these countries have developed or are trying to develop NQFs, and countries have similar goals for these frameworks. In the light of these differences, the trend of policy borrowing observed in this study is somewhat concerning. Equally concerning is the way that the richer countries and international organizations provide technical assistance which appears to provide answers without considering the country’s specific problems. For example, ‘standards’ can be written by strong professional communities to represent their shared understandings of what the required ‘standard’ is; however in other contexts writing down ‘standards’ is undertaken by consultants in the absence of strong professional bodies, strong education and training institutions, and strong social networks. Decentralizing educational provision where education and training institutions are strong and the regulatory capacity of the state is strong may have a very different effect to a similar policy mechanism in a state with weak regulatory capacity and weak or uneven educational provision. Similarly, decentralization and accreditation-based systems may be particularly seductive to poorer states, as they *seem* to reduce strain on the national fiscus. However, governments and policy makers firstly need to consider what the loss may be in terms of quality and quantity of educational provision, and secondly, the additional costs which may accompany the need for increased regulatory capacity.

Possibilities

This scope of this research did not include exploring alternatives to NQFs—there are clearly many policy alternatives that are used and have been used in many countries to attempt to achieve some or all of the goals that NQFs are intended to address (although NQFs probably claim to solve more problems than most policies do). What the study does suggest, though, is that there may be an unfortunate polarization may be being created between the role of industry and role of educational institutions. There seems to be a widely accepted idea in many of the countries that educators are not in a position to develop vocational curricula, as they do not understand what workplaces require. This leads to the idea that industry must provide the specifications for the ‘product’ that educational institutions should produce.

But all the case studies show that involvement of industry has been problematic. An interviewee from one of the qualifications authorities commented that “*the process means that industry has developed the qualification. If the training provider offers it, they know that these people will get a job because it was done by industry people*”. Practices, though, seem to be different. Students, parents, and employers, and governments value university qualifications, and therefore by extension qualifications which can potentially lead to university, and even employers do not always seem to value the qualifications which emanate from industry-led qualifications processes. NQFs in many cases (particularly where there is a strong outcomes or competency-based focus) are claimed to be *industry-led* policies. This may be a problematic expectation, as industry appears reluctant to lead. Where industry does participate, it is often not at the desired level (eg human resource personnel instead of technical experts), and in many instances, the process of developing the standards is

subcontracted out to consultants. For example, in Lithuania, where workplace-based assessment is officially conducted by the Chamber of Industry, the VET schools argue that in fact much of the work is delegated to them anyway. The Chamber mainly plays a role in organizing and coordinating. The VET schools argued that the Chamber does not have the expertise to design the actual assessments, because of lack of expertise and knowledge in the specific fields.

Besides the practical problem of getting employers to be involved, researchers have also suggested that employers may not always be able to articulate what it is that they require, and certainly are in most instances not able to predict what skills and knowledge will be required in the future². Representatives of educational institutions interviewed in Lithuania argued that the problem is not so much lack of input from employers as lack of research into present and future skills needs. In addition, educational research suggests that education and training are much more complicated processes than producing 'products' to specification. What all this suggests is that a simple, one-size-fits-all approach to education/labour market relations may permanently elusive. Instead, more success may be achieved through more flexibility.

Buchanan, Yu, et al (2009) use the notion of 'skills eco-systems' as a way of exploring both the problems and possibilities for improving education and workplace interaction. This fits well within the idea of a sectoral approach, where the focus is on not just developing qualifications, but ensuring coordinated skills, labour market and socioeconomic policies in particular sectors. Working with the needs and possibilities, as well as institutional strengths in particular sectors, probably has the best chance of success. Buchanan, Yu, et al, emphasize that trying to address training issues without addressing the nature of education and labour market structures is unlikely to be successful.

In some instances, the specification of occupational standards may help qualifications to fit better with labour market requirements. In other instances, research-based curricula may be more successful, as industry itself may not know what it will require in years to come. In other instances, professional bodies may play crucial roles. Seeing such processes as ongoing and developmental, rather than fixed quickly through standards specification, may yield better results. The case studies show that NQFs have had some success in specific sectors. The English NVQ model is described as having had some successes in some 'niche' areas and similar situation can be seen in Mexico. In both cases, specific human resource development policies and practices in the relevant industries seem to have made a big difference in achieving success. This seems encouraging for those countries that are implementing NQFs starting with specific sectors.

However, such strategies do not address the concern that governments have about investing in education and training systems which do not seem to be working, and it is this broader concern that makes policies like qualifications frameworks appealing, as they appear to provide more systemic solutions. This research, though, suggests that as desirable as this may be, it is questionable whether NQFs can actually play the roles claimed for them. Whether or not there are other 'systemic' policies which can achieve these roles is a subject for other research. For now, it is worth pointing out that qualifications will be more likely to be of appropriate quality if the needs and conditions of specific sectors and industries are considered, if funding for education and training is ensured, if education and training institutions are built and sustained over time and not

² See Wolf (2002) for a useful elaboration of this problem.

only forced into short-term responsiveness, and if broader conditions in labour markets are addressed. They are also more likely to succeed in the presence of strong professional bodies, strong labour market research, and strong trade unions, and countries could consider policies to support all of these. An issue for future research is the role of awarding or certification bodies, which the current case studies were not able to find much information on.

Financing is a key issue that NQFs bring to the surface in most of the countries. Except for Australia, the UK, and New Zealand, the NQFs in this study have been developed with donor financing and support (this will presumably not apply to many of the European countries which are now in the process of developing NQFs). Improving vocational education and training in most of the countries will clearly require clear investments in institutions—not just policies which expect them to do more with less, or believe that simple competition will drive up quality. Working with institutions to strengthen them is clearly important. Ensuring that learners can afford to access education and training, not just in terms of fees, but in terms of lost income in the case of poorer people, may be something else that countries could focus more attention on. A useful focus, then, for future research, is finding viable mechanisms and systems to evaluate the quality of provision, and mechanisms for ensuring that access is equitable.

Our research suggests that what is key, in particular for developing countries, is the need for serious consideration of policy priorities as well as the sequencing of policies. Countries that have been most successful have been those which have treated the development of frameworks as complementary to improving institutional capability rather than as a substitute for it or as a way of re-shaping institutions, and have seen outcomes of qualifications and programmes leading to them as intimately related rather than separable. Successful use of learning outcomes seems also to be based in strong professional associations and strong educational institutions. The relatively successful Scottish framework has been led by educational institutions and awarding bodies, and while it uses learning outcomes, it has a flexible approach to how they are created and used, and is described as using them in relation to ‘inputs’. Sectoral approaches for specific industries seemed more viable than attempting to create one system for all education and training and for all industries.

References

- Allais, Stephanie. 2007a. *The Rise and Fall of the NQF: A critical analysis of the South African National Qualifications Framework*. Doctoral thesis, University of the Witwatersrand.
- . 2007b. Education Service Delivery: the disastrous case of outcomes-based qualifications frameworks. *Progress in Development Studies* 7, no. 1.
- . 2010. *The Implementation and Impact of Qualifications Frameworks: Report of a study in 16 countries*. Geneva: International Labour Office.
- Buchanan, John, Serena Yu, Simon Marginson, and Leesa Wheelahan. 2009. *Education, Work and Economic Renewal: An issues paper prepared for the Australian Education Union*. Sydney: Workplace Research Centre, June.
- Loose, Gert. 2008. Can We Link and Match Training in the "Duel System" with Competency-Based Education and Training (CBET)? In *"Re-Engineering" Dual Training - The Malaysian Experience*, ed. Gert Loose, Georg Spottl, and Yusoff Sahir, 75-78. Frankfurt: Peter Lang.

- Lugg, Rosemary. 2007. *Making different equal? Social practices of policy-making and the National Qualifications Framework in South Africa between 1985 and 2003*. University of London.
- OECD. 2009. *Is informal normal? Towards more and better jobs in developing countries*. Paris: OECD.
- Phillips, David. 1998. *The switchment of history: the development of a unitary qualifications framework*. Doctoral thesis, University of Wellington.
- Raffe, David. 2009. The Action Plan, Scotland and the Making of the Modern Educational World: The First Quarter Century. *Scottish Educational Review* 41, no. 4: 22-35.
- Strathdee, Rob. 2009. The Implementation and Impact of the New Zealand Qualifications Framework. In *Learning from the Early Starters*, ed. Stephanie Allais, David Raffe, Rob Strathdee, Michael Young, and Leesa Wheelahan, Employment Sector Working Paper no. 45:65-89. Geneva: International Labour Organization.
- Vargas Zuñiga, Fernando. 2005. *Key competencies and lifelong learning*. Montevideo: CINTERFOR/ILO.
- Wheelahan, Leesa. 2008. Can learning outcomes be divorced from processes of learning? Or why training packages make very bad curriculum. In *11th Annual Australian Vocational Education and Training Research Association Conference*. Adelaide, April 3.
- . 2010. *Why Knowledge Matters in Curriculum*. Abingdon and New York: Routledge.
- Wolf, Alison. 1993. *Assessment Issues and Problems in a Criterion-based System*. London: Further Education Unit, University of London.
- . 1995. *Competence-based Assessment*. Ed. Harry Torrance. Buckingham: Open University Press.
- . 2002. *Does Education Matter? Myths about education and economic growth*. London: Penguin.
- Young, Michael. 2005. *National qualifications frameworks: Their feasibility for effective implementation in developing countries*. Geneva: International Labour Organization.