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Unitisation — Benefits and Issues

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Unitisation — benefits and issues

A paper produced for SQA by the Centre for Educational Sociology, Edinburgh University

1 Executive summary

This paper is based on a survey of documents about unitisation in a number of countries around the world. (A list of selected references is given in Annex 2.) Much of the discussion about unitisation in these documents is based either on the early days of unitisation in Scotland, or on the way that NVQs and SVQs are understood to work. The survey found that there is a lot of anecdotal evidence about the benefits of unitisation, but a lack of hard research evidence.

The survey suggests that there are a number of interrelated reasons for this lack of hard evidence:

- ◆ One reason may be the qualitative nature of most of the perceived benefits, which makes it hard to develop objective measures of success. Another may be that a number of the benefits are unplanned or unforeseen.
- ◆ The survey also showed that the effects of unitisation are very closely linked to policy on areas such as access, funding, institutional governance and other factors which bear on the supply and demand of education and training.
- ◆ The intrinsic features of each unitisation programme (such as the way Units are designed and managed and the range of qualifications being unitised) also appear to affect the effects of unitisation, although again these are often so closely associated with policy that it is hard to attribute any effect to the form of unitisation alone with any confidence.
- ◆ Finally, the success or failure of a programme of unitisation may be dependent on the beliefs, expectations and practices in the sector or country concerned. This can affect the ways in which unitised qualifications are promoted, delivered and used (eg by employers or those concerned with admissions).

All of these make it difficult — perhaps impossible — to be clear what are the real effects of unitisation and to make valid comparisons between the situations before and after the change, whether these comparisons are within a single instance (in one sector or one country) or across a number of instances.

Unitisation was introduced in Scotland with the publication of *16-18s in Scotland: an Action Plan* in January 1983 and the paper argues that, in Scotland, this unitisation started a series of radical changes in education and training in Scotland. Some of these changes appear to result relatively directly from unitisation; other seem to be more the result of associated shifts in policy, as described above. The overall result has been smooth and steady progress towards the Scottish Credit and Qualifications Framework (SCQF) and an increasingly integrated system of qualifications.

Twenty years on, many countries around the world have at least an element of unitisation in their systems, although few have opted for fully unitised systems of education and training. In that time, unitisation has tended to be replaced as a main aim by the development of national occupational standards and/or national qualifications frameworks. However, these are usually linked to the unitisation of qualifications. (An account of the origins, nature and spread of unitisation is given in Annex 1.)

The reasons given by the different countries for their reforms share many features including the following, most of which are associated to some extent with unitisation. These are:

- a) **Rationalisation and simplification:** This is about making the system easier to use and understand, for example by removing duplication of provision and reducing the number of qualifications available. Rationalisation can mean that learners have qualifications (Units) with wide currency which can be counted as components in a wider range of programmes. It can also

lead to reductions in costs. However, in general, fully unitised systems appear to be less simple and more costly in implementation than in conception and users often have concerns about the loss of specialised provision and the credibility of more generic provision.

- b) **Access and progression:** This includes improving access to education and training and improving progression routes. (These are often associated with improving the recognition of prior learning and/or introducing credit tariffs.) Unitised systems seem to be particularly advantageous to adult learners in easing the difficulties of returning to education and training: the financial cost, the time required to complete programmes, the need for staged learning and the opportunity to build up confidence. Unitised systems ought also to support the recognition of both experiential and certificated prior learning (RPL), but anecdotal evidence suggests that much of the full process of assessing and accrediting prior learning is seen as cumbersome and resource-intensive by centres and students alike and that the recognition of prior certificated learning cannot be taken for granted.
- c) **Uptake:** This may be concerned with increasing overall participation in education and training, but it is likely to be associated with the uptake of qualifications. Unitised systems are usually expected to increase participation in education and training and/or to increase the number of people taking ‘useful’ or ‘economically relevant’ qualifications. The Scottish experience supports the idea that in some circumstances unitisation can increase participation, but suggests that it may be hard to say what are ‘useful’ or ‘economically relevant’ attainments. Unitisation may be a good way to address immediate economic concerns, but focusing too much on these may make it harder to create a learning culture or increase lifelong learning.
- d) **Flexibility and responsiveness:** This is usually associated with making the system more market orientated and/or more market-driven. In specific terms it may be about making it easier for employers and providers to address skills shortages/skills gaps and making it easier for employees and job-seekers to upskill or reskill. For all users of qualifications the flexibility of a unitised system can make it very responsive, both to learners needs and to economic and technical change. In other words unitisation makes the review and revision of qualifications more manageable and cost-effective. Unitised systems also appear to make it easier to develop innovative qualifications. However, where unitisation is seen as an opportunity to rationalise qualifications, flexibility may mean making use of the manageability of Units within a relatively restricted qualifications system — as is the case with NVQs and SVQs. Each approach has benefits and disadvantages.
- e) **The quality of learning:** This is about the nature of the outcomes of learning: it may mean involving learners more in their learning and/or making the learning experience more relevant to working life. The aspects of quality of learning and teaching which tend to be associated with unitisation include: teaching which is clearly linked to prior learning and intended outcomes; and teaching approaches which involve and motivate learners and encourage them to be active in learning. Reports in Scotland, for example HMI and FE Funding Council reports, suggest that progress has been made in this respect. Another aspect of quality in provision is coherence. This has been a continuing issue in Scotland, and elsewhere in the UK, where it tends to centre on the value of group awards and Baccalaureate-type qualifications.
- f) **The quality assurance of qualifications:** This usually involves making assessment more valid, more standardised, fairer and more transparent. The systems of education and training in the countries which have adopted unitised systems or are about to do so are so diverse that it is difficult to draw any general lessons about the effect of unitisation in this area. There have been continuing concerns throughout the UK about how to maintain a balance between the desire to make assessment more flexible and the need to ensure that it is reliable. This has led to the development of quite complex verification systems and a growing level of exemplification and support. Anecdotal evidence (eg from SQA field staff) suggests that the exemplification has been widely welcomed by practitioners, but also that it is seen by some practitioners as bringing a new restrictiveness to learning and teaching. There is also a continuing concern that unitisation means burdensome assessment. This may stem partly from a problem of professional trust.

- g) **Recognition and mobility:** This is about national and/or international recognition of qualifications to make it easier for workers to move within or between countries. It is sometimes associated with the benchmarking of standards (outcomes, assessment processes, quality assurance). International recognition and the mobility of labour are key issues for many countries. National Occupational Standards, together with reforms to quality assurance and assessment based on the UK unitised systems, are seen as giving some guarantee of international recognition. This has not been a major issue in the UK.

Some of the aims of unitisation which are cited above have little or no relevance in the Scottish (or UK) setting. However, it is notable that even in the aftermath of the certification crisis of 2000, few critics seriously suggested abandoning the unitisation. What can be said about the unitised system in Scotland is that it has proved flexible enough to enable continuing adjustments to be made to balance these tensions and keep the Scottish education and training community engaged in seeking to resolve them.

2 Introduction — the nature of unitisation

This paper is based on a survey of initiation documents, policy papers, information documents, research reports and evaluations of unitisation and aspects of unitisation in selected countries around the world over the past twenty years. The anticipated and perceived benefits of unitisation tend to be very similar from example to example, but there is a lack of hard research evidence as to whether the benefits actually result from the reforms. Much of the debate about unitisation draws on documents about the unitisation which followed the Action Plan in Scotland, or about NVQs and SVQs. There sometimes appears to be confusion between these two systems of unitised qualifications, although they are in fact very different in a number of important respects, as is discussed below.

The International Encyclopaedia of Education (2nd Edition, 1994) says the following about Units (modules): ‘Changes in the labour market have led to a trend in a number of countries to restructure vocational education and training (VET) on a modular basis. Modules are variously defined but generally refer to self-contained Units of study capable of separate assessment. Modularisation is usually part of wider reforms and often associated with training to specified learning objectives (frequently competence-based); participative learning; individualised training routes; and credit accumulation and transfer.’ In the decade since that was written, the trend has continued. The Encyclopaedia also notes that the main criticisms of unitisation were centred on ‘the danger of fragmentation of learning and lack of coherence in training programmes’ but that ‘in practice many modular systems restrict choice’. This tension between choice and coherence remains an issue.

In Scotland the term ‘module’ was originally used, but elsewhere in the UK the term ‘Unit’ has always been used. Broadly speaking, the term ‘module’ is more associated with curriculum and the teaching and learning process, while “Unit” is more associated with outcomes and assessment.¹ Scotvec adopted ‘Unit’ as the preferred term in the mid-1990s and this terminology was adopted by the Higher Still project and then by SQA. The terms ‘Unit’ and ‘unitisation’ are used throughout this paper.

Unitisation has been a confirmed feature of education and training in the UK for around 15 years. New Zealand adopted a unitised approach shortly after the UK and since then Australia and South Africa have adopted a fully unitised system and most European countries now use Units in their VET or adult learner sectors. However, in many of the countries currently involved in or considering unitisation, the reforms tend to be more focused on establishing national occupational standards and gaining international recognition than on the other benefits of modularisation/unitisation cited by the Encyclopaedia. (For a fuller account of the origins, nature and spread of unitisation, see Annex 1.)

¹ See the recent definition from the European Credit System for VET project in Annex 1.

3 Unitisation in Scotland

Unitisation was introduced into Scotland on a national basis with the publication of the Action Plan, *16-18s in Scotland*, in January 1983.² Over the succeeding seventeen years, unitisation was extended to include Advanced courses (HNCs, HNDs and PDAs), workplace qualifications (SVQs and SPAs) and school qualifications (new National Qualifications). Units are now used in a wider range of education and training in Scotland than in most other countries.

The Action Plan, which was quickly broadened out to cover learners of all ages, was the blueprint for a thorough reform of vocational education and training (VET) in Scotland in which unitisation was fundamental. Units were to be specifications for learning and assessment, outcome-based and standardised in design. This approach was seen as offering a number of benefits: learners would have greater flexibility and movement within the system and be able to negotiate individual programmes of study; there would have to be significant changes in teaching and learning which would be focused on defined learning outcomes stated in terms of what learners could actually do; and the qualifications system in Scotland would be simplified. These or similar perceived benefits of unitisation are still found in plans for unitisation around the world.

However, in Action Plan it was also made clear that unitisation alone would not bring about these changes. The reform would have to be supported by changes at institutional and national level. In the event a number of key factors have affected the level of success which can be claimed for each of the different phases of unitisation in Scotland. These include aspects of national policy, the level of institutional flexibility, and the extent and kind of support materials, staff development activities, marketing of the unitised system, and support and guidance for learners. These factors are so closely linked to the outcomes of unitisation that it is difficult to make definitive general judgements about the advantages or disadvantages of unitisation in isolation from them.

What can be said with confidence, however, is that the net result of Action Plan has been to bring about — directly and indirectly — a series of radical changes in education and training in Scotland and that these extended well beyond the traditional VET starting point. In 1985, Scotvec took enrolments from all colleges and central institutions, a range of training organizations, a selection of schools and a handful of other centres; but in 1997 it passed on well over 1,000 centres to SQA, including most state and private schools and a wide range of universities, voluntary bodies, national and local organisations and businesses. By 1997, the range of centres went well beyond Scotland, a trend which is continuing and growing. This was the achievement of a body which did not have the statutory status of SQA and had to depend on the attractiveness of its products. Arguably, this huge growth in users of Scotvec qualifications between 1985 and 1997 offers a good measure of the success of the system.

Among the most significant initiatives and changes have been the following:

- ◆ the Technical and Vocational Education Initiative (TVEI) which depended heavily in Scotland on the existence of National Certificate Units
- ◆ the Advanced Courses Development Programme — the unitisation of Higher National Qualifications (HNs) which led to a huge growth in the number of important technician level qualifications available and also increased the number of learners undertaking higher education courses, many of which led to degree studies
- ◆ the Scottish Vocational Qualifications (SVQ) Development Programme which created a set of unitised qualifications based on National Occupational Standards and led to increased and improved workplace training in a number of key sectors, such as care

² It may be worth noting here (in view of later developments) that the Munn Report *The Structure of the Curriculum in the Third and Fourth Years of the Secondary School* (1977) had already recommended the development of short courses for the schools sector with similar aims in mind. When these were developed by the Scottish Consultative Council on the Curriculum and the Scottish Examination Board in the 1980s and 90s, they turned out to be similar in design to Action Plan Units.

- ◆ the Scottish Wider Access Programme (SWAP) which used unitised programmes to create new routes into Higher Education
- ◆ the introduction of SCOTCAT — the credit accumulation and transfer system which combined developments in the Scottish Universities with the new unitised HNs
- ◆ the steady move towards an increased use of open and flexible learning in colleges and the introduction of Flexible Learning Units
- ◆ the General SVQ Development Programme — the Scottish end of a UK initiative which was intended to offset the perceived narrowness of NVQs and SVQs by introducing Group Awards designed to combine general learning, Core Skills and vocational training
- ◆ Higher Still — a major reform of general and vocational provision which saw the extension of the unitised framework to include all post-16 school provision, and extension in the levels of provision available to students and the introduction of new academic and vocational courses into schools and colleges

These changes have culminated in the introduction of the Scottish Credit and Qualifications Framework (SCQF) which has brought all of the above together with the new Higher Education Framework to create a single system of credit accumulation and transfer for all assessed and quality assured learning in Scotland. In design and intent, this is one of the most comprehensive frameworks in the world and at a time when a growing number of countries are moving towards qualifications and/or credit frameworks, and large amounts of EU and World Bank money is being invested in the reform of VET systems, Scottish expertise in this area of work is much in demand.

The progression from Action Plan to the SCQF has been relatively smooth, although it has suffered occasionally from changes to UK policy which have created difficulties in Scotland. The introduction of SVQs is a case in point and this is dealt with in some detail below.³

David Raffe⁴ attributes this even progress to unitisation: ‘The unity, or lack of unity, of an education system is a powerful determinant of how it responds to future pressures for change. A unitised course structure has helped Scotland to adapt and innovate in a smoother and more incremental way than England, where change has proved less steadily through fits and starts.’

4 Evidence on the benefits of unitisation

This paper is based on a survey of sources regarding unitisation around the world. The search for sources has confirmed that there is a lack of hard research evidence about the specific benefits of unitisation. What material there is tends to be more concerned to portray the perceived benefits of unitisation, often based on documents from the early days of unitisation in the UK and this is examined in section 3 of the paper. (For a list of selected references, see Annex 3.)

The lack of hard evidence of the benefits/disadvantages of any one instance of unitisation should not be surprising for a number of reasons:

- a) Most of the benefits claimed for unitisation are qualitative in nature, and so, hard to measure, and some of the actual benefits are unforeseen and can only be understood some time after the system has been implemented.

³ The certification crisis of 2000 is clearly an exception to this. The unitised system introduced by the Higher Still project added a level of complexity to the awarding system which SQA proved unable to manage. None of the findings on the crisis made a direct link to unitisation, however, and there were no serious recommendations to abandon the unitised system. Since 2000, appropriate IT and management structures have been established for the unitised system, and certification is proceeding without any of the problems of 2000. For these reasons it is not dealt with in this paper, although the issue of complexity is covered.

⁴ In *Investigating the Education Systems of the United Kingdom* in David Phillips (ed) *Education Systems of the United Kingdom*, Symposium Books (2000)

- b) The move to a unitised approach to the curriculum, teaching and learning can be so tied up with accompanying policy changes, that it is almost impossible to make valid comparisons between the situations before and after unitisation.

It is also difficult to draw conclusions about the effects of unitisation across a range of instances for the following reasons:

- c) The style and process of unitisation — what might be called the intrinsic logic — varies considerably from case to case. This may even be so within countries. Because there is no single way to write Units, for example, the effects of the approach taken to this can have a serious effect on the utility and effectiveness of the resulting provision.
- d) The structural or ideological context of unitisation — what might be called the institutional logic — not only varies greatly from case to case, but this background (eg expectations about the nature of the curriculum or the role of stakeholders/social partners in the system) is likely to have a significant effect on the aims and effectiveness of unitisation.

These points can be illustrated from the Scottish experience as follows:

- a) Qualitative and unintended benefits:

The intended effect of introducing SVQs was to make workplace training more clearly aligned to the needs of employers by having industry itself (in the shape of lead bodies) set the standards in clearly identified outcomes of Units. The nature of the outcomes being identified, the authority of some of the lead bodies and some of the methods of the consultants hired to develop the standards have all proved controversial, and the lead bodies themselves have been changed in nature and number over the years. The policy has been to keep the number of these standards-setting bodies low and to make standards as generic as possible and one result of this has been that the language in which the standards are expressed has had to become very abstract or convoluted. This in itself has acted as a barrier to use of these qualifications. Uptake has been very uneven and anecdotal feedback on the benefits of unitisation varies tremendously from sector to sector. This might be seen as very negative evidence about this example of unitisation, but there have also been positive effects, some unplanned. For example, colleges, which were not seen as the natural home for SVQs (and which Employment Department tried to distance from NVQs in England and Wales) have been greatly influenced by them in Scotland, where the college sector has emerged as the main provider of SVQs and qualifications linked to or based on national occupational standards. Thus it could be said that the introduction of unitised SVQs has had a beneficial effect overall on colleges as VET centres, on the college-industry interface and on qualifications levels in the workforce. It is also the case that Scotvec produced a lot of anecdotal evidence (for example through its annual awards) of companies which found the unitised system extremely beneficial in improving staff skills and morale and generally benefiting their businesses. Hard evidence of benefits across whole occupational sectors, and of benefits experienced where use was not led by committed individuals or groups of enthusiasts, is less easy to find.

- b) Benefits masked by parallel policy changes:

The case of HNCs and HNDs might seem to offer simple evidence of benefits accruing from unitisation. Following the Advanced Courses Development Plan there was a massive increase in the range of qualifications available; a huge growth in the number of students gaining these qualifications and therefore a growth in the number of people qualified at technician level, which was generally agreed to be important to the Scottish economy; and development and strengthening of the HN-degree route. The last two in particular might be seen as likely to yield strong quantitative measures of benefits. However the situation which preceded unitisation was so different to that after unitisation as to make the comparison invalid. Colleges offering pre-unitised HNs were restricted as to what they could offer: (before unitisation, HMI operated a process which allocated specific HNs to specific colleges); locally, colleges were managed and funded by local authorities which did not usually encourage colleges to grow; and, of course, the range of HNs available was limited and clearly vocational. As a result of a series of parallel reforms, an open market for colleges was created and a wide range of new HNCs, HNDs and PDAs was developed. At the same time, Executive policy was putting increasing emphasis on widening participation in higher education. So, whilst it *might* be true

that the success of such policies would not have been as great without unitisation, it is also likely to be true that unitisation would not have had the same effects without the management and policy changes.

c) Variations in effect linked to differences in intrinsic logic:

The unitisation, or modularisation, associated with Action Plan was quite different in style and scope to that associated with the introduction of Scottish Vocational Qualifications. Action Plan was concerned with learning of all kinds and could happily incorporate hard and soft skills, process and products. There were even some very popular Units, which were as much about the quality of the learning process as about specific outcomes – the personal and social development (PSD) modules covering work experience, undertaking investigations, etc. SVQs were associated with a particular kind of outcome, which was to be defined in a way which removed the influence of teachers and those concerned with ‘underpinning knowledge’ and ensured that the outcomes were strictly about work competence. Thus, whilst generic skills were a built-in feature of the National Certificate, they were stripped out of NVQs and SVQs and only re-discovered after about five years. There were also significant differences in the way in which the two unitised systems were funded and supported. Arguably these differences in style explain why Action Plan became a central feature of vocational education and training (VET) in Scotland and could subsequently be extended to all nationally funded education and training, while the effect of the introduction of SVQs has been very uneven.

d) Effects linked to differences in structural or ideological contexts:

Action Plan, which initiated unitisation of the Scottish system, was focused mainly on further education, but also had an effect on schools, and the quantity and quality of the effects which unitisation had in each sector was quite different. The whole of further education was changed at a stroke, but in most parts of further education, the content of the Units, the practical nature of the delivery, and the idea of working closely with employers to define the output of courses were quite familiar. On the other hand the changes in assessment regimes created some difficulties in the college sector, as was noted in some of the early evaluations. In schools, where modules were used to supplement the existing SEB examination system, uptake was patchy and often depended on the influence of enthusiasts among management or teaching staff. This was partly because the Units themselves were quite alien in concept, but also because of the lack of properly planned curriculum development associated with the introduction of modules into schools. On the other hand, because schools had already implemented Standard Grades with their grade related criteria and portfolio assessment⁵ in some subjects, the modular assessment regime was in some respects easier to introduce. The changeover to the new system may have required quite significant changes in attitude and approach in both sectors, but the catalogue of Units prepared for FE lecturers quite clearly met the needs of their students, whilst many school teachers found it hard to relate the new modules to the curriculum with which they were familiar. In fact the growth in uptake in schools in the early days of Action Plan suggests that unitisation was a positive move, but the skewed nature of the sample, makes any really hard evidence of overall benefits to the school population hard to generate.

5 Perceived benefits of unitisation

The reasons given by the different countries for reforming their systems may be ordered differently or have different emphases, but the concerns behind these aims tend to have a lot in common. These commonalities have been distilled into the following list of aims, all of which are associated to some extent with unitisation:

- a) rationalisation and simplification
- b) access and progression
- c) uptake
- d) flexibility and responsiveness
- e) quality of learning
- f) quality assurance of qualifications

⁵ A reform anticipated in some regions by the use of CSE mode 3 courses which involved the validation of school-designed courses and the verification of school assessments

g) recognition and mobility

In the detailed comments on each of these which follows the point has to be made that the existing systems which are being unitised or within which unitisation is being introduced are very diverse and, mainly, so different from the Scottish experience as to make comparisons difficult. Some of the aims of unitisation which are cited above, for example, simply have no relevance in the Scottish (or UK) setting.

a) **Rationalisation and simplification:**

Benefits: These include reducing the qualifications available and/or making the system easier to use and understand.

Although many countries see the need to make their qualifications systems easier to understand and navigate through, the reasons for this vary considerably. In Scotland, rationalisation of provision was a key feature of the Action Plan. There it referred mainly to the extent to which discrete programmes which were common to a number of specialist areas could be brought together. The example given was of the apparently distinctive, but in fact only marginally different, mathematics courses taught in the early stages of different engineering programmes. Action Plan highlighted this phenomenon as unnecessary and in need of reform and the eradication of these duplications was seen at the time as a successful feature of unitisation. In other countries the issue is more acute than in Scotland, with multiple and overlapping awarding bodies and qualifications. For example most countries of the world, unlike Scotland, have multiple post-primary school routes and this may mean a number of quite distinct systems each with its own qualifications, its own quality assurance and its own certification. Although few are attempting to create unified systems, many are looking to unitisation to rationalise and simplify at least the VET sector.

To many of these countries, the UK system of official standards-setting bodies and VQs based on the standards they develop often has an appearance of simplicity. However this apparent simplicity is not always matched by the reality. For example, the fact that a wide variety of unitised vocational and pre-vocational programmes underpins or sits alongside NVQs and SVQs is not always clear. Based on the claims made for the benefits of unitisation, it is often assumed that unitisation will result in a relatively small number of Units since many of them will be capable of inclusion in a wide range of qualifications (group awards). It may also be assumed that the development of national occupational standards will result in a small number of qualifications. This has not been the UK experience although there is less duplication and overlap of provision in the Scottish than in the English system.⁶

Issues: The Scottish experience is that the prospective simplicity of a unitised system is not matched by simplicity in implementation. On the one hand, the rationalisation of courses in Scotland brought about by Action Plan reduced costs and gave learners qualifications (Units) with wide currency which could be counted as components in a range of programmes. On the other, the acceptability of such rationalisation has continued to be controversial, with pressure from specialist users and providers to extend the range of specialised programmes. The net result has been a continuing need to consult and review, which is expensive. Some of these issues appear again in the examination of flexibility, which appears below.

Initially there were fears in some quarters that the number of Units in the non-advanced part of the Unit catalogue would grow unmanageably, with a plethora of locally-devised Units offering overlapping and idiosyncratic courses. In the event, Scotvec put processes in place to manage this and the original 1,800 or so Units grew in an orderly way, so that even after Higher Still, there were less than 6,000 Units in the catalogue and the majority of these serve as components of courses, Group Awards or college vocational programmes. In the advanced part of the catalogue (HN Units), duplication has been more of an issue, but again, SQA now has processes to help manage this, and sections of the catalogue where growth has led to avoidable duplication have been rationalised with

⁶ This misconception is widely reported to have characterised the early thinking about Action Plan. According to the story the planners envisaged a system of maybe 800 Units to cover the whole of FE provision – in fact the first National Certificate catalogue contained more than twice this number and the national catalogue has continued to grow, although at a considerably slower rate than the increase in VQ Units.

the collaboration of stakeholders. In the field of workplace qualifications in Scotland, tied as it is to the UK system, unitisation has not brought about overall rationalisation, with nearly 1,600 SVQs and nearly 11,000 Units in 2003.

At least three approaches to the issue of growth in provision have been identified: the use of law; the use of regulatory processes; and that of accepting and managing the growth. A number of governments have tried to give legal force to the new unitised qualifications and in this way to remove or marginalise other qualifications. It is hard to get a clear picture of how this works if only the official qualifications appear to be reported on — for example in New Zealand. However, it would seem that ‘other’ qualifications, such as those offered by Microsoft, are then left in an alternative system (described by one commentator as ‘a parallel universe’⁷) outside the official structure. In Ireland, which has given its framework legal status, the Qualifications Authority is trying to work with a two-tier system which will allow some tailoring of qualifications, but it is too early to see whether this will have the desired effect. The Westminster government has acknowledged the problem and tried to reduce qualifications by creating a regulatory framework and restricting funding to qualifications within the framework. Progress in accrediting qualifications and reducing duplication appears to have been slow, however. Scotland has adopted a voluntaristic approach and has tended to embrace the diversity and look for ways of accommodating and managing it. The fact that there is a single national body for VET qualifications and strong national support for that body — as shown in the aftermath of the certification crisis of 2000 — must also be significant.

b) Access and progression:

Benefits: The perceived need to improve and/or increase both access to education and training and the progression routes available to learners in the system is another important reason given for unitisation. This is often associated with improving the recognition of prior learning and/or introducing credit transfer.

In this context it is usually anticipated that unitisation will make it easier for people to make the necessary commitment (financial or time) to learning, will help with confidence-building or staged learning to support those who start from a low level of knowledge or skill. There may also be expectations of savings to the system resulting from these, or longer-term gains in terms of reductions in welfare benefits and increases in employment, tax revenue, etc.

Any Scottish FE college will give testimony to these benefits for some part of its intake. Discrete examples include the Open University, which has used a modular system for years and with great success to attract adult returners to part-time learning; the Open College Network system which has grown from its tentative beginnings in the early 1990s to the point where the National Open College Network has become a major awarding body in England (with full recognition from QCA and the Learning and Skills Council), a key partner in education and training in Wales, and is beginning to establish networks in Europe all on the basis of a unitised system; and the Scottish Wider Access Programme, which opened up new routes to higher education in Scotland in the 1990s.

Issues: In this context one of the most common areas of attention for countries considering unitised systems is that of recognising prior learning (RPL). In the context of VET in Scotland the focus has been on the assessment and accreditation of prior experiential learning, and the recognition of prior certificated learning has, rightly or wrongly, been taken more or less for granted.

Unitisation, with its focus on outcomes and assessment criteria, was intended to free assessment from unhelpful links to ‘the place, pace and mode’ of learning and in many respects this has happened — encouraging open and flexible learning and legitimising assessment by portfolio.

Early projects funded by the then Employment Department and managed by Scotvec examined a range of ways in which a wider variety of approaches to assessment could be encouraged with a view to improving access. The findings of these projects were largely institutionalised in the 1990s,

⁷ Adelman (2000): *A parallel universe – the trend towards replacing academic degrees with information technology certification* (Change, Vol 32 no 3)

particularly in the college sector, increasing the kind of flexibility associated with a unitised system. However anecdotal evidence suggests that these approaches — particularly the assessment of prior learning — are seen as cumbersome and resource intensive by centres and students alike, and it is unclear how widely they are actually practiced or how reasonable it is to expect centres to provide such services.

Although less specific attention has been paid to the recognition of prior certificated learning, this has been an issue within the unitised system. Centres are under no formal obligation even to recognise Units completed elsewhere and, particularly in the early days of National Certificate modules, it was not uncommon for learners to have to repeat in colleges Units which they had successfully completed in schools. Whilst this was unfortunate, it was often understandable, because the flexibility of the Units meant that the skills and knowledge developed though the same module in different centres can differ considerably and the expectations which lecturers had of learners proceeding from module A to module B in their college would not be met by learners progressing from the local school. Where the expectations were reasonable, this had to be tackled by Scotvec amending the specification or by development work with the school; where they were not, the college would have to alter its approach to module B. There have also been continuing issues about the recognition of outcome-based, internally-assessed Units by some universities which are suspicious of the standards achieved in this form of unitised system.

Note on credit systems: Another feature of unitised systems which a number of countries are now focusing on is their potential for fully realised credit accumulation and transfer (CAT). In Scotland, the introduction of the SCQF has made a real CAT system, with national applicability, seem possible, whereas previously this aspect of unitisation was used more as an administrative tool than as a tool to improve access and progression.

CAT systems do not *require* full unitisation, but they are likely to work better with a unitised system, especially where the credit transfer is between institutions, sectors or countries. For that reason, it would not be surprising if the attention now being paid in the EU to credit systems (the European Credit Transfer System for Higher Education and the European Vocational Credit Transfer System being developed as part of the Copenhagen process) increased the use of unitisation in EU countries.

c) Uptake:

This may be concerned with increasing participation in education and training generally, although it is likely to be measured by the uptake of qualifications. It is sometimes limited to the uptake of vocational qualifications.

Benefits: The focus here tends to be twofold: first on increasing participation in education and training, regardless of the qualifications being pursued; secondly on the number of people with qualifications which are seen as 'useful' or 'economically relevant'. The Scottish experience — twenty years of unitisation — has been that a unitised system can increase the numbers of people taking qualifications.

Initial uptake of National Certificate modules increased rapidly. The Action Plan coincided with the introduction of the Youth Training Scheme (YTS) and much work was carried out to create useful programmes for unemployed young people and then for those who were newly-employed as YTS developed to include these trainees. This explains some of the new uptake. For example, amongst the cohort who had become eligible to take modules when they were introduced in 1986, nearly 60% had completed at least one module by the time they were 19. More than a third had done so in school, and a similar proportion had done it at college or through YTS, but 18% had done so whilst in employment. However, the figures clearly include learners beyond this group and it can be seen that, as intended, Units were offering new opportunities to learners of all kinds. In the first five years of the system, the numbers registered for National Certificate Units more than doubled. In schools the rise was from just under 16,000 to over 105,000; in 'other' centres just under 3,000 enrolments rose to almost 19,000; and even in FE colleges, where the Units were replacing other courses, an initial enrolment of under 80,000 rose to over 100,000. By 1989 the total enrolments for NC modules had

gone beyond 220,000 and this number remained reasonably steady through to 1996 when enrolments were around 230,000.

Issues: When countries undertake unitisation, there is often a tension between the desire to address immediate economic issues and the need to look to future requirements, insofar as this can be done. The immediate needs take the form of skills gaps and shortages — and Units seem like a good way to address these quickly. However this focus on the short-term is often accompanied by a recognition that the future requires a flexible workforce and this means the development of generic or transferable skills and that these are associated with a more general improvement in education and training levels. The question for these countries is whether extending unitisation will assist in creating a learning culture and increasing lifelong learning.

As has been emphasized throughout, the Scottish approach has been to exploit the flexibilities of unitisation to increase the range of qualifications available and to make them as attractive as possible. The figures given elsewhere in the paper would suggest that this has been successful up to a point, but a recent report into the low numbers of Scots prepared to participate in lifelong learning⁸ seems to suggest that there are issues in this area — as in others — which will not be solved by unitisation even when carried out in this way. It would also be hard to say from the Scottish figures, how many of the qualifications undertaken should be judged to be, or not to be, ‘useful’ or ‘economically relevant’.

d) **Flexibility and responsiveness:**

This is usually associated with making the system more market orientated and/or more market-driven. In specific terms it may be about making it easier to address skills shortages/skills gaps and making it easier for people to upskill and reskill.

Benefits: As indicated above, for learners, the flexibility associated with unitisation means that they can work in manageable chunks, gaining recognised certification for their achievements as they progress. This is equally true whether the learners are improving existing skills or learning new skills — eg where they are moving from an old industry to a new one. For other users of qualifications the flexibility of a unitised system can also make it very responsive — for example to economic and technical change.

The changes described in this paper have taken place at a time when Scotland’s traditional industries such as coal mining, steelmaking, shipbuilding and distilling have been in decline or having to undergo significant changes and new areas of employment such as oil and gas extraction, information technology, tourism, call centres, silicon chip manufacture, mechatronics and waste management have emerged. In many of these areas Scotvec/SQA has been able to undertake innovative qualification development to support upskilling in industries under economic pressure or to help to provide skilled workers for new industries.

New qualifications of social value, such as the Skillstart developments which were the precursors of Access provision, primarily intended for candidates with learning disabilities have also been developed.

Units also have the advantage of being able to stand alone as qualifications, so that short courses addressing essential skills or new skills can readily be put on and accredited. The Units for workplace trainers and assessors and the Royal Environmental Health Institute of Scotland Unit in elementary food hygiene are good examples of this advantage.

Anecdotal evidence suggests that the unitised system has also made the processes of revision and updating of qualifications more manageable and cost-effective. Unitisation has made it relatively easy to respond to feedback, or to adapt qualifications to align them with changes in national policy or legal requirements, by revising those parts of the programmes which require it.

⁸ *Scotsman* report (3rd August 2004) on survey conducted by The National Institute for Adult and Continuing Education (NIACE).

Issues: World-wide, there is clearly a tension between the desire to rationalise and the need to innovate. In Australia, the flexibility associated with unitisation has suited the federal system well and Ireland is attempting to resolve the issue by having two classes of qualification. In Scotland, where the national awarding body must also work in a competitive environment, the pressure is on SQA to increase the number of smaller awards, but to create coherence by using the new SCQF credit system to link these into larger national Group Awards such as HNCs and HNDs.

For some countries, flexibility means making use of the manageability of Units within a relatively restricted qualifications system — for example, the unitised qualifications may be strictly tied to occupational standards, as is the case with NVQs and SVQs. There may also be an intention to direct learners — by managing the places available in colleges or on training schemes, through selection and/or funding — to ensure that skills gaps and skills shortages are addressed.

This kind of directiveness has never been a feature of the Scottish unitised system. At quite a general level, it can be claimed that the unitisation of advanced courses and the resulting change and growth in provision has led to an increase in the number of students taking technician level courses — a development which is generally seen to be advantageous for the Scottish economy. However, it could be argued that, by making it easier to develop provision which follows the student market — eg providing qualifications in areas such as broadcasting which are popular but where there may be limited job opportunities, unitisation as practised in Scotland has exacerbated some problems of surplus and shortage in skills. What is clear is that although these outcomes are related to unitisation (ie unitisation makes them easier or even makes them possible) they are not in fact a feature of unitisation, but of the policies and funding regimes which have accompanied unitisation.

e) **The quality of learning:**

This aim may be about the nature of the outcomes of learning and it may include references to involving learners more in their learning and/or making the learning experience more relevant to working life.

Benefits: The aspects of quality of learning and teaching which tend to be associated with unitisation include: teaching which is clearly linked to prior learning and intended outcomes; and approaches which involve and motivate learners and encourage them to be active in learning. One aim of unitisation may well be to improve learning and teaching in these ways, although clearly that ought to involve various kinds and levels of support, including staff training.

In 1991, HMI published a report entitled *Six years on* in which they evaluated the effect of National Certificate on practice in FE colleges. HMI found that the new unitised programmes had brought about some benefits to learners. Other evaluations, including research undertaken by the Scottish Council for Educational Research in the early days of Action Plan implementation, found that unitisation had benefited a majority of students and altered teaching approaches for the better. Later reports by HMIE for the Funding Council appear to confirm these findings, although, of course the focus is no longer on the effects of unitisation.

Another aspect of quality in provision lies in the coherence of the learning experience, and the coherence of modular programmes and Group Awards has been a continuing area of attention in Scotland, and elsewhere in the UK. However, for many of the countries which unitise, this kind of coherence is not an issue, because the system introduced or envisaged is one in which the Group Award is the defining qualification and Units are only or mainly developed as the components of these Group Awards. Indeed in some countries, Units are not separately certificated.

Issues: In terms of the unitised system, Scottish policy makers have tended to take the view that coherence lies in the intentions of the learner and to maintain maximum flexibility in the system. However, in spite of the initial decision not to introduce Group Awards following Action Plan, many colleges marketed their year-long unitised programmes as ‘awards’ — eg National Certificate in Computing – and in *Six years on* HMI saw a need for greater emphasis on programme teams to offset the potential in the unitised system for the growth of a fragmentary approach to learning.

The lack of awards based on specially designed programmes was made even more apparent, first when Unit-based SVQs were introduced and second when the Advanced courses were unitised and HNCs and HNDs were retained.

In 1992, Scotvec introduced GSVQs following an executive policy decision. These awards, which tried to absorb the college programmes, were reasonably successful in the FE sector. However, they suffered from the attempt to design them to achieve policy aims such as bringing learners up to a certain level of core skills. The result, particularly in Care, was to distort uptake and lower success rates and there had to be a review of the qualifications to address this. Many schools felt they were too vocational in content and an initiative to develop specialised Schools Group Awards was set up. However, this was overtaken by Higher Still.

SGAs were designed as part of the Higher Still project to be available to as wide a group of learners as possible. They had to be seen as useful and coherent and appropriate for young people following relatively academic programmes in schools and adults following vocational preparation programmes in colleges. In the attempt to combine coherence and flexibility while setting high standards, the designers created award structures which many users have found to be too complex or, paradoxically, too restricting.

There are, of course, a number of group awards around the world designed to ensure that learners follow what are seen as coherent programmes of Units and/or other components, and as indicated elsewhere in this paper, a number of unitised systems are founded on such qualifications. Coherence is also an issue in England and in Wales where concern about coherence has led to the search for Baccalaureate-type qualifications which can ensure that students in schools and colleges are following coherent programmes.

f) The quality assurance of qualifications:

This usually means making assessment more valid, more standardised, fairer and more transparent.

Benefits: As noted earlier in the paper, one tenet of the unitised system in the UK was that assessment should be based on standards and not on the place, pace or mode of learning and a number of steps have been taken to make that a reality, at least in VET.

However, the systems of education and training in the countries which have adopted unitised systems or are about to do so are so diverse that it is difficult to draw any general lessons about the effect of unitisation in this respect. On the one hand the intention may be to make quality assurance and assessment more standardised, fairer and more transparent, eg by introducing an element of external assessment or moderation; and on the other hand the intention may be to make the assessment more valid, eg by moving away from dependence on written examinations. And these changes may be linked to wider policy issues, such as the need for social reform and/or the imperative of gaining international recognition for the outputs of the education and training system. In these cases the discussion of the reform tends to be focused on these wider concern issues rather than on unitisation, which becomes, probably rightly, a subsidiary issue.

Early research by SCRE suggested that the learners and employers were happier with the kind of assessment introduced by Action Plan than were the FE lecturers who were delivering the system; however, the changes brought in by Higher Still — essentially a move to re-introduce an element of external assessment into modular programmes — was viewed negatively by many FE lecturers. Another early finding by SCRE researchers was that the ability to reach common judgements on performance varied considerably from subject to subject.

The system, as managed by both NCVQ and Scotvec, involved the introduction of new roles designed to support assessment and develop a common understanding of standards. In particular internal and external verifiers were introduced, not only for NVQs and SVQs, but for all modular provision. Since 2000, SQA has adopted a number of measures to try to ensure that standards are fully understood by providers, particularly in schools. Where these measures have been successful in creating new communities of professionals with a shared concern for quality improvement, or a common interest in

standards in a particular area, it could be argued that unitisation has brought about important improvements in the system, albeit indirectly.

Issues: As the above suggests, there have been continuing concerns throughout the UK about the reliability of assessment in a system which separates assessment from delivery and allows for variety in the instruments of assessment used to assess the same outcomes. This has led to the development of quite complex verification systems and a level of exemplification and support which — anecdotal evidence suggests — has been widely welcomed by practitioners, but is nonetheless seen by some as both bureaucratic and restrictive to learning and teaching. Through Higher Still, a new generation of Units, with clearer definitions of, and sometimes restrictions on, the conditions of assessment has been introduced. Most of these Units are also supported by exemplars in the National Assessment Bank (NAB), and these NAB items have come to be seen as extensions of the Units in the eyes of many providers and users.

In Scotland, more recent surveys and comments, such as those undertaken in the early days of Higher Still implementation,⁹ have tended to concentrate on assessment issues. In particular the amount of assessment required in new National Courses has been an issue. This concern has been echoed in England where unitised A levels were introduced in 2000. However, again international comparisons are difficult to make. In Scotland, where the ‘additional’ assessment was mainly internal Unit assessment, the issue has been addressed in the National Qualifications Review and informal feedback to date suggests that this is to the broad satisfaction of users. However, the A level Units are subject to external assessment which not only makes changes difficult, but must also give users a different view of the assessment loading to that in Scotland.

It is worth noting that the complaint that unitisation means burdensome assessment, has been voiced at various points in the development of the fully unitised system which SQA now runs. It is sometimes argued that this problem is tied to the Unit specification, but it is also argued that there is an inevitable link between flexibility and high assessment demands.

Specifying assessment in any system always involves balancing validity, reliability, practicability and cost effectiveness and in an outcome-based unitised system, this balance has to be reached more often and more frequently in areas where there is little precedent to go on. So the question must remain whether the current specifications have created the right balance. The Unit specifications used by Scotvec/SQA have undergone considerable review and change over the period since 1985. SQA officers have reported feedback from centres to the effect that some of the more recent variants do create a better balance than some of the earlier specifications.

However, it may also be a cultural issue. The problem of quantity of assessment may be about a lack of trust in providers and even lack of confidence among teachers and lecturers. In the traditional externally assessed course-based system the question of trust hardly arises (although it may where there is an appeals system based on estimates provided by the centres). However, in a system which relies to such a significant extent on internal assessment, the judgement of the teacher and lecturer become crucial. In this context it is notable that burdensome assessment is often found where Units are specified by teachers and lecturers, as with HN Units and the original new National Courses, which may imply a lack of confidence in the profession by the profession.

g) Recognition and mobility:

This will be concerned with national and/or international recognition of qualifications. National recognition is associated with the credibility of qualifications and the extent to which they are trusted by employers and those concerned with admissions to courses of education and training. The effect of international recognition is to make it easier for workers and students to move between countries.

Benefits: The credibility of qualifications is closely associated with the assessment issues discussed above. Unitised systems, particularly where there are Units which can be used in a variety of different

⁹ A number of these are referred to in the report of the National Qualifications Steering Group, *Review of Initial Implementation of New National Qualifications* (2001).

programmes (common and generic Units), should make movement within sectors and between sectors easier. In each case, however, this requires the receiving bodies give recognition and full weight to the previously achieved Units.

International recognition and the mobility of labour are significant issues for many countries — particularly those in Eastern Europe and the former Soviet republics. By and large it is felt that the system of qualifications based on national standards which the NVQ and SVQ approach represents, together with reforms to quality assurance and assessment, often based on the UK unitised systems, will give some guarantee that the qualifications held by nationals in these countries will be taken seriously in the countries in which they may be seeking employment.

Issues: On a national basis, difficulties may emerge where different sectors see the system from opposed perspectives. For example, if one group of users places a non-negotiable emphasis on the standardisation and reliability of the assessment and another places a similar emphasis on its validity. That situation raises issues about what constitutes the appropriate balance referred to in the previous section.

National inter-sectoral recognition has been a significant issue in Scotland, but the development of the Scottish Credit and Qualifications Framework may indicate a national willingness to address this problems. International recognition — other than occasional problems with the value put on Scottish qualifications by English users, particularly in the higher education sector - has not been a major issue. As indicated above, in many countries undertaking unitisation this is not the case, and the need to gain international recognition is likely to be a key factor in shaping the unitised systems which they develop.

6 Conclusion

A point which appears at a number of places in the paper is that unitisation is being, or has been, overtaken as a driver and influencer by the development of frameworks. As stated early in the paper, most of the countries surveyed for this paper have developed frameworks or are in the process of developing them and the unitisation process is increasingly coming to be an adjunct of framework development, rather than an aim in its own right. In some ways, this change of focus could be seen as a confirmation of the main argument of this paper — ie that unitisation has to be understood as part of the wider context or policy structure within which it is undertaken and implemented.

Changes to the unitised system in Scotland have tended to be prompted by tensions in the system: between competing and changing policy requirements, between the need for standardisation and the benefits of innovation, between centralised authority and devolvement to the centres, between skills and knowledge; between specific and generic skills, between validity and reliability in assessment, and so on. And what can be said about the unitised system established in Scotland is that it has proved flexible enough to enable continuing adjustments to be made to balance these tensions and keep the Scottish education and training community engaged in seeking to resolve them. This in itself must be seen as a considerable benefit.

Annex 1: The origin, nature and spread of unitisation

The USA is generally seen as being the home of unitisation/modularisation. Some sources claim that the original move to teach in modules can be found in 20th century American army training. Others place the origin in the system of elective courses offered at Harvard in the 19th century. However, Scotland can probably lay a credible claim to be the originators of the modern movement to unitise which is discussed in this paper.¹⁰

In an educational context, the term ‘module’ is now widely and loosely associated with the practice of breaking down curricula, which might previously have been designed to occupy full-time learners for an extended period of time (say three or four hundred hours of programmed learning), into relatively small segments (say thirty or forty hours). The term ‘Unit’ tends to be associated with the aspect of this which deals with assessment and (sometimes) certification. Scotland originally used the term ‘module’, but elsewhere in the UK the term ‘Unit’ has always been used. In England, Wales and Northern Ireland, this term was used for National Vocational Qualifications, the first major exercise in unitisation. Scotvec adopted ‘Unit’ as the preferred term in the mid-1990s. This was partly a recognition of the growth of this usage and partly because of the confusion which often arose between the non-negotiable Unit outcomes and assessment criteria specified by Scotvec and the flexible content and learning/teaching approaches, often set out in ‘modules’ developed by centres, local authorities, and national curriculum bodies. The term ‘Unit’ was adopted by the Higher Still project and was built into the SQA system from its inception.

The following definitions are drawn from a recent document on proposals for a European Credit system for VET.¹¹ The terms are very similar to those to be found in UK documents, such as those coming out of Employment Department (which led on the NVQ project) in the early 1990s.

- *A Unit means the elementary (or smallest) part of a qualification or of a curriculum or a qualification programme. A Unit is outcome-oriented. It corresponds to a limited amount of knowledge, skills and/or competences. It corresponds with a specific achievement in terms of an expected vocational/professional outcome at individual level. A Unit is anchored in an occupational profile at a given level within a reference levels framework.*
- *A module means the elementary (or smallest) part of a learning pathway, and is process-oriented. It gives information on the teaching/learning processes and necessary resources.*

The key features include a focus on the outcomes of learning — ie descriptions of what learners will be able to do at the end of a Unit. And in this system, as in many national systems which have adopted a unitised approach, the outcomes are closely associated descriptions of the skills and knowledge which combine to make for competence in a work role — what are known in the UK as National Occupational Standards (NOS). The Scottish experience shows that it is probably more true to say that the adoption of NOS leads to unitisation, than to say that unitisation must be associated with NOS.

As is indicated in the main text, unitisation was introduced into Scotland on a national basis with the publication of the Action Plan, *16-18s in Scotland*, in January 1983. The Action Plan, which was quickly broadened out to cover learners of all ages, required a thorough reform of vocational education and training (VET) in Scotland and the authors of the Action Plan made it clear that unitisation was fundamental to their proposed reforms. The building blocks of the new system were to be Units of learning and assessment, outcome-based and standardised in design. They were to be called ‘National Certificate modules’ and each would cover 40 hours of teaching and learning (although there would

¹⁰ Introducing the concept of modular group awards such as GSVQs and SGAs, the point was often made that the model was not very different from the system of 1st and 2nd ordinary courses which traditionally combine into Scottish degrees.

¹¹ *Developing a credit (transfer) system for VET — draft version*

also be half modules and double modules).¹² They would offer ‘clear possibilities of credit-transfer within and among institutions.’ The way that Units were specified would help to promote valid assessment. And if all the Units were brought together on one certificate, this would ‘ease the recording of attainments’ which was seen as unduly complex, involving scores of certificates.

Shortly after this date, the UK government introduced a reform which was designed to define occupational competence for all branches of the economy and create a single simple set of qualifications based on these standards — NVQs and SVQs. Although this may have looked similar to the preceding Scottish unitisation of VET, the intent was quite different. Similarly, while the products (VQ Units) looked much the same as NC modules, the processes by which they were developed and the philosophies which underpinned the two approaches to specification were very different. The two systems shared certain aspirations, such as the aim of increased flexibility, programmes which were more focused on learning and assessment than previously, and outcomes which were validated by end-users. But in fact they differed in a number of important ways: NC Units had a standardised design length, while VQ Units scrupulously avoided any suggestion of a fixed time to be served; NC Units were varied in the approach they took to describing outcomes and found ways to include knowledge-based outcomes, while VQ Units focused strictly on what a learner could actually perform, usually in the workplace; and NC Units were entirely free-standing within a system which had no levels and no Group Awards, while VQ Units were first and foremost components of Group Awards at five distinct levels.

Another example of the difference between the systems relates to delivery. While the delivery of NC Units in a wide range of centres was being encouraged, one intention of the NVQ/SVQ project was to move the bulk of training out of ‘educational’ institutions and into the workplace — this intention was not fulfilled, as has been noted in the preamble.

The progress of NC modules and VQ Units has been quite different and where they have been successful it has been in quite different ways. The unitisation process itself appears to have been beneficial in both cases where it has offered flexibility and improved responsiveness, but in many respects, the success or failure of the reforms has been associated with other factors such as the governance and financing of the systems.

The next country to adopt a unitised system was New Zealand, which set up the New Zealand Qualifications Authority (NZQA) in 1989 to establish a unitised system. It based much of its work on UK (and particularly Scottish) developments, but created its own hybrid. It followed the broader design of NC Units, but made its Units components of Group Awards at distinct levels. In this way it foreshadowed later UK developments where Group Awards were introduced to offset the fragmentary nature of much of the delivery of the original modular systems. NZQA also managed to incorporate occupational standards into this system and to some extent appear to have avoided the kind of division which characterises the UK systems — what has been characterised as a split between capability and competence.

Australia and South Africa were the next countries to make major commitments to unitised systems, mainly through the development of ‘Unit standards’ which are essentially occupational standards and using these as the basis for other qualifications. In each case, the context has been very important and, of its nature, makes comparisons with the UK difficult. Australia operates a federal system, so that comparisons with specific states, such as Victoria, is easier than with the national system; and in South Africa the whole project was based on the need for a framework which would play a significant part in social reform and redress — adding factors to the design and implementation which do not appear in most other systems.

¹² It may be worth noting here (in view of later developments) that the Munn Report *The Structure of the Curriculum in the Third and Fourth Years of the Secondary School* (1977) had already recommended the development of short courses for the schools sector with similar aims in mind. When these were developed by the Scottish Consultative Council on the Curriculum and the Scottish Examination Board in the 1980s and 90s, they turned out to be similar in design to Action Plan Units.

In each case, however, the idea of a Framework — defined by large Group Awards, levels and credits — has become more important than that of Units per se. It is also notable that most discussions of the unitised basis for these national systems tend to hark back to the UK experience. None of the systems has been trouble-free, but the issues have tended to be more about the ways in which the frameworks are specified and managed than about the unitised nature of the systems.

Twenty years on from Action Plan, there are few countries which have all-encompassing unitised systems, but a growing number of countries are moving in that direction.

Firstly, the number of unitised VET systems is growing. These often include what is referred to as non-formal education and training, although that term is defined differently in different countries — it may include apprenticeship schemes, workplace training, and/or adult and community education. Virtually all EU countries and EU accession and candidate countries either have unitised aspects to their systems — eg France, Germany, Hungary, Netherlands, Spain — or are in the course of introducing such systems — eg the Czech Republic, Greece, Hungary, Poland, Slovenia, Turkey. Unitisation in Universities seems to be a world-wide phenomenon, although there is variation in the extent of adoption within countries and even within universities. There is also a transnational Leonardo project on the unitisation of nurse training involving Belgium, Germany, Luxembourg, Netherlands and Poland. And — returning to the supposed origins of unitisations there are activities at present in Australia, Canada and the UK to capitalise on the perceived benefits of unitisation in army training.

Secondly, the number of qualifications and/or credit frameworks is growing and unitisation is often included within the reforms as part of this aim, rather than a development for its own sake. Unitisation may be seen as a natural consequence of developing national occupational standards or it may be associated with the introduction of credit to improve flexibility. In addition to the countries cited above, many of the countries in Southern Africa and a number of former Soviet Republics are moving in this direction. These frameworks are driving much education and training reform — particularly VET reform.

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