

DOCUMENT RESUME

ED 387 655

CE 070 034

AUTHOR Lawton, Dennis
 TITLE The Changing Role of Vocational and Technical Education and Training (VOTEC). Assessment, Certification and Recognition of Occupational Skills and Competences. General Report.
 INSTITUTION Organisation for Economic Cooperation and Development, Paris (France).
 REPORT NO .DEELSA/ED/WD(92)41
 PUB DATE Apr 93
 NOTE 33p.; Report of a Policy Seminar organized by the Portuguese Ministry of Education and the OECD (Oporto, Portugal, October 27-30, 1992). For related documents, see CE 070 024-033.
 PUB TYPE Reports - Research/Technical (143)
 EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Educational Change; Educational Policy; Educational Practices; Educational Trends; Education Work Relationship; *Employment Qualifications; *Evaluation Methods; Foreign Countries; International Educational Exchange; *Minimum Competencies; Policy Formation; Postsecondary Education; Role of Education; Secondary Education; Seminars; *Student Certification; *Student Evaluation; Synthesis; Trend Analysis; *Vocational Education
 IDENTIFIERS Organisation for Economic Cooperation Development; United States

ABSTRACT

More than 120 delegates representing 22 Organisation for Economic Cooperation Development (OECD) member countries met to discuss policies regarding assessment, certification, and recognition of occupational skills and competencies in view of the changing role of vocational education and training. The following themes were discussed in the plenary sessions and working groups: pedagogical and didactic implications of different approaches to assessment and certification; the role of assessment and certification in the functioning of training and labor markets; portability and transferability of qualifications; and implementation of assessment, certification, validation, and accreditation. Common trends and problems in assessment, certification, and recognition of occupational skills/competencies in OECD member countries were identified and a list of policy proposals was formulated. Among the policy proposals were the following: match assessments to curricula and not vice versa; facilitate parity of and switching between academic and vocational education; when planning training, focus on long-term rather than immediate needs; encourage qualifications that are recognized both nationally and internationally; and design assessment procedures to facilitate access for those groups that have traditionally experienced difficulty with education and training. (Appended are the following: project proposal, list of documents presented, and list of themes for discussion.) (MN)

ORGANISATION DE COOPÉRATION
ET DE DÉVELOPPEMENT ÉCONOMIQUES

DIRECTORATE FOR EDUCATION, EMPLOYMENT,
LABOUR AND SOCIAL AFFAIRS

RESTRICTED

Paris, réd. : 13-Apr-1993
OLIS : 15-Apr-1993
dist. : 20-Apr-1993

ED 387 655

DEELSA/ED/WD(92)41

Or. Eng.

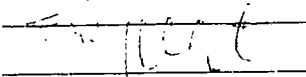
THE CHANGING ROLE OF VOCATIONAL AND TECHNICAL EDUCATION AND TRAINING
(VOTEC)

ASSESSMENT, CERTIFICATION AND RECOGNITION OF OCCUPATIONAL SKILLS AND
COMPETENCES

GENERAL REPORT

U.S. DEPARTMENT OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
 This document is reproduced here as
provided by the International
Organization for Migration
 This document is reproduced here
as provided by the International
Organization for Migration
• This document is reproduced here
as provided by the International
Organization for Migration

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY



TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

005611

BEST COPY AVAILABLE

(Note by the Secretariat)

1. The attached document presents a synthesis of the discussions of the policy seminar on Assessment, Certification and Recognitions of Occupational Skills and Competences held in Oporto, Portugal from 27 - 30 October 1992. It was jointly organised by the Portuguese Ministry of Education and the OECD. This was the third policy seminar which took place in the framework of the Education Committee's activity on The Changing role of Vocational and Technical Education and Training (VOTEC)(1).
2. The report was written by the general rapporteur, Mr. Denis Lawton, who was able to draw on the reports from four working groups, prepared by Mr. Michael Young (WG I), Mme Myriam Campinos (WG II), M. José Manuel Protes da Fonseca (WG III), and Mr. John Rodgers (WG IV).
3. More than 120 delegates, representing twenty two Member countries, Tchecoslovaquia, the European Commission, the International Organisation for Migration, as well as BIAC and TUAC participated in the seminar, which was directed at policy makers, practitioners and researchers in the fields of education, training, and employment.
4. The following themes were discussed in plenary sessions and in working groups(2):
 - Pedagogical and didactic implications of different approaches towards assessment and certification;
 - The role of assessment and certification in the functioning of training and labour markets;
 - Portability and transferability of qualifications;
 - Implementing assessment, certification, validation, accreditation.
5. This report is circulated to delegates to the Education Committee for **INFORMATION**.

NOTES

1. For a presentation of the activity altogether and of the preceding seminars see Annex I.
2. For a fuller presentation of the themes and issues cf. Annex II of this report.

PRELIMINARIES

1. Participants were welcomed to the Seminar by representatives of the Portuguese government who stressed the importance of the discussions to Portugal and to other countries represented. The OECD Secretariat welcomed participants and outlined the objectives of the Seminar in the context of the OECD project on the Changing Role of Vocational and Technical Education and Training. The Porto Seminar on Assessment, Certification and Recognition of Occupational Skills and Competences had been preceded by two seminars in 1991: the first in the USA on "Linkages in Vocational Education and Training", and the second in Switzerland on "Technological Innovation and Economic Change - Pedagogical and Organisational Implications for Vocational Education and Training". The next VOTEC Seminar is intended to provide the opportunity to examine the effectiveness and attractiveness of "dual systems" and other forms of learning at school and at work in view of technological, economic and social change. It is possible that there may be another Seminar on girls and women in VOTEC, before the final conference, probably in Paris in November 1994. The whole project had been endorsed by OECD in 1989 and was being given high priority, as it was considered to be of vital importance to all Member countries, not only those who were member of the European Community.

A framework for the seminar

2. As a background paper for the seminar, Dr. Hilary Steedman had presented a framework paper on "Issues and Problems", which she introduced at the beginning of the first session (DEELSA/ED/WD(92)15). Questions from the paper were also used each day to set the agenda for the working groups on each of the four themes (see below).

3. Reference was made to the importance of changes in all industrial countries which have led to similar training issues being discussed nationally. During the last twenty-five years electronically controlled automation in industry and commerce has produced more goods at lower prices, living standards have risen and demand has continued to rise. Production methods have changed so that industrial workers now tend to perform a variety of tasks. The most successful employers are those who have adjusted to these changes, exploiting new technology to the full. Those who try to follow are often dependent on the availability of good training facilities. This situation sets a challenge for policy-makers: much of the workforce is in need of training, but workers may have received only low-level schooling with little or no training after school. What employers themselves can do without help from government is often limited. The danger is that firms, or whole industries, get locked into a "low skills, low quality equilibrium" which results in failure and closure.

4. Many countries face the problem of helping firms move into a "high skills, high quality equilibrium"; training programmes are essential, and these are sometimes, but not always, provided by government initiatives; firms, however, also need to be persuaded to invest in extensive training. Public policy (local, regional or national) may involve legislation, financial help, direct provision of training, as well as schemes of assessment and certification. Co-operation between public and private organisations is one of the keys to success. The interests of individual workers are also important. Fortunately, in the process of moving from low quality to high quality, there is often a match between the needs of workers, firms and the whole economy.

5. How countries can develop programmes to improve methods of production is a general question; the task of the seminar was more limited, being concerned with how assessment and certification might contribute towards economic growth and individual development. Inevitably, the discussion of assessment and certification would sometimes impinge upon those wider concerns. In many OECD countries, training has been expanding for the last ten or fifteen years, and the standards of young people, in terms of general education and capability, now tend to be higher. Yet the range is extremely wide and colleges have to offer a variety of courses. Many young people are, however, still excluded for a number of reasons: their school attainments may be inadequate; the courses on offer may not be attractive to them; financial resources may be lacking. This kind of mismatch was also to be addressed by the seminar. Some countries had been experimenting with new methods and courses which could be evaluated and discussed internationally.

6. One trend common to most OECD countries is the tendency for young people to stay on in full-time or part-time education or training beyond the end of compulsory schooling. This trend cast doubt on the pattern, still common in many countries, of retaining two quite separate pathways beyond compulsory schooling: one "academic", the other "vocational" and often of lower status. Some countries have been exploring the advantages of more flexible models in which progression and switching would be encouraged. Discussion of such experiences with changes in assessment and certification would be valuable, especially in the context of considering the desirability of general education for all young people up to age 18. Extensive discussion could help countries, like the UK, where there was still a debate between those who wanted one unified pathway and those who wished to retain segregation. One topic identified for discussion in this context was the use of modular structures as a method of flexible course planning.

7. Another common trend has been for employers to look towards the education system to supply workers with higher levels of skills and general education. This trend puts educational institutions under the public spotlight. The reliability and validity of certification procedures are scrutinised, and sometimes changes are demanded which may pose problems. There are also important questions of cost. Colleges tend to regard the needs of students as a high priority; however, the requirement to meet costs from revenue may lead to lower standards. There is a tension between institutions' desire for stability and the need for change. The difficulty is essentially one of trying to be responsive without undermining the organisations themselves.

8. The existence of such problems emphasises the need for good communication between employers and institutions. Some good practices have developed, and these were identified as an important area for discussion. It was also pointed out that, in many OECD countries, full-time post-secondary training and education courses were designed exclusively for young people. These countries may find it necessary to respond to adult needs, perhaps following the example of Denmark and the UK, where "Further Education colleges" cater for both groups. The needs of adult employees were, however, sometimes quite different from those of the young: short, more focused, specialist courses were often more appropriate, and these might be provided either at the workplace or at weekends. It was not always easy, but some countries had managed to overcome many of the logistical and administrative difficulties. The certification of new skills required by adults was also sometimes a problem where certificates were mainly provided for the more standard courses designed for young people.

9. In some countries the difficulties were so considerable that the phrase "market failure" was being used: the matching of supply and demand in training was poor. There might be very high numbers of adults and young workers in need of training and willing to be trained, but their firms might find themselves in a situation where there was a conflict between the short-term interest of remaining at existing skill levels and the long-term interest in moving to a high-quality equilibrium. In such cases, one solution to market failure was planned public intervention of some kind. Where this occurs, the quality of interaction between public and private organisations is crucial, not least because it is at this interface that assessment and certification have to operate.

10. Certification can be part of a new market situation where satisfactory means are provided for employers and employees selling and buying skills. For this reason, certificates should be sufficiently simple and clear to enable employers to know exactly what they are "buying". Certificates also need simplicity, clarity and consistency over time in order to bring together employers and employees; but certificates also need to be sufficiently valued by employers to give them real currency. Firms have to be sure that certificates carry valid and reliable information which is also relevant, or they will not use them as part of the employment process -- including setting differential wage levels in some cases. In other words, the employer needs to know whether a certified worker really can do a specific job. But is it realistic to expect a certificate to provide so much reliable and valid information? There needs to be a reasonable balance between accuracy of detailed information and the cost involved -- including the cost of the employers' time in making sense of the information provided.

11. In some countries there is an additional problem of validity: an employer wants to know about the possession of several skills, but the employee may have been tested only on knowledge about some skills: there may be a gap between the needs of employers and the assessment practices in use. This may

be because the needs of the employer are specific, whereas the certificate is intended to be more general and necessarily involves "written papers", as well as the demonstration of specific on-the-job skills. On the other hand, the skills of an employee required in a firm might be more varied than what was assessed for certification. There are no easy solutions to these conflicts, but some countries have acquired valuable experience which is worth sharing and discussing -- including discussion between employers and the certifiers about what information can be reasonably expected from a certificate.

12. A further problem of certification concerns the question of stability of information. Employers like certificates to remain unchanged for as long as possible; but assessment and certification have to change in accordance with the current skills, which change rapidly as technology develops.

13. One way of coping with the problem of giving detailed information to employers is the use of competence-based assessment which sets out in detail on the certificate precisely the skills (competences) which have been acquired. Unfortunately, this approach also has certain disadvantages: the complexity of assessment, the high costs involved as well as the loss of reliability and consistency of the certificate over time. A perfect balance between these conflicting demands will be difficult to find. A further problem occurs in terms of the employee who also needs clear information about certification in order to make a rational decision about investing time in acquiring new skills.

14. For all these reasons it is important to have some kind of coherent framework for certification with clearly differentiated levels. It may not be possible to have a single responsible authority for all certification, but a market in which examining bodies compete can be extremely confusing and inefficient in terms of poor response to technological change. On the other hand, the kind of change which is too rapid and too complex will overload certification and carry the risk of breakdown. Some OECD countries seem to have achieved, however, a balance between excessive stability and reasonable flexibility. It was recommended that the seminar should focus on the extent to which change could be accommodated within a coherent and transparent system.

15. Other problems of assessment and certification were identified for discussion. For example, the majority of workers in many OECD countries had received no formal training; but it would be quite wrong to assume that they had acquired no skills; they had legitimate expectations that their existing skills should be formally recognised and certificated as well as being provided with training programmes to acquire new skills. This process of certification was often rightly different from what was thought appropriate for young trainees. But it was also essential that certification processes should be seen to be comparable in terms of clarity and consistency -- perhaps by being included within a single system.

16. Another problem was the fact that employers who financed training were sometimes reluctant to offer nationally recognised certification for fear of having their certificated workers "poached" by other firms. Once again, in some countries, there may be a case for suitable public intervention. Practices between OECD members varied considerably: in some cases there were collective agreements which encouraged employees to acquire skills and

certificates but which also introduced, it was alleged, rigidities of an undesirable kind. Discussion of this problem might be fruitful. It would also be important to achieve a balance between transferable general skills and workplace specific training. A public system of certification can sometimes take on that kind of responsibility. The seminar might help determine a realistic balance between immediate workplace relevance and reliable quality assurance for assessment and certification.

17. There is also a need for much greater understanding between the providers of training and the employers of trainees in several respects, bringing skills and certification as close together as was feasible, bearing in mind other difficulties discussed above. Discussions between employer representatives and employee representatives are also essential. It may be possible to overcome the problem of certifying firm-specific skills in a way which will encourage desirable mobility. Even the problem of certifying highly specific single skills may be reconcilable within one transparent certification system.

18. For some OECD countries the need to resolve the problems outlined above will be reinforced by the Single European Market. In particular, since the Treaty of Rome there has been a need for a system of mutual recognition of qualifications. This has yet to be fully achieved, partly because requirements for certification as well as modes of delivery vary so much at present. The seminar would encourage discussions between EC states as well as between the EC and other OECD countries.

Seminar papers and discussions

19. The Framework Paper was followed, over a period of four days, by a number of presentations on specific topics:

Theme I: Curricular and Pedagogical Implications of Different Approaches to Assessment and Certification

- David Short, United Kingdom
- Helmut Aigner, Austria
- Matti-Vesa Volanen, Finland

Theme II: The Role of Assessment and Certification in the Functioning of Training and Labour Markets

- Acacio Catarino, Portugal
- Michael Murphy, Australia
- Wilfrid Reisse, Germany

Theme III: Portability and Transferability of Qualifications

- Olivier Bertrand, France
- Claire Prevost-Fournier, Canada
- Jurgen Schmeh, EC

Theme IV: Implementing Assessment, Certification, Validation, Accreditation

- Ron Tuck, Scotland
- Benoit Bouys, France
- Winifred Warnat, USA

20. Discussion of these presentations, together with their accompanying papers, has been summarised in the sections on Common trends and Policy proposals, which follow (paras 26-28), or, if more appropriate, in the section devoted to Group Reports at the end of this general report (paras 29-63).

General report

21. This part of the report will be divided into three main sections: first, a discussion of the problems, issues and tensions which currently exist in the field of vocational and technical education and which are very largely shared by OECD countries. Second, an analysis of some of the common trends shared by Member countries, despite their obvious differences: general directions that all countries are travelling in, some more rapidly than others. And third, a list of tentative suggestions for policy proposals -- some of which OECD might take up.

22. Before discussing each of those in turn, it may be helpful to set the context in another way. The conference discussions covered a very wide range. VOTEC embraces programmes of a very basic kind which in a better world would have been unnecessary because the skills which they catered for would already have been accomplished during the period of compulsory schooling; other programmes were designed for reasonably well-taught school leavers, training them for specific tasks, or more general occupations, or more advanced skills either for now or for the future. In addition to that very wide range, a number of discussions were specifically concerned with the needs of adults as well as the young.

23. The point that was frequently made during discussion was that programmes targeting different levels of training may require quite different kinds of assessment. There is a tendency to think that, if a pattern or formula works well in one situation, it should be used everywhere. Some members of the conference were very anxious for their colleagues to avoid falling into that trap.

24. It was also generally accepted that there is no perfect system. But some may be closer to perfection than others. Even bearing in mind that what works in one country may be disastrous in another, it was clear that countries can learn from each other's experience, and it was expected that OECD might wish to develop certain policy principles. This issue will be returned to later in this report (para 28).

Common problems, issues, tensions, compromises

25. There were a number of cases where what was desirable in some respects was difficult to achieve for other reasons. The following is not a comprehensive list, but includes those which were most frequently raised and discussed during the conference, either in plenary sessions or group discussions.

- i) Training should meet the needs of industry, but employers often find it difficult to specify what they want, let alone what they need. It was accepted that this was by no means universally true, but it was frequently reported from many countries that some employers had difficulty in describing in detail, or even in general outline, exactly what they expected from school leavers or from trainees at the end of a training programme. At the same time, employers were frequently critical of schools and trainers for failing to supply what industry needed.
- ii) Training should be concerned with more than specific preparation for one task or job, but employers tend to be more concerned with their own specific requirements. This was not a general accusation against all employers, but it was widely felt that, in many cases, employers failed to look at more general needs, either of individual trainees or of the economy as a whole.
- iii) Training should meet the future needs of industry, but employers tend to be concerned with short-term requirements. It was sometimes suggested that this was a natural reaction by employers, but it was also a problem for the economy in general, as well as specific firms in particular.
- iv) Some, but not all, members of the conference were convinced that there were advantages in training qualifications carrying additional remuneration, but others feared that this would introduce rigidities into the workforce structure.

These four "tensions" were summed up as "market failure". Some contributors were convinced that, in their particular system, the arguments in favour of some kind of state intervention were overwhelming. Some societies were able to find other solutions but, in most cases, the four kinds of "tension" quoted above were sufficiently problematic to provide convincing arguments for the need for outside agencies to provide training which would not be available if left to industry itself -- particularly where there were many small firms.

- v) There is, however, a tension between the freedom of the market and dislike of intervention on the one hand, and the need for planning on the other. In some countries (but not all), any kind of government intervention was resented by some groups of employers. There was clearly no general formula which could be applied to all countries at

this moment, but it was felt that, given more time for detailed analysis, it would be possible to recommend circumstances under which outside intervention would be essential.

- vi) There was a tension, in many cases, between the desire for a simple system (including simple certificates) which would be easy for employers to understand and manage, and the complexity of training and assessment in terms of the needs and achievements of employees and trainees. What is good for employers in general may not be in the best interests of trainees.
- vii) We need to have a system which is as simple as possible (for a variety of reasons, including the needs of employers), but there are many complicating factors, such as the needs of immigrant workers, the slightly different requirements of older workers, women returning to work, and so on.
- viii) There is a conflict of priorities between making minor adjustments in order to improve an imperfect system and deciding when to attempt radical reform.
- ix) A specific example of lack of concordance between the immediate demands of employers and the needs of individuals was the tension between narrow training programmes sometimes preferred by employers and the much broader educational needs of individuals.
- x) There is a tension between curriculum and assessment. One of the accepted principles of good course design is that assessment is an integral part of the plan. Yet there are serious tensions between curriculum and assessment; for example, a curriculum should be designed with some concern for long-term learning outcomes, but assessment necessarily concentrates on short-term measures; a curriculum involves the design of a whole course, but assessment often has to be satisfied with a sample of learning outcomes; curriculum is concerned with validity, whereas traditionally, assessment has given priority to reliability. (Some countries have attempted to avoid this tension by omitting the use of the word "curriculum", but this was not necessarily a solution to the substantive problem).

Common trends

26. In many Member countries, despite important national differences, there are some common trends which exist; to some extent, all OECD countries are driven by economic and technological change, and there is a limit to the ways that they can react to those changes. The following is a list of common trends which were discussed during the seminar:

- The curricula for programmes are tending to become combinations of general education, general training and more specific training; getting the balance right is increasingly seen as the problem.
- Many countries are experimenting with modular approaches to curriculum design in order to achieve greater flexibility, including the possibility of switching from academic to vocational programmes, or vice versa.
- There is a good deal of dissatisfaction with "traditional" approaches to teaching and learning; more experiential learning has been advocated, but teachers and instructors themselves need retraining in many cases to make such reforms fully effective.
- Similarly, assessment experts now tend to be more concerned with evidence of understanding rather than simple memorisation. But different tasks need different kinds of assessment. It is always important to ensure that the mode of assessment fits the learning task.
- Many countries now have some kind of student self-assessment. In such cases, there is a tendency for the student self-assessment to be monitored by teachers, just as teacher assessment is normally subject to moderation of some kind.
- Many countries have developed schemes for the recognition and accreditation of prior learning. This may be of particular help with such groups as new immigrants and adult returners to the workplace.
- Attempts are being made to encourage portability and transferability of qualifications.
- Many countries are making progress with workplace learning, together with workplace curricula, assessment and certification.

27. For all the above trends it was helpful for Member countries to have the opportunity to discuss issues and compare possible solutions.

Policy proposals

28. Finally, having looked at some common problems and common trends, it was helpful to attempt to draw up a list of possible policy proposals. The seminar accepted that it had no authority in this sphere and made suggestions only tentatively for consideration by other OECD policy committees:

- OECD should encourage the consideration of the role of government, employers, unions, chambers of commerce and other agencies in combatting market failure -- attempting to ensure that suitable training will be supplied to meet demands and needs.

- Good training programmes should include general education as well as more specific training, whenever appropriate.
- Assessment should be matched to curriculum -- not vice versa. Mixed modes of assessment are often most appropriate. (Note: In some countries, the word curriculum was deliberately not used in the context of training; this seemed to be because in the past, "curriculum" had been confused with input training models which had generally been replaced by output assessment programmes.)
- Where there are two post-compulsory pathways, often mistakenly referred to as "academic" and "vocational", it was important that parity of acceptance and "switching" should both be facilitated. (There was a good deal of dissatisfaction expressed with the over-simplified stereotyping of learning as either "academic" or "vocational". OECD could assist in the process of avoiding such over-simplification.)
- Courses described as "vocational" should count towards the entry requirements for higher education.
- Training should be planned with long-term needs as a priority, rather than immediate demands.
- There should be more studies on how to motivate employees to gain training qualifications, and how to reward those who are successful.
- Qualifications which are recognised nationally and internationally should be encouraged; there should also be comparability studies concerned with the standards of similar qualifications.
- Assessment is necessarily complex, but care should be taken to avoid over-elaboration. Costs in terms of time and other resources should not be ignored. Transparency is also a high priority. Educational factors should take priority over psychometric sophistication.
- Assessment procedures should be designed with a view to facilitating access for those groups who, in the past, have had difficulty with formal education and training.
- Provision of training opportunities for adults should be given high priority.
- There are many cases of good plans which have never been implemented. OECD should encourage studies of implementation.

Reports from working groups on the four seminar themes

29. The four summaries which follow are based primarily on discussions within the relevant groups, but they also draw on aspects of the discussions of

their themes, derived from discussions which took place in other groups. The following four summaries are, therefore, more concerned with discussions of the themes rather than only with what took place in each of the four groups.

Group I: The curricular and pedagogic implications of new approaches to assessment and certification

30. The report begins with three introductory points which reflect the generally shared perspective from which the group approached the questions of certification and assessment in vocational education:

- a) The priority is purpose, not methods. It was recognised that the issue of appropriate methods of assessment (and whether methods such as written tests that are common in general education should be used in vocational programmes) can only be resolved in relation to the purposes of assessment in each case. Such purposes might include encouraging progression to further levels, accrediting prior experience, or assessing a candidate's suitability for a particular job; all will require different methods of assessment. Likewise, competence in different occupational areas and at different levels will need to be assessed by different methods. The following two examples will illustrate this point: first, some occupations will require greater emphasis on oral skills; second, whereas evidence for a low-level practical skill might be obtained from an employee's performance in the workplace, a much more elaborate assessment will be necessary to identify whether the same employee has the potential to take on wider responsibilities, or be capable of high levels of study.
- b) The importance of taking account of national traditions and experience. Different assessment methodologies and issues had a different significance in the circumstances of different countries. Some have long traditions of teacher-based assessment, while others have depended on external examining bodies. Some have highly developed systems of collaboration between employers, employee organisations and teachers through which mutual trust has been established. In other countries this trust hardly exists and it is not surprising that there is greater emphasis on external assessment.
- c) New combinations of skills and knowledge. Regardless of their history and present circumstances, all OECD countries are faced with similar pressures from the increasingly competitive global economy. New forms of production demand new levels of skill and new combinations of skills and knowledge. The group attempted to identify the new competences; how and by whom they might be assessed. There was general agreement on the following:

- While individual firms will give priority to their short-term needs and to specific skills, their longer-term competitive future will depend on broader and more generic capacities of their employees. Governments need to be aware that these conflicts of interests are inevitable. They should not assume that because employers are only interested in immediate skill needs, longer-term and more general skills are not important for national economies as well as for the survival of individual firms.
- No-one can be certain about what new skills will be needed. The only certainties are that they will change more quickly than in the past, that workers at all levels will need to be adaptable and ready to change, and that the emphasis will increasingly be on new processes (learning to learn and to take risks, developing problem-solving skills, etc.) rather than new content.
- It is important that those involved in education and training are specific when making the case for "generic" skills. A number of countries had experienced failure when attempting to introduce and assess forms of general education as a component of vocational education programmes.

Group I recommendations and proposals

31. Group I recommendations (paras 31-34) relate specifically to the impact of current changes in work organisation and the need to create new incentives for young people to take vocational courses. Training programmes are increasingly being required to encourage the flexibility and commitment of employees, rather than just their capacity demonstrate specific skills. Trainers are encouraged to take on young people who previously would have left school for unskilled employment.

32. The impact of changes in work organisation:

- Assessment of the new kinds of "process" skills have to relate to specific work contexts as well as demonstrating the capacity of students/trainees to be analytical. Such assessment cannot be carried out by teachers or employers alone, but only in partnership between them. It is important that both OECD and national governments disseminate exemplars of successful assessment partnerships.
- Employers (individually, in local groups, and in their associations) need to be encouraged to participate in assessment, both at the design and the implementation stages. The credibility of any assessment methods depended on employer "ownership". This is particularly true of such approaches as portfolios and records of achievement which are widely accepted by teachers but make greater demands on employer time; employers need to be actively involved from the beginning if they are to be convinced of their value.
- Members emphasised that it was not only skills and knowledge that VOTEC programmes were going to need to develop, but **attitudes to work**

(for examples, the ability to take responsibility and to work without supervision). These are important even if, as seems likely, they are not as amenable to assessment.

- As VOTEC programmes become more flexible and trainees are expected to become responsible for choosing how to construct their programmes from a list of modules, the role of careers guidance specialists becomes crucial. Careers guidance officers should have an integral role in course design and the implementation of programmes.
- Teachers need to be supported in developing new approaches to learning and in developing assessment methods that draw on a wide variety of contexts. In particular, they need to find ways of enabling trainees to take responsibility for and evaluate their own learning strategies.
- In light of the demands being made on teachers and the difficulty of combining rather than polarising didactic and learner-centred pedagogies, consideration should be given to new approaches to the preparation of teachers that involve both the teacher training providers and the colleges in which vocational courses are offered.
- As a way of specifying broader generic skills, Member countries are recommended to develop the clustering of occupational areas as a basis for foundation vocational programmes.
- Parallel to the clustering of occupational areas, employers should be encouraged to identify sector needs as opposed to firm needs or process-specific needs for training.
- Creating new incentives for young people (and adult returners) to join vocational programmes:
 - i) It is important to design programmes that recognise the vocational motivation of young people by making learning and assessment activities more like "real work" and less like school. This means making them more collective, more negotiable and with more opportunities for students to improve their level.
 - ii) Opportunities for vertical mobility, regardless of the level, focus or type of programme (full or part-time) need to be created. This can be done by ensuring that all vocational qualifications provide access routes to higher education.
 - iii) Vocational qualifications need to be built into ladders of occupational as well as educational progression. This would mean, for example, that dental mechanics could become dentists, or legal and accounting clerks could be lawyers and accountants.
 - iv) Higher education staff need to be made aware of the new routes from vocational programmes into higher education and that, with the development of "franchising", the traditional VOTEC/HE divide is becoming more like a continuum.

33. Research and development proposals for national governments and OECD:

- The group proposed an enquiry into the new forms of general vocational education that are being developed in a number of Member countries replacing the traditional choice between occupationally-specific and diluted academic programmes. Such an enquiry into the new forms general vocational education that are being developed in a number of Member countries replacing the traditional choice between occupationally-specific and diluted academic programmes. Such an enquiry would need to explore the relationship between such courses and other routes, their opportunities for progression, and the different approaches that are adopted to breadth and general understanding and their relationship to vocational specialisation.
- The neglect of foreign language learning in VOTEC was seen as a major barrier to horizontal mobility. OECD and Member governments were advised to establish a major study which might draw on the experiences of smaller countries and the immigrant communities of larger countries for whom the need to learn at least one second language is a necessity.

A final note from group I

34. Some members expressed concern about the consequences of developing two distinctive vocational and academic tracks for 16-19 year-olds, rather than an integrated system in which students could follow a range of pathways through different combinations of theoretical and applied modules. As general vocational programmes are developed, and as students are encouraged to make choices in terms of their long-term vocational aims rather than competing for places on traditional high status (academic) courses, there is less and less of a case for separate tracks with distinct assessment systems. Such a conclusion will have very different implications for those countries with tried and tested VOTEC systems and those currently involved in developing them.

Group II: The role of assessment and certification in the functioning of training and labour-markets

35. The rapidly changing requirements of the labour market have already been analysed; this theme is concerned with the role of assessment and certification in facilitating desirable changes. Two main topics within the theme were identified for discussion: first, methods of adjusting qualifications and certification to changes; second, the relation between certification and the mobility of workers in the labour market.

Topic 1: adjustment to change

36. All countries have to find ways of dealing with the planning of the certification of vocational competence so as not merely to respond to the immediate needs of industry, but also to ensure the provision of future skill requirements which cannot be predicted with accuracy.

37. The group accepted the necessity, for individuals and for firms, of adapting to a number of changes that might arise. The main means of being able to respond to change and to anticipate future problems inevitably involves the concept of vocational education and training, which must include both general education and workplace competence. The members of the group felt, however, that when there was an emphasis on unpredictable future changes, a high level of general education had to be given some priority. Unfortunately, there were several ways in which "general education" was interpreted in different countries:

- it might be seen as "understanding" of a very broad kind, such as problem-solving, communicating, etc.; or
- general education might be focused on scientific and technical knowledge; or
- involve "mastery" of specific skills in the manner typical of "dual" systems.

38. The general concept of education and training, apart from involving questions of knowledge and skills, must also answer the need to produce individuals with positive attitudes to all kinds of demands which emerge in a rapidly changing world. This means that initial training should be planned with that priority in mind. Countries where academic education predominates may find that it is an advantage to have individuals who are more capable of being trained by firms in a general way rather than being given very specific skill training on the job. In other respects, too, the initial training should not be so narrowly specialised that it does not permit further education and training or progression to higher levels. For this reason some were of the opinion that there should be a comprehensive reappraisal of vocational education and training.

39. In order to facilitate adjustment to change, it is also essential to avoid retaining occupational groupings which are too narrow. For example, it was reported that Denmark had reduced the number of trade groups from 300 to 50, while Hungary had gone from 40 to 15 groups.

The question of certification stability

40. Different countries have various ways of dealing with adaptation to change -- for example, modifying the content of certificates (as in Germany) -- or creating new diplomas (France). The group recognised the need to find common solutions which would be acceptable to social partners (representatives of employers and employees) as well as to the education authorities.

41. Countries also tend to employ different change strategies: some operate with a continuous process of evolution; others negotiate for many years to arrive at a final agreement and then proceed with modifications by way of three-way discussions; others consider that one of the possible means is that social partners should collaborate in order to anticipate the changes -- a contract for a programme might even be jointly financed by the state and employers and agreed by tripartite arrangements. It is important that each country considers carefully the questions of change in the context of its own history and according to its own rule system. A single perfect model does not exist, but there is a general desire in all member countries to find ways of making progress.

Topic 2: Certification and worker mobility

42. There was agreement in the group about recognising the need for national certification which would constitute a system which would be sufficiently credible to be worthy of the confidence of all those concerned. However, definitions of certification and qualification were not always consistent or compatible. Two extreme types of system were identified. At one extreme there are countries where the prevailing custom is to have a certificate with a detailed description of items which have been judged by bureaucratic and complex criteria; they prefer a holistic or global definition. At the other extreme, there are countries where the norm is a job description involving a list of skills. In other words, being able to do the job is the "qualification".

43. No agreement was achieved between participants about the most appropriate link between gaining a certificate or qualification and achieving a wage increase. Some employers claimed that an automatic connection between wages and certification/qualification caused harmful rigidities. Employers tend to prefer a variety of qualifications with no automatic link with wages. From the workers' point of view, however, another kind of rigidity may tend to develop: sometimes they prefer to limit the availability of their own qualification in order to preserve its market value.

44. The group considered that discussion of international qualifications was premature, and that it would be necessary to allow time for social and cultural patterns to evolve gradually. The linguistic problem was only one of several difficulties involved.

Group III: Portability and transferability of qualifications

Kinds of transferability under consideration

45. The group considered it necessary to make a distinction between the following kinds of transferability: transfer from one job to another

-- within the same firm;

- within a sector;
- within a region;
- within a country.

46. Following a detailed analysis of specific situations in the many countries which were represented in Group III, the following policy trends were identified (without complete agreement within the group):

- Technical and professional training is also an integrating factor possessing value for the world of education, employment and in the management of human resources.
- The cultural element and the development of skills to adapt to new situations, should both be present in many programmes of technical and professional training (the analysis of modular systems might, in some cases be an advantage).
- The transferability of qualifications should be thought of within the framework of "permanent education" programmes, in which certification should be extremely flexible.
- Attainment gained from professional experience outside formal training programmes should be treated as equally important.
- When the transferability of qualifications is under consideration it is necessary to ensure that meaningful discussions take place between the various partners -- from the world of education and training and from the world of employment.
- When negotiations with employers take place, it is important to develop methods and procedures which are realistic rather than bureaucratic. It is essential to secure as much transparency as possible in the dialogue between workers with qualifications and employers.
- It is important to have regard for all the different factors concerned in the transferability of qualifications, whether the target is the world of work or the possibility of further academic studies.
- Finally, the training policy as a whole should give priority to conditions which promote real transferability, not just formal opportunities which are part of a rule system that does not operate effectively in practice.

A concrete case: the portfolio on or record of achievement

47. Detailed discussions took place about arrangements for the "portfolio" system which is now firmly part of practice in Quebec and elsewhere. This involves recognising the importance of a Portfolio/Record of Achievement which contains comprehensive information about the individual concerned which would be relevant to his or her position in the labour market. It also involves using the Portfolio not only as an instrument for assessing the qualification and the competence of the individual, particularly in the context of contact with potential employers, but also as a means of individual self-evaluation.

48. What should be the reference point for analysing the portfolio? On the one hand, there are arguments against giving too much emphasis to past academic achievements because of their lack of workplace relevance. From that argument, there would be a tendency to minimise the importance of academic certificates (diplomas). On the other hand, there are other important factors, such as well established links between diplomas and wages, as well as the traditional elitist position typical of public administration.

International transferability (in Europe and elsewhere)

49. Group III recommended that unnecessary regulations should be avoided, but that favourable conditions should be encouraged for the transferability of qualifications. For example, greater transparency of qualifications and certification would facilitate meaningful discussions between prospective employees and employers.

50. On the other hand, the problem of the lack of uniformity of terminology which exists within countries becomes much more problematic at the international level.

Group IV: Implementing assessment, certification and validation

51. The Group IV Report summarises the main reflections of the group and covers them under three headings or topics. First, the identification of a number of policy challenges which helped to focus attention on the group's mandate of looking specifically at Theme IV; second, centring on the significant areas of discussion of the issues concerning the theme of implementation of assessment, certification and validation; third, on the policy suggestions.

Topic 1: Identification of the policy challenges

52. From the beginning a fundamental point was made about the need to be clear on the purposes of assessment, and how to track them in a systematic way so that the design would be appropriate for the agreed policy purposes of assessment in vocational training and its relationship with the education system.

53. A central policy feature and challenge facing many OECD countries was that of processing, on the one hand, the traditional screening purposes of school education for academic selection, and, on the other hand, (given the trends in higher retention rates of young people staying on in education with a wider spread of needs, capabilities and aspirations), extending the range of options open to them in ways that would give them vocational preparation leading to positive opportunities for employment and career development.

54. In the same policy environment there are moves in many OECD countries to develop structures in assessment and certification that aim to set national standards and quality. In this context it was suggested that efforts were needed to resolve the tensions between having flexible and responsive structures for the certification and qualification systems that promoted more access for all, and those structures that allowed for progression - both within a coherent, credible and manageable system. Bearing in mind the degree of complexity involved, it was important to be effective in making progress in the implementation of assessment, certification and validation in order to achieve more qualified, highly skilled workforces. All this had to be achieved at reasonable cost and with acceptable "tradeoffs" between the partners.

55. It was also important to consider implementation issues that involved the social partners of unions and employers and met the needs of adults as well as young people, including the issues of uncertified skills through the accreditation of prior learning.

Topic 2: Implementation of assessment

56. Group IV considered that the concept of an academic/vocational continuum (introduced by Ron Tuck in his plenary session paper) was a better model than the traditional pattern of complete separation. However, it should not be adhered rigidly or seen in one-dimension terms, as there could be a good deal of flexibility by using modular structures and thus providing a variety of pathways for people of all ages and ability levels; this should also allow access to people in different places, especially recognising that individuals also learn a good deal outside institutions.

57. In designing programmes for the implementation of assessment, the following key purposes of assessment, certification and validation should be borne in mind:

- to ensure that education/learning needs are met;
- to meet the labour market/employment requirements.

58. In seeking to achieve those two objectives, could the process of assessment be designed to meet both? And, if so, would that mean two sorts of certification? In addition, there was a need to provide formative assessment, including good feed-back to the students. It was also considered that there was a need to think in broader terms of at least four other kinds of assessment:

- education/trainer assessment;
- industrial/employer/social partner assessment;
- team assessment;
- self-assessment.

59. Another key design issue in assessment and its implementation is whether the aim should be excellence (making good better) as opposed to competence. On this there was some disagreement about differences in philosophy. The disadvantage of moving to an excellence approach is that the assessment process would be likely to become distorted as it often moved into the area of values, attitudes or cultural bias, and could also become very complicated and costly. On the other hand, it was argued that if assessors (whoever they were) did not assess beyond competence, others in the labour market would.

60. There were also some misconceptions about competence-based approaches in terms of broad aims and scope. A competence-based approach was concerned to promote minimum standards as well as better general standards than existed at present in many occupations, allowing also for the higher development of individuals beyond minimum standards set at various levels. It was, however, also important in competence-based approaches which emphasised outcomes, that inputs should not be lost sight of -- particularly the quality of inputs and ways of assuring and delivering them.

61. There was also a view that justice could not be done in implementing new assessment systems without regard to cost. Related to that, a range of options could be available based on judgements concerning:

- cost-effectiveness;
- cost efficiency;
- access.

But it was also recognised that there could be tensions here, especially between cost-efficiency and the extension of access. It also needed to be remembered that assessment often had multiple meanings, and the example was cited that in assessing student performance what was actually assessed was often something other than student achievement (for example, the quality of teachers or trainers or the teaching methods used).

62. A number of other points about assessment were made:

- the virtue of anonymity in giving objectivity to assessment, although it was equally important that the public authorities should ensure that such methods were open to public scrutiny;
- in industrial and employment terms, assessment systems involving the social partners (unions and employers) in design and implementation

were valid in a special way, as they were close to those directly concerned with the occupations involved, as well as the dynamism of change;

- public accreditation of institutions/certificate-awarding bodies was also an important consideration;
- the idea that all key players -- providers and consumers -- should be comfortable with whatever assessment system was implemented in the OECD Member countries concerned, especially if this involved innovations in assessment, certification and validation.

Topic 3: Policy suggestions from Group IV

63. The key policy suggestion that emerged was the need to realise, in the debate on the implementation of assessment systems, that much attention had been given to the concept itself and to policy design issues, but very little had been paid to strategies for implementation. This applied not only to questions of responding to change, but also to making changes.

64. In some OECD Member countries there had been important attempts to innovate in recent years in the field of qualifications and related assessment systems, especially those inspired by competence-based approaches; other forms of innovation have also been important and have received considerable political support. However, from some evidence available, there were indications that if such implementations were to be successful, there would be a crucial need to think in terms of what the proposed changes meant for all the agencies involved. Declared policy aims and intentions often produced unintended consequences or weaknesses that had not been anticipated in the implementation strategies. Questions of successful and effective delivery of implementation at the various levels, also needed to be addressed.

65. Consideration of design on its own was not sufficient: without strategies that engaged, convinced and secured the commitment of the key players (teachers, trainers, assessors, social partners, consumers) in the changes that should be taking place, there were considerable risks that desirable policy objectives would not be realised. There was, therefore, a strong case for recommending special policy studies to draw out lessons for effective "best practice" implementation strategies.

Conclusion of general report

66. At an early stage in the conference, it was agreed that there was little hope in reaching consensus on assessment terminology. Not only are there differences between languages, but there is frequently disagreement in English on the same words (such as, skill and competence; curriculum and programme, etc.). No attempt was made to standardise usage during the conference, but participants were encouraged to make clear what they meant when using such terms.

67. There was a general feeling that after four days of intensive effort, a good deal had been achieved, but there was scope for much more work to be done in this field. Participants looked forward to receiving information about the other seminars and conferences which were part of the project.

ANNEX I

PROJECT PRESENTATION - October 1992

Objectives of the activity

This activity, endorsed by the OECD Education Committee in December 1989, followed the request of several Member countries concerned about the capacity of education and training systems to respond to young peoples' changing educational needs and aspirations and, at the same time, to changing economic demand for skills and skill profiles in the labour force. The activity is expected to promote mutual information and common reflection among OECD Member countries on recent policy developments and changing visions concerning the role and place of VOTEC within overall education systems and its relationship with the economy. In depth studies are, in particular, to examine changing pathways and participation as well as recent curricula developments in VOTEC.

Structure of the activity

The activity is organised according to three largely parallel approaches:

1. Analytical country reports prepared by administrations and experts in participating Member countries according to agreed themes and guidelines (cf SME/ET/90.24). Fifteen countries have so far submitted first contributions. The reports each have three chapters: 1. Recent developments, reforms and policy debate concerning VOTEC; 2. Sectoral studies on changes in production and employment and responses by VOTEC (Construction, Tourism, Printing or Machine Tool Construction); 3. Major policy concerns as defined at the first meeting of country representatives.
2. In depth studies by expert groups are presently being prepared in two areas of particular importance:
 - Changing pathways and patterns of participation in vocational and technical education and training and the changing relationship between initial education, training and employment - a study in interested Member countries, combining statistical analysis with other types of information documenting and explaining changing educational and occupational choices and pathways of different groups of young people (approach inspired by discussion paper n°1 of the US policy seminar - cf list of documents);

-- New approaches to integrated learning - a review and analysis of research literature and innovative practice concerning cognitive, pedagogical and organisational aspects of theoretical and applied learning by young people in post-compulsory education and training (starting out from discussion paper n°2 of the US seminar - cf list of documents).

3. Policy seminars are organised together with host countries on themes and problems related to this activity and proposed by the host country. These seminars provide the occasion for different actors involved in vocational and technical education and training to exchange information and experience and to discuss current policy issues. They are expected to add concrete policy perspectives to the analytical work undertaken in the other parts of the activity.

Two seminars took place in 1991: the first in March in the USA on "Linkages in vocational-technical education and training" and the second in September in Switzerland on "Technological innovation and economic change - pedagogical and organisational implications for vocational education and training". The third seminar on "Assessment, certification, and recognition of occupational skills and competences" was organised on October 27 - 30, 1992 in Portugal (cf list of documents).

The next VOTEC seminar is scheduled in Marseille, France. It will provide the opportunity to examine the effectiveness and attractiveness of "dual systems" and other forms of learning at school and at work in view of technological, economic and social change.

One other VOTEC seminar may take place in 1994

Final Conference

A final conference is provisionally scheduled to take place during the last week of November 1994 at the OECD in Paris.

THE CHANGING ROLE OF VOCATIONAL AND TECHNICAL EDUCATION AND TRAINING (VOTEC)

LIST OF DOCUMENTS

- ED(89)17 PROPOSALS FOR WORK
- SME/ET/90.24 I. CONCLUSIONS OF THE MEETING OF NATIONAL REPRESENTATIVES AND EXPERTS HELD IN PARIS ON MARCH 14 AND 15, 1990
II. GUIDELINES FOR ANALYTICAL COUNTRY REPORTS

LINKAGES IN VOCATIONAL-TECHNICAL AND TRAINING
CHALLENGES -- RESPONSES -- ACTORS

Seminar organised by the United States Department of Education and the OECD
19th-22nd March, 1991
Phoenix, Arizona, USA

- SME/ED/WD(91)5 COMPULSORY EDUCATION AND WHAT THEN ?
SIGNALS, CHOICES, PATHWAYS
Discussion paper n° 1
- SME/ED/WD(91)3 LEARNING AND WORK: THE RESEARCH BASE
Discussion paper n° 2
- SME/ED/WD(91)4 THE ROLE OF EMPLOYERS AND UNIONS IN FACILITATING
TRANSITION TO EMPLOYMENT AND FURTHER LEARNING
Discussion paper n° 3
- SME/ED/WD(91)2 POLICY INTEGRATION AND CO-OPERATION -- A PERSISTENT
CHALLENGE
Discussion paper n° 4
- SME/ED/WD(91)15 WHERE DO WE GO FROM HERE -- THE US PERSPECTIVE
- SME/ED/WD(91)11 SYNTHESIS OF DISCUSSIONS

TECHNOLOGICAL INNOVATION AND ECONOMIC CHANGE: PEDAGOGICAL AND ORGANISATIONAL
IMPLICATIONS FOR VOCATIONAL AND TECHNICAL EDUCATION AND TRAINING

Seminar organised by the Swiss Federal Office of Industry and Labour and OECD
18th-20 September, 1991 -- Sainte-Croix, Switzerland

- SME/ED/WD(91)13 THE ADVENTURE OF TECHNICAL PROGRESS
PROBLEMS AND RESPONSIBILITIES
Discussion paper n° 1
- SME/ED/WD(91)12 TRAINING AND AUTOMATION IN PRODUCTION ACTIVITIES:
A LOGIC OF PROFILES OR OF LEVELS ?
Discussion paper n° 2
- SME/ED/WD(91)18 TRAINING AND DEVELOPMENT OF SKILLED WORKERS IN
AUSTRIAN INDUSTRIES
Discussion paper n° 3
- SME/ED/WD(91)16 COORDINATING LEARNING IN SCHOOLS AND ENTERPRISES --
ROLES AND RESPONSIBILITIES IN VIEW OF TECHNOLOGICAL
INNOVATION
Discussion paper n° 4
- SME/ED/WD(91)14 SKILL PROFILES AND SKILL FORMATION IN TOMORROW'S
FACTORIES
Discussion de paper n° 5
- DEELSA/ED/WD(92)35 SYNTHESIS REPORT

**ASSESSMENT, CERTIFICATION AND RECOGNITION OF OCCUPATIONAL SKILLS AND
COMPETENCES**

Seminar co-organised by the Portuguese Ministry of Education and the OECD
27 - 30 October 1992
Porto, Portugal

DEELSA/ED/WD(92)15	ISSUES AND QUESTIONS (Issues Paper)
DEELSA/ED/WD(92)26	PROBLEMS OF COMPETENCIES AND TRAINING CERTIFICATIONS WITHIN THE EUROPEAN COMMUNITY (For Information)
DEELSA/ED/WD(92)20	COMPARABILITY AND RECOGNITION OF QUALIFICATIONS: EUROPEAN EXPERIENCES (Theme III)
 <u>COUNTRY CONTRIBUTIONS</u>	
DEELSA/ED/WD(92)29	AUSTRIA (Theme I)
DEELSA/ED/WD(92)30	FINLAND (Theme I)
DEELSA/ED/WD(92)16	UNITED-KINGDOM (Theme I)
DEELSA/ED/WD(92)17	AUSTRALIA (Theme II)
DEELSA/ED/WD(92)18	GERMANY (Theme II)
DEELSA/ED/WD(92)31	PORTUGAL (Theme II)
DEELSA/ED/WD(92)19	CANADA (Theme III)
DEELSA/ED/WD(92)32	COMMISSION OF THE EUROPEAN COMMUNITIES (Theme III)
OECD/GD(90)6 (for Information)	FRANCE (Theme IV)

DEELSA/ED/WD(92)21	SCOTLAND (Theme IV)
DEELSA/ED/WD(92)34	UNITED-STATES (Theme IV)
DEELSA/ED/WD(92)27 (FRENCH COMMUNITY)	BELGIUM
DEELSA/ED/WD(92)22 (FLEMISH COMMUNITY)	BELGIUM
DEELSA/ED/WD(92)23	DENMARK
DEELSA/ED/WD(92)25	NEW-ZEALAND
DEELSA/ED/WD(92)24	•SWEDEN
DEELSA/ED/WD(92)28	SWITZERLAND
DEELSA/ED/WD(92)46	NEW APPROACHES TO INTEGRATED LEARNING (ISSUES PAPER)

ANNEX II

Themes for Discussion

Theme I

Pedagogical and didactic (curriculum) implications of different approaches towards assessment and certification

- Pedagogical versus labour market oriented objectives of assessment and certification: education-led "examination" and employment-led "testing" (identity and identification) -- implications for curricula, learning processes, teaching methods (e.g. exams, tests and the modularisation of learning processes, etc)
- The role of assessment and certification in initial and further education and training
- Assessment, certification and standards of achievement
- "Techniques" of assessment and certification and their appropriateness with respect to different types, levels and environments of education and training: e.g. academic, technical and vocational education and training; theoretical and applied learning; school-based and work-based learning; initial and further education and training; etc
- Educational impact of competency based assessment, as compared to more holistic evaluation of learning

Theme II

The role of assessment and certification in the functioning of training and labour markets

- The role of assessment and certification in relation to classification and remuneration: regulated, negotiated and/or market relations?
- Defining and assessing the collective skill profile of the work force (at the level of enterprises, sectors, system-wide...): as a reference for skills and competences of individuals; as an instrument of planning and development; etc

- The role of assessment and certification in determining the "value" of different skills and competences (and of academic diplomas and occupational certificates): in different education and employment systems; at entry level and over time (assessment, certification and career); in internal and external labour markets

Theme III

Portability and transferability of qualifications

- across enterprises, sectors, and occupations
- cross-nationally: the European experience, compared to strategies developed in traditional "immigration countries" (e.g. USA, Canada, Australia)
- across regions within countries (experience from federal countries)

Theme IV

Implementing assessment, certification, validation, accreditation

- Institutional frameworks and organisational arrangements: the role of different actors with respect to validation and accreditation of skills and competences acquired in different learning processes and contexts, e.g. school-based and work-based learning: initial and continuing education and training; formal and non-formal learning; prior learning and experience acquired independently of assessment and accreditation
- Managing multiple and flexible (individualised?) systems of learning, assessment and certification
- Costs and benefits of different systems of assessment, certification and recognition of occupational skills and competences (from the point of view of different "actors", i.e. public administration, educational institutions, teachers and trainers, employers, learners and workers).