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Making learning visible: identification, assessment and recognition of non-formal learning

During the last few years, most Member States of the EU have emphasised the crucial role of learning that takes place outside of and in addition to, formal education and training. This emphasis has led to an increasing number of political and practical initiatives, gradually shifting the issue from the stage of pure experimentation to that of early implementation.

Introduction

This article¹ treats the question of how to make learning, which takes place outside formal education and training institutions, more visible. While learning in the formal education and training system is a distinct feature of modern societies, non-formal learning is far more difficult to detect and appreciate.² This invisibility is increasingly perceived as a problem affecting competence development at all levels from the individual to society as a whole.

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Identification, assessment and recognition of non-formal learning has to be based on simple and inexpensive methodologies and a clear notion of how institutional and political responsibilities are to be shared. But first and foremost, these methodologies have to be able to deliver what they promise, with the quality of 'measurement' being a crucial aspect. This article makes an effort to clarify, through an initial theoretical discussion, the requirements for reaching successful practical solutions in this field.

The character of learning

When approaching the questions of how to identify and assess non-formal learning it is crucial to keep in mind that learning is contextual in its character. When taking place in social and material settings, knowledge and competences are very much the result of participation in 'communities of practice' (Lave and Wenger, 1991). Learning cannot be reduced to passive reception of 'pieces' of knowledge. This perspective implies a focus not only on the relational side (the role of the individual within a social group) but also on the negotiable, concerned and engaging nature of learning (the communicative character of learning). The individual learner acquires the skill to perform by actually engaging in an ongoing process of learning. Learning is thus not only reproduction, but also reformulation and renewal of knowledge and competences (Engeström 1987, 1991 and 1994).

The results of learning processes, what we call competences, are partly tacit (Polanyi 1967) in their character. This means that it is difficult to verbalise and delimit the single steps or rules intrinsic to a certain competence. In some cases, people are not even aware of being in possession of a competence. This is highly relevant to the task of assessing non-formal learning and has to be reflected by the methodologies. Much of the know-how we possess was acquired through practice and painful experience. An ex-

1) This article is an extract of the executive summary of "Making learning visible" by Jens Bjørnavald, Cedefop Reference publication, Office for Official Publications of the European Communities, Luxembourg.

2) The term non-formal learning encompasses informal learning which can be described as unplanned learning in work situations and elsewhere, but also includes planned and explicit approaches to learning introduced in work organisations and elsewhere, not recognised within the formal education and training system.



perienced carpenter knows how to use a tool in ways that escapes verbalisation. Normally, this know-how is taken so much for granted and the extent to which it pervades our activities unappreciated.

Assessment in formal education and training: main lessons

The important issue is whether it is possible to develop methodologies able to capture the (contextually specific and partly tacit) competences in question? While specialised methodologies for assessment of non-formal learning still have a long way to go, testing and assessment within formal education and training can refer back to a long history of practice, research and theory (Black 1998). The ongoing expansion of assessment into work and leisure time is inevitably linked to this tradition. It may be assumed that new approaches rely heavily on the methodologies developed within the more structured learning areas presented by formal schooling. At least it may be assumed that some of the same challenges and problems are shared between the two learning domains.

Assessment in formal education and training can be said to serve two main purposes. The formative purpose is to aid the learning process. No system can function properly without frequent information on the actual working of the process. This is important in classrooms as well as in enterprises: the more variable and unpredictable the context, the more important the feedback. Ideally, assessment should provide short-term feedback so that learning deficits can be identified and tackled immediately. The summative purpose is to provide proof of an accomplished learning sequence. Although these proofs may take many forms (certificates, diplomas, reviews, etc.) the purpose is to facilitate transfer between different levels and contexts (from one class to another, from one school to another, from school to work). This role can also be formulated as one of selection and a way of guarding the entrance to levels, functions and profession

The confidence attributed to a specific assessment approach is generally linked

to the criteria of reliability and validity. The reliability of an assessment depends on whether results can be reproduced in a new test occasion and by new assessors conducting the test. Validity can, in many respects, be looked upon as a more complex concept and concern than reliability. A starting point might be to consider whether an assessment measures what it was originally intended to measure by those preparing it. Authenticity is a primary concern; high reliability is of little value if the result of the assessment presents a distorted picture of the domain and candidate in question.

Reliability and validity are meaningless concepts, however, if not linked to reference points, criteria for judgement and/or standards of achievement, etc. We can identify two main principles used when setting these reference points and/or criteria. In formal education and training, norm referencing (according to the setting of a group) is commonly used. The second way of establishing a reference point is to relate a given performance to a given criterion. Criterion-referenced testing implies identifying a domain of knowledge and skills, then trying to develop general criteria on the basis of the performance observed within this specific domain (Popham 1973).

The lessons from testing in the formal system can be used to raise a number of questions and topics relevant to the domain of non-formal learning:

- a) Which functions, formative or summative, are to be fulfilled by the new methodologies (and institutional systems) for identification, assessment and recognition of non-formal learning?
- b) The diversity of learning processes and learning contexts raises the question of whether the same kind of reliability can be achieved in this area as in formal education and training.
- c) The contextual and (partly) tacit character of learning complicates the quest for validity and the question is whether methodologies are properly designed and constructed in order to deal with this issue.
- d) The matter of reference points ('standards') is a key issue which needs to be

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addressed. The question is whether domain boundaries (including ‘size’ and content of competences) are defined in a proper way?

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Institutional and political requirements

The future role of systems for the assessment and recognition of non-formal learning cannot be limited to a question of methodological quality. While being important, reliable and valid methodologies are not sufficient to make individuals, enterprises and/or educational institutions trust and accept assessments. This is particularly the case if assessments are given a summative role, providing a competence proof to individuals competing for positions in the labour market and in educational institutions. A number of political and institutional preconditions have to be met to attribute some actual value to the assessments in question. This can be done partly through political decisions securing the legal basis for initiatives but should be supplemented by a process where questions of ‘ownership’ and ‘control’ as well as ‘usefulness’ must be clarified. As we move from pure experimentation to actual implementation of permanent systems, it becomes clear that the questions of participation and information becomes increasingly important (Eriksen 1995). Formulated in another way; are all relevant participants involved, governments as well as social partners?

In this way, assessments of non-formal learning can not only be judged according to technical and instrumental criteria (reliability and validity), but have to include a series of normative criteria (legality and legitimacy) as well. Furthermore, the acceptance of assessments of non-formal learning is not only a matter of their legal status but also of their legitimacy.

The European situation is presented herein through the examples of five country clusters as well as activities at EU level. Although countries within each cluster may differ somewhat in their methodological and institutional approaches and choices, geographical nearness as well as institutional closeness seem to motivate mutual learning and to a certain degree common solutions.

Germany and Austria; the dual system approach

The German and Austrian approaches to the question of identification, assessment and recognition of non-formal learning are very similar (Cedefop, Collingro et.al., 1997, Cedefop, Mayer et.al., 1999). It is interesting to note that the two countries where work-based learning has been most systematically integrated into education and training (through the dual system) have so far been reluctant to embrace this new trend. On the one hand, this reflects success; the dual system is generally viewed as successful both in terms of pedagogy (the combination of formal and experiential learning) and capacity (high proportions of the age groups covered). On the other hand, and reflecting the strong emphasis on initial training, the existing system seems only partly able to extend its functions to continuing vocational training and to the more diverse training requirements of adults. But, in spite of this, we can observe a substantial amount of project-based experimentation and the attention towards these questions is increasing. The discussion on recognition of non-formal learning in Germany and Austria is closely linked to the discussion on modularisation of education and training.

Greece, Italy, Spain and Portugal; the Mediterranean approach

The general attitude to the introduction of methodologies and systems for non-formal learning in Greece, Italy, Spain and Portugal is positive (Cedefop, Turner, 2000, Cedefop, Di Fransesco, 1999, Cedefop, Castillo et.al., 2000). Both in the public and private realms, the usefulness of such practices is clearly expressed. The huge reservoir of non-formal learning which creates the basis for important parts of the economies in these countries



needs to be made visible. It is not only a question of making it easier to utilise existing competences, but also a question of how to improve the quality of these. Methodologies for the assessment and recognition of non-formal learning can be viewed as tools for quality improvement, encompassing not only single workers and enterprises but whole sections of the economy. These countries also illustrate that the step from intention to implementation is a long one. Legal and political moves have been made through educational reforms of varying scope but the actual introduction of assessment and recognition practices has not progressed very far. The coming years will show whether the positive intentions almost unanimously expressed in the four countries will be translated into practices which actually affect and serve individuals and enterprises.

Finland, Norway, Sweden and Denmark; the Nordic approach

It is not possible to speak of a 'Nordic model' at least not in any strict sense (Cedefop, Haltia et.al., 2000, Cedefop, Pape, 1999, Cedefop, Nielsen, 1999). Finland, Norway, Denmark and Sweden have chosen different approaches and are working according to somewhat different schedules. These differences do not change the fact that all four countries have taken practical steps through legislation and institutional initiatives, towards strengthening the link between formal education and training and learning taking place outside schools. Despite the fact that some elements of this strategy have existed for some time, the most important initiatives have taken place in recent years, mostly since 1994-95. The mutual learning between these countries is strong and has become even stronger over the past two to three years. The influence of Finnish and Norwegian approaches on recent Swedish documents illustrates this effect. Finland and Norway are clearly opening up for the institutional integration of non-formal learning as part of a general lifelong learning strategy. The plans presented in Sweden and Denmark indicate that these two countries are moving in the same direction and that the issue of non-formal learning will become more focused in the coming years.

UK, Ireland and the Netherlands; the national vocational qualification (NVQ) approach

In the UK, Ireland and the Netherlands (Cedefop, SQA, 1998, Cedefop, Klarus et.al., 2000, Cedefop, Lambkin et.al., 1998) we can observe strong acceptance of an output-oriented, performance-based model of education and training. The general acceptance of learning outside formal education and training institutions as a valid and important pathway to competences is a basic feature in these countries. What is questioned, however, is how such a system should be realised. The UK and Dutch experiences illustrate some of the institutional, methodological and practical problems associated with establishing a system able to integrate non-formal learning within its framework. The challenge of developing an acceptable qualification standard seems to represent the first and perhaps most serious obstacle (Wolf, 1995). As long as assessments are supposed to be criterion-referenced, the quality of the standard is crucial. The UK experiences identify some of these difficulties balancing between too general and too specific descriptions and definitions of competences. The second important challenge illustrated in the UK and Dutch cases, but not reflected in our material on the Irish experience, is related to the classical assessment challenges of reliability and validity. In our material the problems have been clearly demonstrated but the answers, if they exist, are not so clearly defined. All three countries base their vocational education and training on modularised systems, a factor which seems to support the rapid and large scale introduction of methodologies and institutions in the field.

France and Belgium; 'opening up' diplomas and certificates

In several respects, France can be characterised as one of the most advanced European countries in the area of identification, assessment and recognition of non-formal learning. Belgium has been less active, but a number of initiatives have been taken during recent years, partly influenced by the French experiences (Cedefop, Vanheerswyngheles, 1999, Cedefop, Feutrie, 1998). The first French initiatives were taken as early as 1985

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“Initiatives at European level have clearly been important in pushing the issue forward in the minds of the public as well as politicians. The white paper on teaching and learning (European Commission, 1995) helped to define the issue in a clear way and thus supported the processes at national and sector level. The resulting programmes (mainly Leonardo da Vinci and Adapt) have initiated and financed unparalleled experimental activity.”

when the system of the ‘bilan de compétence’ was introduced. The aim of the bilan is to support the employer/employee in identifying and assessing professional competences; both to support career development and in order to support enterprise-internal utilisation of competences. The second important French initiative was the ‘opening up’ of the national vocational education and training system for competences acquired outside formal institutions. Since 1992, vocational certificates (Certificate d’aptitude professionnelle) can be achieved (to various degrees) on the basis of assessments of non-formal and prior learning. A new law, initiated by the Ministry of Labour and Solidarity, will be put into force from 2001. This law states the right of the individual to have his or her prior, non-formally acquired competences assessed and recognised. This law will broaden the French approach in this field and will make it possible to obtain entire certificates on the basis of non-formal learning. A third important initiative was taken by the French chambers of commerce and industry where the aim was to set up procedures and standards for assessment independent of the formal education and training system (Colardyn, 1999). Using the European norm EN45013 on procedures for certifying personnel as a point of departure, important experiences have been gained. Parallel activities based on EN 45013 are going on in Belgium.

EU approaches

Initiatives at European level have clearly been important in pushing the issue forward in the minds of the public as well as politicians. The white paper on teaching and learning (European Commission, 1995) helped to define the issue in a clear way and thus supported the processes at national and sector level. The resulting programmes (mainly Leonardo da Vinci and Adapt) have initiated and financed unparalleled experimental activity. While not interfering directly in the efforts to develop national systems in this area, the EU level has clearly strengthened attention towards the issue and also contributed in a practical sense by supporting methodological and institutional experi-

mentation. This does not mean that the particular strategy of the white paper, focusing on European standards and a European personal skills card (PSC), has been implemented (European Commission, 2000). One important reason for this is the mixing of objectives in the original conception of the task. On the one hand the PSC was presented as a summative approach; introducing new and more flexible proof of qualifications and competences. On the other hand the need for new assessment methodologies was promoted on the basis of the need to identify and utilise a broader basis of competences; what we may term a formative objective basically addressing the support of learning processes. Looking into the Leonardo da Vinci experiment, the first objective has only been elaborated and followed up to a limited degree. Where a summative element can be detected, it is normally with a clear reference to existing national qualification systems or linked to a limited sector or profession. The formative aspect, however, has turned out to become a main concern. Not in the form of extensive supranational systems, but in the form of practical tools for single employers and/or employees. Opening up for initiatives from a wide variety of actors, questions and methodologies have been initiated at a ‘low’ institutional level where formative issues and concerns have dominated. Or, to put it in another way, the activity of the projects illustrates the priorities of enterprises and sectors, not the priorities of the National ministries.

What has triggered this wave of activity affecting most European countries almost simultaneously? Answering this requires focusing on political and institutional objectives, developments and challenges. Below, we will emphasise three aspects.

Reengineering education and training; the aspect of lifelong learning

To establish a system for learning throughout life requires a stronger focus on the link between different forms of learning in different learning domains at different stages of life. While the formal system is still very much focused on initial education and training, a lifelong learning system has to face the challenge of linking a variety of formal as well as non-formal



learning areas together. This is necessary to meet the individual's need for continuous and varied renewal of knowledge and the enterprise's need for a broad array of knowledge and competences - a sort of knowledge reservoir to face the unexpected. Also in this context, the question of identification, assessment and recognition of competences presents itself as crucial. Competences have to be made visible if they are to be fully integrated into such a broader strategy for knowledge reproduction and renewal.

Key qualifications

Although normally treated as two separate issues, the question of how to define, identify and develop key qualifications (Kämäräinen, 1999) and the challenge of how to assess non-formal learning are closely related. We will argue that these two debates reflect different aspects of the same issue. In both cases we can observe increasing attention towards learning and knowledge requirements in a society characterised by unprecedented organisational and technological change. Methodologies and systems for identification, assessment and recognition of non-formal learning can be looked upon as practical tools for making key qualifications visible and stronger. The terms informal and non-formal learning are, however, not very helpful in this respect. Non-formal learning is a 'negative' concept in the sense that it is a negation of something else. It gives little positive indication of content, profile or quality. The concept is important, however, by drawing attention to the rich variety of learning areas and forms available outside formal education and training. A closer link to the key qualification issue might thus be useful and give the exercise more direction. The linking of formal and non-formal learning domains can be viewed as a way of realising and materialising the objectives expressed through key qualifications.

Solutions seeking problems; a supply driven development?

Only in a few cases can the development of measurement and assessment methodologies be described as driven by demand or by a push from the bottom up. If we study the last half of the 1990s when this

tendency gained momentum and strength the existence of programmes like Adapt and Leonardo da Vinci at European and sector level have contributed to the setting and changing of 'the assessment agenda.' The availability of 'fresh money,' linked to a limited set of specific priorities, inspired a high number of institutions to involve themselves in the development of instruments and tools. Although the results from these projects may be of varying quality, the long term impact on the agenda of the organisations and institutions involved should not be underestimated. The coming period will show whether this supply driven movement will find users, for example at sector and enterprise level, appreciating the effort put forth.

Answering the question of why attention to non-formal learning has been strengthened does not provide an answer to the question of how to support and strengthen the positive elements of these developments. Following the theoretical clarifications made in the first part of the report, the challenges ahead can be defined as both a methodological (how to measure) and a political/institutional one (how to secure acceptance and legitimacy).

Methodological requirements

Which functions are to be fulfilled by new methodologies (and institutional systems) for identification, assessment and recognition of non-formal learning? As indicated previously, it is necessary to build on the lessons learned from formal education and training. A direct transfer is not, however, possible. The increased diversity and complexity of the non-formal learning has to be appropriately reflected by the methodologies. Do we speak of a formative role where the instruments and tools are used to guide the learning processes of individuals and enterprises or do we speak of a more limited summative role where non-formal learning is tested for possible inclusion into the setting of formal education and training? The purpose of the assessments, in the non-formal as well as in the formal domain, is decisive for the methodological choices to be made and for the ultimate success of the exercise. Successful development of methodologies and systems implies that these functions are clearly understood and com-

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The highly contextual and (partly) tacit character of non-formal learning complicates the quest for validity. There is an acute danger of measuring something other than what is intended. The main thing is to avoid a distorted picture of the candidate and the domain and to strive for authenticity.

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bined and/or separated in a constructive and realistic way.

The diversity of learning processes and contexts makes it difficult to achieve the same kind of reliability as in standardised (for example multiple choice) tests. The question is how (and which specific kind of) reliability should be sought in this new domain. Reliability should be sought by seeking optimal transparency of the assessment process (standards, procedures etc.). Reliability could also be supported through implementation of systematic and transparent quality assurance practices at all levels and in all functions.

The highly contextual and (partly) tacit character of non-formal learning complicates the quest for validity. There is an acute danger of measuring something other than what is intended. The main thing is to avoid a distorted picture of the candidate and the domain and to strive for authenticity. Methodologies have to reflect the complexity of the task at hand; methodologies must be able to capture what is individually and contextually specific.

The question of reference points ('standards') is a major issue for assessment of formal as well as non-formal learning. While norm-referencing (using the performance of a group/population) has not been seriously discussed in the context of assessing non-formal learning (due to the diversity of competences involved), the issue of criterion or domain-referencing lies at the heart of the matter. The definition of boundaries of competence-domains (their size and content) and the ways in which competences can be expressed within this domain is of critical importance. The wider the area, the greater the challenge in designing authentic assessment approaches. This reverts, in many ways, to the question of functions to be fulfilled; do we want to improve learning processes or do we want to produce proofs (papers of value)? Both purposes are highly legitimate and useful. The setting up of reference points will, however, differ considerably according to the purposes selected.

Political and institutional requirements

As soon as the first methodological requirement has been met, by answering

the questions of methodological purpose and function (see above), institutional and political implementation could be supported along two main strategies; one focusing on 'institutional design' and the other on 'mutual learning.'

Institutional design: Some basic criteria must be fulfilled if proofs of non-formal learning are to be accepted along with proofs of formal education and training. First of all, participants must be heard when setting up and operating systems of this kind. Since systems for recognition of non-formal learning will have a direct effect upon the setting of wages as well as on the distribution of jobs and positions in the labour market, this matter clearly incorporates the balancing of interests. Although not emphasised very much until now, the question of who to involve and who to listen to will be of decisive importance in the coming period. Secondly, relevant information must be fed into the process. On the question of representation, the definition and articulation of standards and reference points (in particular) require sufficient and balanced information. Thirdly, the transparency of the structures and procedures are very important. It is possible to establish structures where the division of roles (setting of standards, assessment, appeal, quality control) is clearly defined and presented. Transparency of procedures is 'a must' if acceptance and legitimacy are to be achieved. The attention of both researchers and policy makers must be drawn to all these issues in the near future.

Mutual learning should be sought and supported between projects, institutions and countries. A substantial amount of learning is already taking place at various levels. As concluded in other parts of this report, and especially in relation to activity at European level, the potential for mutual learning is much greater than the actual and factual achievements thus far. Establishing such learning mechanisms must reflect the various purposes and functions to be fulfilled. Finally, it is very necessary to increase coordination and to support activities (at European and national level) in order to capitalise on the experiences gained through numerous existing projects, programmes and institutional reforms.



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