Assessing, recognising and certifying informal and non-formal learning ([1]) (ARCNIL): evolution and challenges

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SUMMARY

Certifying non-formal and informal knowledge may be a consequence of separating education and training from other social and economic activities. Specialisation and formalisation of education and training both aim to increase learning efficiency. In the emerging knowledge society, this has attracted particular attention among researchers and politicians involved with human resources. There are increased efforts to expand knowledge, including explaining and certifying non-formal and informal variants. Faster knowledge cycle turn-round speed makes the education market an insufficient mediator between demand and supply, increasing inconsistencies between education and work and raising questions of transparency. Offering a second chance of better education attainment and diminishing the effects of closed internal labour and training markets are also important. While favouring certification of non-formal and informal knowledge and skills, the author identifies those who might lack interest and warns against simplifications that discredit certification or create illusions that it might replace formal education.

([1]) In this article learning is understood as a process leading to knowledge acquirement, and knowledge as contextualised information (Beijerse, 1999).

Introduction

The plea for assessment, recognition and certification of non-formal and informal learning (ARCNIL) has frequently been expressed in EU documents related to topics such as lifelong learning and qualifications frameworks. However, it has mainly focused on practical economic and social needs without sufficient account of its essential reasons and nature. The purpose of this article is to:

- explain why ARCNIL has become a social issue;
- put forward the factors that today make ARCNIL a pressing issue;
- discuss some challenges to ARCNIL, which do not always allow for straightforward solutions.

Why has ARCNIL become a social issue?

In this section, we argue that ARCNIL is a social construct that has been put on the agenda by three processes:

- the separation of education as an organised form of learning from other social and economic activities;
- the formalisation of learning and education;
- making knowledge official by accrediting schools and their curricula and recognising certificates issued.

Separating education from other social and economic activities

In the preindustrial era, education was mainly organised as a household-based apprenticeship structure. 'In these structures, there is no separate school, no distinctive place or organisation where training takes place, apart from where the mature activity is itself done' (Collins, 2000, p. 218). The separation of learning and education from other activities, such as private life and work, occurred parallel to the division of labour. According to Weber [1925, (1978)], the modernisation of economies and societies, the essential part of which was industrialisation, brought about the spatial and temporal separation of work and private life. Production has been placed in factories and practised during working time. A similar process can be observed with learning and teaching. Education has been purposefully organised out of private life (home) and working life (enterprise) environments, and has been placed in schools where it

is practised during specially designated 'learning/ teaching' time.

Durkheim [1893 (2002)] complements Weber's view by pointing out the social division of labour. His theory helps understand how different social and production activities have gradually crystallised in the forms of distinct social and economic institutions, occupations and professions. This has also happened to teaching, which has been placed in schools and taken over by teachers. 'School may be taken in a more explicit sense, as a formal institution: an activity taking place in special places and times, under the direction of a specialised teacher' (Collins, 2000, p. 215). Functional differentiation and specialisation have led to greater efficiency in economic and social systems. Teaching and learning are no exception.

In Boisot's terms (2002, p. 65-78), the learning cycle starts with the concentration, abstraction and codification of uncodified and tacit, concrete and undispersed knowledge. In this way, knowledge takes its objective and materialised – explicit – form, which enables it to be more effectively dispersed to or obtained by others. Upon individual reception it again turns into a concrete and uncodified form. During its use, some individuals, groups and organisations upgrade it and innovate, creating new pieces of knowledge. This is the starting point of a new knowledge cycle. The processes of abstracting and codifying knowledge increase the effectiveness of individuals' knowledge creation and its transfer to others. Since the abilities to run these processes are not equally distributed among the population, and they can be learned and made more refined and effective, professional researchers and teachers obtained their specific role in the division of labour. Their key roles are to create new knowledge and to disperse concrete and uncodified knowledge among the population by means of its concentration, abstraction and codification.

Formalising learning and education

To make knowledge transfers more efficient, namely to transfer an increasing amount of knowledge in the shortest time possible, learning has become increasingly dependent on organised, formal teaching. This means that knowledge was not only encompassed in a written form in books and, later on, in other media. Teaching programmes and curricula have also been written down and textbooks prepared. Knowledge of how to teach various groups effectively has developed in the form of scientific disciplines, such as pedagogy, andragogy and didactics. The organisation and management of schools have been conducted according to special rules. The aim has been to

make knowledge explicit, to improve its availability and put it in a standard form which would guarantee its quality and transparency, as well as the possibility of its assessment and verification. Teaching has become formal, paid work and teachers a special profession which dominates a new institution, the school.

Making knowledge official

While the early initiative for schooling lay in the hands of rich landowners, traders and artisans, the proliferation of nation States and big industries needing a lot of labour brought about the need to educate everybody. Enlightened emperors, such as Maria Theresa (1717-80) and Josef the Second (1741-90) in the Austro-Hungarian Empire, inspired by philosophers, such as Rousseau, Diderot and others, wanted all citizens to become literate and to understand their oral and written decrees. The expectations of employers were that new employees would understand their commands and written instructions, start working effectively as soon as possible and to shorten the long training period associated with apprenticeship. As Collins writes (2000, p. 225), 'The origins of bureaucracy require the existence of at least some education because the key to controlling a large number of specialized workers is the use of written records […] official actions are supposed to be recorded, so that subordinates know what they must do and superiors can check on their behaviour.' These are the main reasons that compulsory education of all youth was gradually introduced and paid for by the State.

The active role of the State in this area did not only increase the formalisation, professionalism and expansion of schooling. Compulsory education was put under the direct control of State authorities which erected schools, selected, appointed and paid teachers, prescribed the contents and methods of teaching and issued certificates, which guaranteed that certain knowledge was obtained at school. The knowledge conveyed in this way has become recognised as official and certificates have been issued to graduates making their knowledge officially valid. Even vocational schools that long remained in the hands of employers and their associations gradually accepted the practice of accreditation by authorities of the State or social partners.

Many factors behind this development remain valid today. The separation of time, space and institutions devoted to private life, work and learning has not decreased. Parents have neither the time nor ability effectively to teach their children. Being under competitive

pressure, employers seek qualified employees who are ready to work. Formalisation has increased more than it has decreased. In spite of the expansion of privatisation the State firmly holds education in its hands. However, this development has not been without its deficiencies of which we should mention two: weak links of teaching and learning with other social activities, especially work; and the growing closure of formal education institutions leading to a partiality of formalised and institutionalised official knowledge.

Linking work with teaching and learning

Increasing specialisation requires mechanisms to keep the specialised parts of society and the economy together. Durkheim [1893 (2002)) highlighted organic solidarity, which has been maintained by the functional interdependence of individuals and groups and by the exchange of goods produced by specialised producers in the market. The separation of work and education between enterprises and schools, employers and (potential) employees, with each performing its own function, is bridged by labour and training markets. On this basis, education and training programmes are expanded, created anew, contracted or terminated.

The other mechanism of mediation is planning by the State and/or social partner bodies; it includes the network of schools as well as the curricula. Planning authorities try to anticipate future demand for knowledge and skills and shape the structure of schools, curricula and qualifications accordingly. They send information on actual and expected labour market needs to adults, the young and their parents, as well as to training providers and the wider public.

Internal labour and training market segments allow development and transfer of new, organisationally-specific, knowledge and skills to core workers and between them (Kerr, 1954; Loveridge and Mock, 1979). The demand for training comes from line managers and directly from workers who apply to participate in various kinds of training. The supply of training is either mediated from outside or directly offered by training departments and training centres engaging internal experts. Organisations have established training departments and employed training specialists who are supposed to manage the transfer of knowledge inside organisations, as well as to obtain it from the outside. However, for those workers with 'ordinary' jobs and those who are available in sufficiently large numbers a 'hiring and firing' approach and other types of numerical flexibility prevail (Atkinson, 1986).

The combination of market and planning mechanisms kept the worlds of learning and work in touch quite successfully in the past. However, as we show, these mechanisms are facing growing difficulties.

The closure and partiality of formal education institutions

While the links between education/training and work were maintained successfully, the closure of education and training institutions in their formal structures was not paid much attention. The assumption was that knowledge created in formal research, education and training institutions, as well as in private life and work environments, could be fluently brought into formal curricula and conveyed to students. However, this was not always the case. A part of the knowledge created in private life, civil society and work organisations remains unnoticed and, in the best case, informally disseminated. There are several reasons for this:

(a) teachers and curricula designers are themselves specialised and belong to various disciplines. They therefore tend to overlook interdisciplinary knowledge that occurs in the margins and intersections of disciplines. In addition, their monitoring of new knowledge creation could be insufficient and the criteria for its selection outdated;

(b) communication barriers between schools and research centres of universities on one hand and companies on the other prevent fluent inflow of newly created knowledge found in work organisations into curricula. The first speak the language of scientific disciplines, while the second refer to specific life and work issues;

(c) companies often resist sharing their firm-specific knowledge to preserve their competitive advantage. Further, they can legally protect it as their industrial property;

(d) it is difficult to express a lot of knowledge in an explicit form and convey it with school teaching methods (Polanyi, 1966);

(e) the appearance of official curricula based on national accreditation procedures could lead to certain ideological biases and blindness that cause some knowledge to be overlooked or deliberately left out of curricula. ‘Curricula are detailed statements about national preferences: a preferred natural and social world, a preferred history, a preferred understanding of children as learners’ (McEneaney and Meyer, 2000, p. 201). ‘Political control faces the risk of being captured by groups pursuing narrow interests; for example, those pursuing fundamentalist

or creationist agendas, teachers' unions, or book publishers' (Hodges Persell, 2000, p. 397);

(f) even though certain knowledge has been brought into accredited programmes, access to it may remain restricted due to limited numbers of students admitted, caused by constrained school capacities, protection of professional status, etc.

These difficulties lead to a certain loss of knowledge, which remains closed in informal environments and cannot be widely shared in society.

Factors making ARCNIL a pressing issue

A self-evident question is why ARCNIL has only become a pressing issue in the last two or three decades. Which changes in the economy and society brought it to the forefront of professional and political debate? Referring to Lopez et al. (2006), we will offer two sets of reasons: economic and social.

Economic reasons for the growing attention to ARCNIL

Among the economic factors, globalisation should take first place. It has led to a single, highly interdependent world economy with less and less nationally protected areas. It has made all natural, financial and technological resources available to all producers and to all national economies, parallel to the ever tougher competitive pressures to which they are exposed. Diminishing natural resources and the availability of the others are leading organisations and national economies increasingly to seek competitive advantage in the relatively abundant, most specific and least mobile ([2]) resource – human resources. The most valuable human resources are undoubtedly knowledge and skills. 'Relative abundance in certain skills in a given country constitutes a comparative advantage for firms in that country' (Estevez-Abe et al., 2001, p.146). 'The various theories of corporate competitiveness stress the skills of human resources as a key determinant of success' (Lopez et al., 2006).

If competitive advantage is sought in human resources, in particular knowledge and skills, and if the competition is shifting to labour and skills markets, then the amount and quality of knowledge and skills in a certain economy and organisation is becoming a major developmental concern. This is not only expressed in political declarations in terms of knowledge-society and knowledge-economy

scenarios (European Commission, 2000). It takes concrete forms such as investment in science, technology and education, expanding numbers of the young attending higher levels of education, the increasing involvement of adults in lifelong learning, the development of national innovation systems, support for technological restructuring and similar. The strategic question is how to increase the capacity of human resources or, more specifically, how to increase the amount and quality of knowledge and skills (Saussois, 2000)?

In the search for knowledge and skills, attention has not been paid just to the formal research, education and training institutions that were long ago purposefully established to create and disseminate knowledge. It has been realised that 'much of the know-how we possess was acquired through practice and painful experience' (Bjørnåvold, 2001). Therefore, non-formal and informal learning agents such as enterprises and other work organisations, the media, the worldwide web, civil society and local community clubs, associations and organisations, households, professional associations and other 'communities of practice' (Wenger et al., 2002) have been regarded as desirable partners in knowledge and skill creation and dissemination. It is not important how knowledge and skills are created or acquired. What counts is the amount, quality and relevance. At this point, assessment, recognition and certification of informal and non-formal knowledge offers the means to make additional knowledge visible, valid and more accessible to a wider range of potential users. '[…] there should be a legal follow-up instrument which facilitates the accreditation of new knowledge acquired and also fosters the desire to learn new things' (Lopez et al., 2006).

With ARCNIL in place, it is expected that individuals would be motivated to acquire additional knowledge and skills, especially if they are better paid according to awarded certificates, but also if their employability, social and organisational status increase (Lopez et al., 2006). The knowledge creation and dissemination process is thus self-reinforced.

Another implication of today's global competitive pressure is that the knowledge cycle is turning at an ever-increasing speed (Lundvall, 2001). Competition is expressed in terms of the time needed from

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([2]) Labour force surveys carried out continuously by Eurostat show low levels of labour mobility inside the EU as well as from outside. The majority of the population is rooted close to their birthplace and employers must count mainly on the local and regional labour force. In addition, the inflow of labour from non-EU countries is restricted by various social, political and economic factors.

an invention to its application in a marketable product. It is important how quickly new knowledge is acquired, disseminated to relevant organisations and individuals and applied in the work process. This is leading to unprecedented organisational and technological change, to a greater need for new, and an abundance of, obsolete knowledge, and to the increasing need for learning and forgetting (Lundvall, 2001).

At least two complications are caused by this speed of change, the first of which is a weakening of the function of labour and training markets. The time taken before information indicating the needs for new knowledge and skills reflecting new technologies reaches curricula developers in schools and national bodies, via labour and training markets, before curricula are restructured and approved, and before new graduates emerge from the education process, could be so great that employers are already facing a new technological cycle. Even in countries with decentralised curricula planning and corporate arrangements providing for the direct coordination of curricula between employer and school representatives, time delays in adjusting curricula could still be too long. That is why employers increasingly invest in acquiring and disseminating knowledge and skills internally without the accreditation. In the case of firm-specific knowledge, enterprises are often not particularly interested in making it available to outside users, even via State school curricula. The gap between the knowledge and skills developed in companies and that embodied in formally accredited curricula is therefore widening and the need to assess, recognise and certify this knowledge is becoming more pressing.

Even if the problem of the slow inclusion of new knowledge into official curricula was resolved, there is a further complication. More or less continuous technological change requires permanent retraining and increasingly also the systematic reeducation of employees. This normally requires them to be absent from work or leave their jobs. The first is undesirable for employers because it disturbs the production process and incurs costs. The second is unacceptable for employees because social security and employment institutions in most countries do not provide safe enough transitions from work to training and back. This is why employers are increasingly upgrading their workplaces with places for continuous learning (Lopez et al., 2006), while effective national institutional arrangements for employee lifelong learning are still being sought. The merging of learning and work in the workplace is exacerbating the gap between the knowledge

created and disseminated in work environments and that embodied in formal curricula. This all amplifies the need for ARCNIL.

From the economic perspective, ARCNIL is also needed to make the labour market more transparent. What employers are seeking is real employee knowledge and skills. If these are not reflected in valid certificates such as diplomas and diploma supplements then employers need to invest more in their recruitment procedures. The generally desired mobility of labour is therefore reduced.

Social reasons for stronger attention to ARCNIL

From the social perspective, ARCNIL could be a useful tool to combat social exclusion and improve social justice. For various reasons, many citizens may not continue their initial education up to the level of their potential yet some could develop such potential later while working or participating in other forms of informal or non-formal learning. ARCNIL provides the opportunity to compensate for what was not achieved in the earlier phases of one's life cycle (Lopez et al., 2006). Such groups are early school-leavers, the unemployed who have lost their jobs, migrant workers, people with special needs and so on.

Another group is workers who have acquired many firm-specific and industry-specific skills which are not always formally recognised even by their employers. Workers could become tied to certain jobs and employers, making them feel insecure in the event of a radical technological change or the closure of a company. For well-functioning systems, these workers need a high level of employment and unemployment protection (Estevez-Abe et al., 2001, p. 154), part of which could include ARCNIL. It raises their formal qualifications and thus contributes to their employability and the opportunity to move to other employers. It also gives good grounds for claiming better remuneration.

Challenges to certification

Assessing, recognising and certifying non-formal and informal learning is not without challenges. First, many groups and organisations may not be interested in them; this might include well-organised professions from higher education which usually control schools whose monopolies ARCNIL may endanger. Formal education often serves as a means of controlling entry to certain professions including

direct or indirect decision-making on numbers of new entrants. Managers and teachers in schools have vested interests in providing formal education yet ARCNIL could serve as a side route into a certain profession without formal schooling. Representatives of professions and schools would claim that they are maintaining the quality standards of their professional practice and thereby protect the interests of their clients and the public. They would speak less openly about protecting their own special economic position in the division of labour. There is a dilemma whether ARCNIL should be run in cooperation with professions and schools or without them. If ARCNIL lies in their hands for quality control reasons it may function in a partly restrictive way or could be blocked for self-protection reasons. If ARCNIL is established parallel to formal education it would require greater institutional investment; it may face a lack of expertise, may lead to double qualification standards, and create conflict with the organised professions. Therefore, an agreement and partnership with professional organisations and schools would probably be the best, if not an unavoidable solution ([3]).

Another less interested partner in ARCNIL could be employers who invest a lot in developing firm-specific knowledge and skills through which they seek competitive advantage. The certification of knowledge and skills obtained in companies by employees could increase their employability and propensity to move on. Companies could lose some of their investment in human resources and let their specific knowledge be disclosed to competitors. Another disincentive for companies is potential claims for higher wages based on publicly recognised qualifications. These reasons may produce some hesitation from employers to support ARCNIL, although they could benefit from the higher labour mobility and transparency of qualifications. Certification makes recruitment procedures easier and cheaper, and more workers are available in the market. However, this argument holds more for firm-unspecific jobs where the supply of labour is insufficient than for the core ones. To cope with this challenge, an agreement with employers is needed, although one can only expect their selective support.

([3]) In Slovenia, for instance, the system of ARCNIL was implemented by law in 2000. However, it functions only in certain segments of middle range qualifications, where education is ususally not provided by secondary schools. Although legally possible, implementation beyond secondary level has not been attempted due to anticipated opposition of professional organisations and schools providing formal education.

Two further challenges are linked to the content of ARCNIL. It serves as a vehicle to promote informal and non-formal learning and publicly recognise knowledge and skills acquired in this way. It offers an additional way to grasp, make visible and valid concrete and uncodified knowledge created while solving problems in various work and life situations by self-learning, learning in teams and groups, in organisations, etc. It could add further knowledge to that formally acquired, which could have a similar yet possibly quite different quality enriched by competences. However, ARCNIL can only be a supplementary mechanism to formal education and training and not an alternative to it. It is less effective than formal education with respect to how much knowledge can be put in an explicit form and conveyed to others in a certain period of time, and in how much knowledge can be acquired while working or carrying out other activities in comparison to systematic and methodical formal education. It seems that a good balance between traditional education and training focused on the systematic dissemination of disciplinary structured knowledge and skills via lecturing and experiential and problem-focused knowledge is needed even in formal education (Allen and Velden van der, 2008). A similar balance can generally be expected between formal education and learning outside formal education and training institutions.

Attempts to make non-formally and informally acquired knowledge and skills explicit through assessment and certification clearly have virtue. However, one should not forget that certain types of learning and knowledge creation can only flourish if they remain informal and are very difficult if not impossible to be explained (Nonaka et al., 2003); teaching relationships between masters and apprentices or knowledge creation in a team are examples. Too strong and too direct interference with work and social problem-solving situations by standardisation, knowledge portfolio making and counselling might even hamper their proper functioning and reduce their innovation potential.

For ARCNIL to be successful, good quality, fixed standards of knowledge assessment and certification are essential. They should be equal for a certain qualification irrespective of formal or informal acquisition of knowledge and skills, a requirement that is not easy to meet in practice. Usually, there is a difference between the learning outcomes of formal education and of learning by doing in the work process. While formal education involves more systematic and

disciplinarily structured knowledge and fewer practical competences, the opposite is true for the work process. This is why school-leavers are additionally trained by employers after they start working and why workers who had their qualifications recognised need to take some general courses to obtain a certain education. It is also why education and qualifications cannot always be equated with each other.

The other important factor of success is the strict use of established standards, which gives ARCNIL the requisite credibility. Enough time, money and other resources should be devoted to counselling potential ARCNIL applicants, elaborating knowledge portfolios, training counsellors and assessors as well as the assessment itself. A social partnership approach to ARCNIL is desirable, if not unavoidable, to ensure well-coordinated activities and the sharing of responsibilities and costs.

Conclusion

One could conclude that ARCNIL is returning to the stage due to deficiencies in formal education systems which do not meet all the requirements of modern economies and societies. In particular, they cannot embrace much of the knowledge and skills that are created in various life and work environments and therefore cannot disseminate it. Since modern economies and societies are increasingly knowledge-based there is a thirst for all sorts of knowledge and skills including informal and non-formal ones. Companies and societies as a whole might acquire some competitive advantage in the global economy by having a greater volume of up-to-date – additional to formal – knowledge and skills. ARCNIL is becoming a desirable tool but it can only supplement formal education and training and can replace it only marginally. Its implementation should pay attention to various stakeholders, such as schools and companies, and should be partnership based.

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