

Flexibility through Learning Outcomes: Implications for Quality

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Abstract

Flexibility in learning is an acknowledged necessity for a knowledge society. This flexibility has been developing in an incremental fashion (discrete cycles, credits, distance learning, learning outcomes). Full flexibility in learning means that horizontal and vertical movement between different learning settings (formal, non-formal, informal) is supported and recognised, and that higher level qualifications can be obtained in this way. It is widely believed that full flexibility can be secured through the use of learning outcomes. In this perspective, its viability depends critically on whether the same or at least comparable learning outcomes are potentially achievable in widely differing learning settings and whether the potential means for assessing such learning outcomes can credibly assure quality. This paper examines the viability of the proposition of full flexibility in learning with respect to quality, suggesting that there is an urgent need to agree on European standards and guidelines for quality assurance in respect of non-formal and informal learning settings.

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1. Flexibility in learning for a knowledge society and its incremental development

Flexibility in learning is an acknowledged necessity for a knowledge society [13]. This means that in addition to the traditional – formal – mode of learning, other learning settings, e.g. non-formal and informal learning [3,7] are supported and recognised. Moreover, it means that movement between the various learning pathways is possible. It is widely believed that flexible learning can be achieved through the use of learning outcomes [1,2,18]. This notion has gradually acquired central significance [19]; the view that the realisation of the European Higher Education Area (EHEA) depends critically on the breadth and consistency of the application of learning outcomes, is increasingly being heard.

The acceptance and implementation of flexible learning pathways, with learning outcomes as their central building block, entails substantial reforms for HE systems, for Vocational Education and Training (VET) systems and for systems dealing with the accreditation and recognition of qualifications. Significant steps in this direction have been taken in the contexts of the Bologna process and the Lisbon strategy. However, there is still substantial ground to be covered if flexible learning pathways are ever to become a reality for higher level qualifications in all three Bologna cycles. Issues of quality are central. Unless they can be resolved and agreed at European level, the debate around flexible learning will remain purely academic. This paper attempts to examine the viability of the proposition of full flexibility in learning and to point out some of the implied quality issues.

Flexibility in learning has been developing in an incremental fashion, through the introduction of discrete cycles and the gradual abolition of long integrated programmes, the use of credit-based curricula and credit accumulation, the increasing use of open and distance learning modes, and now learning outcomes (see Figure 1). Flexible learning can therefore be incrementally built into the design of HE systems, VET systems, the recognition of qualifications and national qualifications frameworks. Full flexibility in learning may be tentatively defined as follows: it is a state of affairs in which learners can move horizontally or vertically¹, within and across diverse learning forms and hence also learning routes (formal, non-formal, informal), transferring and accumulating learning achievements (across or within the different learning routes), and in which diverse spatio-temporal frames are permitted and formal accreditation/certification of the learning

¹ Vertical movement means that the accumulation of learning achievements continues at a higher level/cycle, in passing from one learning pathway to another. Horizontal movement means that learning achievements are transferred within the same level/cycle from one learning setting into another.

achievements is possible. Under no circumstances should flexibility in learning mean a reduction in quality or the too easy acquisition of qualifications, since obviously such developments would not serve the interests of knowledge societies.

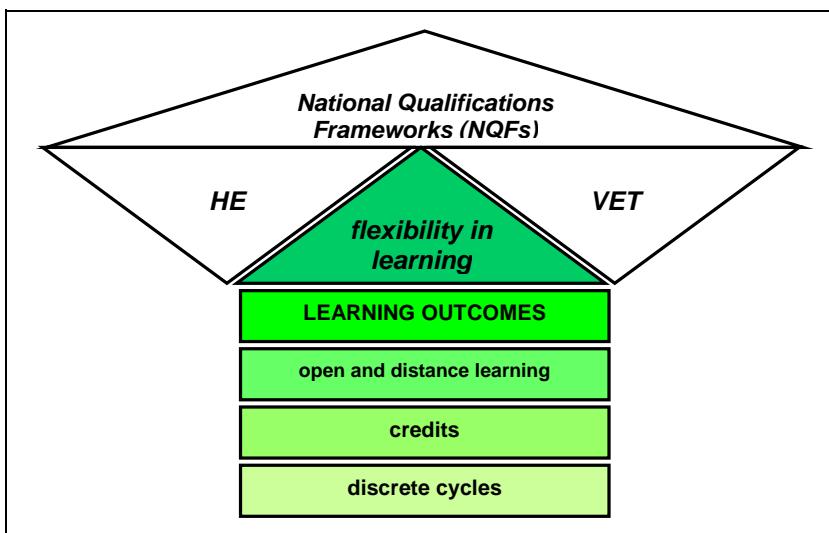


Fig. -1

Flexible learning incrementally built into national qualifications frameworks

2. Converging learning pathways through common learning outcomes and quality standards

The formal route of learning is well established and understood, with acceptable procedures for the transfer and accumulation of credits, and the recognition of qualifications. HE institutions have the major, and in some countries, exclusive role regarding formal learning and the award of higher level qualifications. The European Standards and Guidelines (ESG) for quality assurance [12] are based on formal learning. Likewise, the criteria and procedures of the Lisbon Recognition Convention [21] are geared to the formal learning setting. Non-formal and informal learning, functioning as alternative routes to formal (high level) qualifications, represent relatively recent developments and most countries are still trying to get to grips with them [3-5,7]. These alternative learning routes involve entities other than HE institutions, namely professional bodies or public organisations, VET establishments, enterprises, economic sectors, etc.

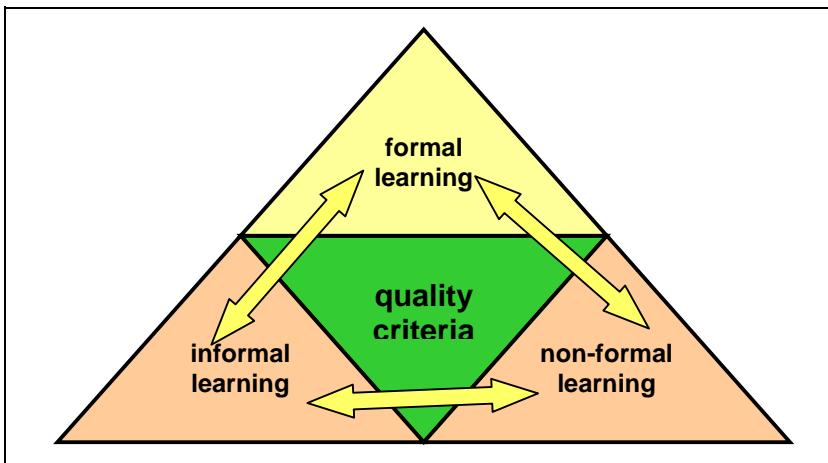
The role of HE institutions

Validation of learning outcomes

The meta-frameworks of qualifications developed at European level [22,24] aim to encompass qualifications acquired in different learning settings. In particular, the Qualifications Framework for the EHEA defines descriptors, i.e. generic learning outcomes, for the three Bologna cycles (Bachelor, Master, and PhD). These descriptors are meant to be independent of the learning setting. Thus, in theory, particular learning outcomes may potentially be achieved via different learning routes or through a combination of such routes. So far, this has not been widely demonstrated in practice, and in reality, the major reforms brought about, thus far, through the Bologna process, principally concern formal learning. On the other hand, the major driving force behind the development of the common European principles for the validation of non-formal and informal learning [8], in conjunction with the European Qualifications Framework (EQF) for lifelong learning, appears to be the validation of learning outcomes reflecting mainly practical skills and competencies [7], rather than knowledge per se. As such, this validation concerns mainly lower level qualifications.

Flexibility in learning for the higher levels (1st, 2nd and 3rd cycle qualifications) requires the merging and extending of the outcomes of the Bologna process and the Lisbon strategy, [16] so that alternative learning pathways might be available at all qualification levels, subject to commonly agreed quality standards. The establishment of agreed, quality-based mechanisms for the accreditation and recognition of prior, non-formal or informal, learning² is a legitimate proposition. Such a development would give a strong incentive to learners to engage in continuous learning and, moreover, would enable the utilisation of such learning for different purposes.

² This means “formalising” informal or non-formal learning, by conferring on it some kind of formal qualification/certification.

**Fig. -2****Bridging diverse learning routes through commonly agreed quality standards**

The specification of basic quality standards, applicable in a comparable way in diverse learning settings, may well result in overcoming the obstacles/scepticism that currently exist, thus enabling the transfer and accumulation of learning achievements/outcomes across widely differing learning pathways. The agreed quality standards should set the minimum requirements regarding: (a) the specification of actual learning outcomes (for specific qualifications and disciplines), (b) the criteria and procedures for the validation and certification of the learning achieved, and (c) the criteria and procedures for assessing the assessors. Commonly agreed learning outcomes, in conjunction with commonly defined quality standards could secure the convergence of the alternative learning pathways (see Figure 2). The endorsement at European level of quality standards for non-formal and informal learning, in respect of the specification and validation of learning outcomes leading to the certification of high level qualifications, is necessary – if the relevant decisions are to be transparent, credible, coherent, comparable and fully accountable.

Quality standards

Quality in learning, from the perspective of the flexibility desired, is therefore grounded on the following two premises at least:

1. That the actual learning outcomes are specified, on the one hand independently of the learning setting, and on the other hand in a manner guaranteeing consistent interpretation, in respect, for example, of their level, of the degree of difficulty/effort associated with their attainment, etc.
2. That the means of assessing and certifying the attainment of these outcomes are valid and fit for their particular purpose; and that the assessors are reliable/credible and competent to undertake the assessment of the learning outcomes.

Defining learning standards

Regarding premise (1.), it should be noted that the learning outcomes in qualifications frameworks are abstract statements, potentially open to multiple interpretations. The learning outcomes for an actual qualification (cycle and discipline), on the other hand, should be specific and not open to widely different interpretations. Moreover, for high level qualifications, learning outcomes would not be expected to be confined to practical skills and competencies; domain knowledge is also expected to figure as a major component.³ The need for clearly defined learning outcomes is stressed in [17]; however, this is not necessarily easy, as is demonstrated in [9].

Academic qualification through informal standards?

If the above premises can be satisfied, then there exists the possibility of a state of full flexibility in learning, in which prior experiential or work-based learning would be validated and certified in a commonly accepted way. For example, could it be possible for someone to be awarded the highest academic qualification of a doctoral degree through informal learning, or put in a different way, could such a development be justified? In some countries it is already happening. The scenario is as follows: the person (a “researcher”) carries out self-directed research in his/her work place; he/she publishes the results of his/her research in scientific journals or conference proceedings; and ultimately his/her learning outcomes (research results in this case) are recognised by an authority that has the right to award doctoral degrees⁴ as constituting the successful completion of a doctoral programme. The competent authority then awards this person a doctoral degree⁵. In this example, the traditional quality criteria for PhD qual-

³ It is assumed that all higher level qualifications included in a qualifications system are obtainable through the formal learning route (without implying that the awarding body is necessarily a HEI). The formal route, therefore, constitutes the point of reference regarding learning outcomes and the quality assurance of these qualifications (in fact, this seems to be the spirit of the new ECTS Guide, regarding the accreditation of non-formal and informal learning).

⁴ Presumably the competent authority is a university or an academy of sciences.

⁵ A question that could justifiably arise in such a context would be “what if the person is not a holder of a 1st cycle qualification?”

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fications, namely the contribution to knowledge, the publishability of research results, and the potential to undertake independent research, have been more than satisfied. For the results are not just publishable, they have already been published – demonstrating not only that a contribution to knowledge has been made, but also that the person has a proven ability to undertake independent research.

Comparable learning achievements can therefore derive from very diverse learning settings. In the example above, it is true to say that the informal setting has yielded a higher level of achievement at the highest academic level, the third cycle, clearly showing that quality was not adversely affected by following a non-standard learning route. In such a case it would not be justifiable to deny recognition. When there are internationally accepted quality standards for a given cycle, as is the case with the doctorate, and provided that such standards can be reached by different learning routes, then it can be argued that no substantial differences arise with respect to the ultimate results (learning achievements) gained via diverse learning routes and that recognition should be granted.

What of the other two Bologna cycles, the 1st (Bachelor) and the 2nd (Masters) cycles? Is it possible to define internationally accepted quality standards, through which it might be possible to ascertain in an objective and credible manner the quality of the ultimate result of learning, independently of the learning pathway followed? Could alternative learning pathways, with respect to the two more basic cycles, lead to sufficiently comparable and compatible learning outcomes?⁶ In some cases it has already been demonstrated that this is possible [20]. Comprehensive written examinations/interviews (of different kinds) and/or case studies, in conjunction with the certified professional achievements documented in a candidate's portfolio [4, 25, 26], can potentially constitute the means for certifying the specific learning outcomes on the basis of the corresponding quality criteria.

If the scenario sketched above is realisable, then the current situation, in which 1st, 2nd and 3rd cycle qualifications are typically, if not exclusively, obtained in the formal learning setting, would change dramatically, permitting the acquisition of qualifications at all three Bologna cycles through other learning routes or combinations of routes, and perhaps wholly through informal learning. However, various issues need to be considered in order to decide whether full flexibility in learning is attainable. Some of these issues are the following:

Comparable achievements

Alternative learning pathways

⁶ This means that the learning outcomes from the different routes do not exhibit substantial differences, although the notion of "substantial difference" still lacks definition.

Comparable learning experiences

1. Are the learning experiences which derive from a formal Bachelor programme of 3 to 4 full-time academic years (covering basic knowledge and a comprehensive presentation of the principles of the specific discipline) comparable to the learning experiences accruing from an informal work-based context, albeit of many years duration? A similar question can be posed with respect to Masters programmes.⁷ In [17] it is held that it is not possible to acquire the same qualification as in the formal school system, but only a part, while in [20] it is reported that in some specific activities informal learners perform at a higher level than formal learners due to their substantial (over twenty years) working experience.
2. Could such comparisons be unfair, given that a formal academic setting and an informal experiential setting differ in so many parameters (the timeframe for example)? Then again, would it be fair to grant the same certification/recognition to learning achievements, if they exhibit substantial differences and are not underpinned by the same quality standards?

Distinct types of qualification

3. Should it be acknowledged that within the same level/cycle, there might exist distinct types of qualification, which although considered to be of the same level and of equal or comparable value (with respect to shared purposes and shared access provision), still have distinct characteristics, distinct profiles and orientations and thus distinct quality standards? For example, there could be academic Bachelors, professional Bachelors, and vocational Bachelors. Some countries have already introduced the distinction between academic and professional Bachelors, representing different types of 1st cycle qualifications. With respect to 2nd cycle qualifications, the distinction between academic and professional Masters has been in

⁷ In recent discussions between the author and a major provider of work-based learning programmes, it transpired that "work-based learning" could be considered to be the topic of learning, rather than merely the means of learning. A key objective of the work-based learning programmes of this particular provider is to teach people how to become more effective learners and problem-solvers in their work-place, skills that are transferable to other work places within the same or a comparable profession. The acquisition of specific knowledge (or knowledge enhancement) is of secondary importance. Thus, for example, as the provider asserted, an MA in Social Work (obtained in the conventional way) would be substantially different from an MA in Social Work gained through work-based learning study. Although one could argue that such qualifications are of comparable value and/or of the same level (i.e. 2nd cycle qualifications), they nevertheless serve different purposes in the labour market. In order to avoid misunderstandings, there should be a general appreciation of the semantic differences between the various types of qualifications within the same level/cycle, so that every case is treated fairly (i.e. recognition is neither denied nor excess privileges granted by equating unequal things).

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existence for many years in a number of countries (in fact a rapid increase in professional Masters has been recently observed [10]). Moreover, the category of professional doctorates has emerged in recent years.

Given these unresolved questions, it is to be hoped that that clarification will emerge from the gradual development of National Qualifications Frameworks (NQFs). An NQF, as an overarching meta-framework, should aim to give a clear typology and semantics of the qualifications included in the relevant qualifications system. However, qualifications frameworks are not a panacea and cannot be a solution to everything, as clearly demonstrated in [29], which analyses the concept in a critically constructive and evidence-based manner. A broad range of evidence of the benefits of NQFs may not become available in the short or medium term. At the same time, their ability to promote and accredit informal learning has been questioned, for example in [27] and [28]. This claim is further supported by the cases of the few countries that have pioneered the concept (before the development of the European meta-frameworks) and that have incrementally developed NQFs which are still evolving [6,23]. One of the countries paving the way is France; as reported in [15], in 2006 there were 3,705 cases, in which all or part of a diploma was awarded on the basis of the recognition of prior experiential learning. The case of France is an exception. In most other countries little progress has been made [10]. The same observation, namely that “the procedures for the recognition of prior learning are at an early stage of development in the majority of countries” is also made by the 2007 Bologna Stocktaking report [5]; it also recommends the linkage of “recognition of prior learning with the development of NQFs and with systems of credit transfer and accumulation”. It should be stressed, however, that in parallel to the development of NQFs, flexibility in learning must be grounded in agreed European quality criteria for the different learning settings, if fully flexible learning is ever to become a viable proposition.

**National Qualifications
Frameworks (NQF's)**

3. Learning achievements and associated effort

This discussion would be incomplete without turning the spotlight onto one of the key aspects of learning, namely the effort (or workload) associated with it. Learning is measured qualitatively through its (learning) outcomes and quantitatively through the effort leading to these outcomes. A process of learning, and ultimately a qualification, can therefore be abstracted (qualitatively) in terms of learning outcomes and (quantitatively) in terms of effort. The (learning) "effort" translates into credits of some kind.

Integration of learning outcomes and credits

Learning, therefore, cannot be independent of the effort made by the learner. In consequence, the European Credit Transfer and Accumulation System (ECTS) [11], calls for the integration of learning outcomes and credits, where credits denote the workload of learners. It is true to say that the interpretation of ECTS credits in terms of absolute times, and their association with academic years of full-time study, reflects the formal mode of learning and its typical timeframe. As such it is not immediately obvious how ECTS credits could apply to the non-formal or informal learning settings; in [3] the relationship between ECTS and the accreditation of prior experiential learning is characterised as problematic, and this is considered to be a major obstacle for the validation of informal learning. However, ECTS has been widely used as the basis for reforming HE programmes throughout Europe and has continuously been updated and refined on the basis of developments and the experience of using it.

ECTS

More recently, but so far largely at a theoretical level, the European Credit System for Vocational Education and Training (ECVET) [14] has tried to define an appropriate credit system for transferring and accumulating learning experiences in the context of vocational education and training, thus principally addressing non-formal and informal learning settings. It is to be hoped that such a new credit system will be compatible with ECTS, if the flexibility in learning discussed above is ever to be achieved; otherwise the dividing barriers could become unbridgeable.

Timeframes for learning

Everyone would agree that the new developments call for different timeframes for learning. Rigidity and a single timeframe are no longer viable. Although everyone would agree that variations in timeframes are necessary, most people would also agree that the notion of effort (or workload), as an integral aspect of the desired learning, cannot be abolished. Instead, the associated effort should be defined in a way applicable to different learning settings. A definition which uses the absolute time required as its exclusive or principal criterion, would not

be acceptable.⁸ Going back to the example of the informal learning route with respect to the doctoral cycle, the effort of the informal learner would be substantially greater than the effort of a corresponding formal learner.⁹ This is to be expected, since self-directed or even unintentional learning (which is a characteristic feature of informal learning) is more difficult and error-prone than teacher-guided learning (encountered in the formal settings which by definition cultivate and promote learning). A learner outside a formal setting may easily be led astray and, instead of advancing, may move away from the attainment of whatever learning pursuits he/she may be seeking and which somehow arise in an unintentional manner. Typically, the percentage of people abandoning formal studies through e-learning is higher than the corresponding percentage of people abandoning formal studies attended in the conventional way of physical presence at an institution. By analogy, if and when there is full flexibility in learning, it should be expected that formal learning has a higher percentage of success, while the effort required to achieve the same learning outcomes would be comparably higher for the non-formal/informal learners. Thus, flexibility in learning should not mean that it would be easier for someone to acquire a qualification through the informal route of learning. The appropriate quality standards can ensure that this would not be so. As pointed out in [4] “While we can observe some concern regarding the quality of validation processes (is this the easy way to get a certificate? can we trust the process?), this has not seriously affected the implementation of these approaches”.

Assuming that a common semantics between ECTS and ECVET credits can be reached, then the transfer and accumulation of credits between different learning settings could be possible. This in turn could lead to the “formalisation” of non-formal and informal learning achievements. For convergence purposes, all forms of learning would need to be attached to measurable learning outcomes and associated credits or levels of effort/difficulty. For non-formal learning this should not be difficult to do, since it is largely planned learning. Difficulties might be expected with informal learning, since it is open-ended and unplanned. Its formalisation, however, would require the explication of learning outcomes (from prior experiences) and their subsequent assessment before the associated credits are awarded.

Transfer and accumulation of credits

⁸ A hierarchy of conceptual levels of effort/difficulty, instead of measures of absolute workload, is being proposed as an alternative qualitative interpretation of credits. A particular degree or qualification could then comprise particular amounts of learning (in terms of number of credits) at particular levels of effort/difficulty.

⁹ Thus far there are no standard guidelines regarding the application of ECTS with respect to the doctoral cycle.

4. Conclusions

Flexibility in learning is an acknowledged necessity for a knowledge society. Full flexibility of learning means that it is possible for someone to acquire a (higher level) qualification by accumulating learning experiences and corresponding outcomes from diverse learning settings (formal, non-formal or informal). However, flexibility in learning should not mean a reduction in quality or the too easy acquisition of qualifications.

European quality standards

In order for flexibility in learning to become a viable proposition it is necessary, therefore, to agree on a set of European quality standards for types of learning other than formal learning. These quality standards should establish minimum quality requirements regarding: (a) the specification of learning outcomes, so that they are universally perceived in a comparable way, (b) the assessment criteria and procedures for the credible validation of learning outcomes, and (c) the validation of the assessors. The ESG for quality assurance should therefore be appropriately extended to include the agreed quality standards for non-formal and informal learning pathways. Likewise, the recognition criteria and procedures specified in the Lisbon Recognition Convention may need to be appropriately extended. Such developments will lead to greater transparency, coherence, compatibility and credibility, that collectively would enhance the accountability of the various actors involved in the informal/non-formal learning and validation/certification processes.

Finally, another potentially welcome consequence of implementing flexibility in learning is that a legitimate means will be provided for the recognition and certification of (formal) learning achievements conducted in the context of non-recognised institutions.

Discussion Questions

- Can non-formal/informal learning deliver the same or at least sufficiently comparable learning outcomes as those obtained through programmes of formal study in each of the three Bologna cycles?
- Can qualifications built on, or incorporating, non-formal/informal learning have the same or comparable value as those achieved through formal programmes of study? Would it be advisable to introduce a typology of 1st, 2nd and 3rd cycle qualifications based on the learning pathway followed?
- How can the European standards and guidelines for quality assurance be extended to include quality standards for non-formal/informal learning?

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Defining degree structures and identifying their characteristics

Biography:

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