

Informal and implicit learning: concepts, communalities and differences

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SUMMARY

Informal learning and its validation has become a major issue in European and national education policy, raising the following questions. May learning be constituent for political action? Is learning the focus of validation? Is informality a feature of learning? Is implicit learning solely related to informality? To give answers, a general learning concept is introduced, focusing on the acting individual in socioculturally shaped environments. Using this concept, learning is exclusively realised by the individual and therefore may not be a constituent element of political actions. Learning outcomes, not learning, are validated. Implicit learning is not only related to informality, and formality is not a feature of learning. From this perspective, 'informality' and the opposite 'formality' have to be located in conditions external to the learner, characterised by the 'extent of educational arrangement', 'certification' and 'approved public regulations'. Consequently, the term 'informal learning' is triggering inappropriate associations.

Informal and non-formal learning are receiving increasing attention worldwide. *Learning: the treasure within* (Unesco, 1996), *Lifelong learning for all* (OECD, 1996) and *Qualifications and lifelong learning* (OECD, 2007) have drawn attention to learning outside formal educational institutions. Non-formal learning has been a central issue in European education policy since the 1995 white paper on

education and training (European Commission, 1995) followed by the European year of lifelong learning in 1996. A further stimulus came from the conclusions of the Lisbon European Council in March 2000. They emphasised that lifelong learning 'is no longer just one aspect of education and training; it must become the guiding principle for provision and participation across the full continuum of learning contexts' (European Commission, 2000, p. 3). This was emphasised further by the action plan and promoted by the 2002 Copenhagen declaration calling for 'a set of common principles regarding validation of non-formal and informal learning' (European Commission, 2002). Progress is documented in the *European inventory on validating non-formal and informal learning* (Cedefop, Colardyn and Bjørnåvold, 2005; Cedefop 2008). The 2007 update states that 'validation of informal and non-formal learning has been found to be an increasingly important area of activity for policy-makers, practitioners and other stakeholders' (Ecotec, 2007).

Formulations like 'learning: the treasure', 'lifelong learning for all', 'lifelong learning as a guiding principle', 'the full continuum of learning contexts' or 'validation of non-formal and informal learning' indicate that the term 'learning' is used differently. Therefore a general learning concept will be introduced to answer the following questions: may learning be constituent for political action? is learning the focus of validation? is implicit learning solely related to learning in non-formality? is formality a feature of learning?

A conceptualisation of learning

Terms like 'viewing a picture', 'comprehending a statement', or 'handling a piece of work' express personal activities. In these expressions, activities are directed toward 'something' (a picture, a statement or a piece of work). From a cognitive perspective, such a 'something' is not in the head of the acting person as an object but as about that object, generated by the individual her/himself. A consequence is that activities are linked to information. Another important feature is that action and information are inseparably connected; there is no action without information and no information without action (Straka and Macke, 2005). This dynamic interplay is nominated an 'action episode'.

From the perspective of an acting person the picture, the statement or the piece of work is located outside the acting individual. Further

examples are other persons (supervisors, colleagues, peers or friends), tasks and requirements on the shop floor, technical equipment, organisational and instructional structures, teaching objectives, social norms and values as part of a culture. According to the notion of Gagné (1973), these features are assigned to the concept of 'external conditions'.

With external conditions, the environmental impact on an action episode is located. But an additional condition – indispensable for action – is still missing. It is the concept of 'internal conditions' introduced by Gagné (1973). These conditions enable a person to act on the basis of personal characteristics such as abilities, skills, knowledge, motivational and emotional dispositions. Giving this conception, a change of actions is only an indicator of learning.

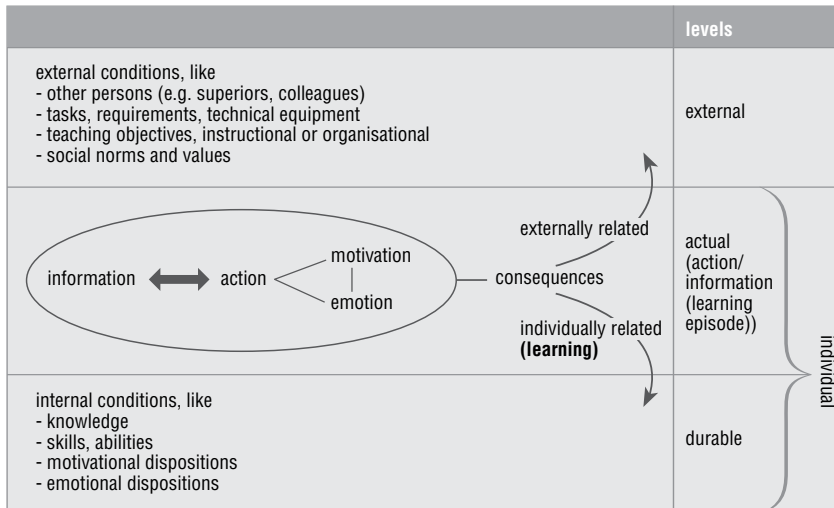
When asked why an individual realises, maintains, discontinues or avoids particular behaviour, or what reasons (conscious or unconscious) are behind it, the motivational part of the action episode is focused. Motivation relates actions to something (such as information), which has a certain intensity either for or against it. Similar concepts were introduced by Weinstein and Mayer (1986) and VanderStoep and Pintrich (2003). Emotion is another dimension of action. It embraces the subjective experience from an affective and non-rational angle, which can be pleasant or unpleasant. Emotion is connected with impressions such as joy or anger, or physical processes like sweating or shuddering, and expressional behaviour such as facial expressions or gestures (Pekrun, 2006; Boekaerts, 1999).

The four dimensions (information, action, motivation, emotion) presuppose one another. They do not exist separately but come into being only by interplay, generating one another. However, this does not mean that one or the other of the dimensions cannot be to the fore during certain phases of an episode. For example, although reading a text considered highly motivating, someone in a bad mood may retain nothing. Later, when feeling better, the individual may read the text attentively, compare what has been read with what is already known, and so add new information to her/his reactivated previous knowledge. This is not surprising, as people more easily understand and retain information when motivated (Figure 1).

An action episode may have consequences for external and/or internal conditions. External-related consequences arise, for example, from handling and transforming a piece of work or giving verbal expressions to transmit potential information. Individual-related consequences are where the interaction between information, action,

motivation and emotion lead to a durable change in the internal conditions of the acting individual. Only in this case has learning taken place (Straka and Schaefer, 2002; Straka and Macke 2005). This means that durable internal conditions or outcomes of learning are validated, not the learning process itself. Yet learning occurs only if the individual is in a specific mode and/or motivational state, factors under the control of the learner. Policy may only indirectly support learning, be it with advocated values and aims or external arrangements for the validation of learning outcomes.

Figure 1. Learning concept



The European concept of formality in learning

The glossary of Cedefop (European Centre for the Development of Vocational Training) (Cedefop; Tissot, 2000) and the updated glossary in the communication of the European Commission *Making a European area of lifelong learning a reality* (2001) give definitions of informal, non-formal and formal learning (Table 1).

According to Colardyn and Bjørnåvold (2004) these definitions are based on the intention to learn (centrality of the learner in the learning process) and the structure (context) in which learning takes place.

Table 1. **Formal, non-formal and informal learning**

<p>Formal learning consists of learning that occurs within an organised and structured context (formal education, in-company training), and that is designed as learning. It may lead to formal recognition (diploma, certificate). Formal learning is intentional from the learner's perspective.</p>	<p>Non-formal learning consists of learning embedded in planned activities that are not explicitly designated as learning, but which contain an important learning element. Non-formal learning is intentional from the learner's point of view.</p>	<p>Informal learning is defined as learning resulting from daily life activities related to work, family, or leisure. It is often referred to as experiential learning and can be partly understood as accidental learning. It is not structured in terms of learning objectives, learning time and/or learning support. Typically, it does not lead to certification. Informal learning may be intentional but it is mostly non-intentional (incidental or random).</p>
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Source: Colardyn and Bjørnåvold, 2004, p. 71.

Considering these definitions with the learning concept outlined above, indicates that:

- internal conditions, as the constitutive feature for learning to take place, are still missing (Straka, 2002). Learning is an episode – intended or not – whatever the result might be. However, internal conditions might be more implicitly than explicitly addressed with general terms like learning outcomes or results;
- intention may have overlapping with the concept of motivation at first glance, but this link weakens with the formulation 'the intention to learn explains the centrality of the learner in the learning process' (Colardyn and Bjørnåvold, 2004, p. 71). Considering that only vivid persons can learn, such an expression is redundant. However, if this statement sets boundaries to definitions referring exclusively to external conditions (such as instructional objectives, time admitted for learning), the notion may contribute to differentiation between education and learning;
- apart from some tautological tendencies in these definitions – such as 'learning consists of learning' – an interpretation might also be that it is not learning itself that distinguishes informality from formality. Indications for this conclusion are terms like 'organised and structured context', 'formal recognition' or no 'certification';

- given the phrases ‘incidental from the learner’s perspective’, ‘accidental learning’, or ‘incidental/random learning’ bridges might be built to different learning types, discussed below.

Features of formality

An action by a person is no learning episode per se. Even an episode dedicated to learning gets the attribute ‘learning’ if, and only if, a durable change of internal conditions occurred. To carry the argument to extremes, we state that most parts of the learning episode and the learning result in total are – up to now – not directly accessible for outsiders. As a consequence, formality cannot be grounded in the individual. The key has to be found in the context or the external conditions in which the person’s learning took place. This consideration is supported by Colardyn’s and Bjørnåvold’s formulations: ‘learning that occurs within an organised and structured context’; ‘learning imbedded in planned activities (...) not explicitly designated as learning’; or ‘learning resulting from daily life activities related to work, family, or leisure’ (Colardyn and Bjørnåvold, 2004, p. 71).

Work and family represent contexts which tend not to be organised for educational purposes. In relation to leisure, this difference between educational and non-educational is blurred. If resources – like the Internet, a CD, a book or television programmes – are used (Straka, 1986), these external conditions are more or less structured for educational purposes. In that case, the term informal education instead of informal learning is appropriate.

Assigning non-educational external settings to informality poses a new problem: what is different about non-formality of learning and are daily life activities, related to work, family, or leisure – informal settings – exclusively unplanned and non-formal ones planned? The answer is that planned and unplanned activities may take place in both settings. A solution for this dilemma might be to use the criterion ‘degree of educational arrangement of external conditions’.

This criterion does not exclude the inconsistency that arises when people spend their leisure time on a history course in an adult evening class, or a volunteer evening history group meeting in their homes (Tough, 1971; Livingstone, 2001). In both settings, arrangements are dedicated to support learning, which is a core function of education. Which criterion is met in these cases: formal, non-formal or informal? If the criterion ‘organised and structured

context' is used, the volunteer evening history group could be a formal environment. Therefore, the additional criterion 'certification' is proposed to differentiate them. This notion is in accord with the European concept of informality that experiential and accidental learning typically does not lead to certification.

Certification may still not be sufficient for differentiating the external conditions for learning, one reason being certificates exist for different public and non-public regulation and approval. Some have beautifully ornamented formats with probably little acceptance beyond the meeting room. Others have a high reputation in the world of work, such as those from large IT-companies but they still lack guaranteed acceptance as of legal status. An *Abitur* (comparable to A-level in the UK) in Germany or *Externenprüfung* (examination for employed persons beyond the German VET system) have different attributes. Compared with certificates of high reputation, the *Abitur* guarantees admission to higher education in Germany. The *Externenprüfung* – if passed – guarantees the employed the craft or employee certificate in a defined domain, which makes her/him eligible for specified salary levels. Both entitlements are valid across Germany and perhaps across Europe via the European qualifications framework (EQF) in the future. Considering these aspects, the criterion 'certification' has to be subset into 'approved by public regulation' which might be the core idea of formal recognition in Colardyn's and Bjørnåvold's (2004) contribution.

Explicit, implicit, and incidental learning

To differentiate their learning types, European concepts of formal, non-formal and informal learning introduce additional aspects such as 'intentional from the learner's perspective' or 'non-intentional (or incidental/random)'. They argue that informal learning may be intentional, but in most cases it is non-intentional whereas formal and non-formal learning are intentional from the learner's perspective.

Compared with the introduced learning concept, these formulations focus on the learner. The question is whether the intention of the learner differentiates exclusively between formality and informality in this context. A learning result may be achieved intentionally or non-intentionally in both contexts. Self-directed learning, the prototype of intentional learning, occurs under informal and formal arrangements (Straka 1997, 2000). Knowles (1975) – the originator of the self-

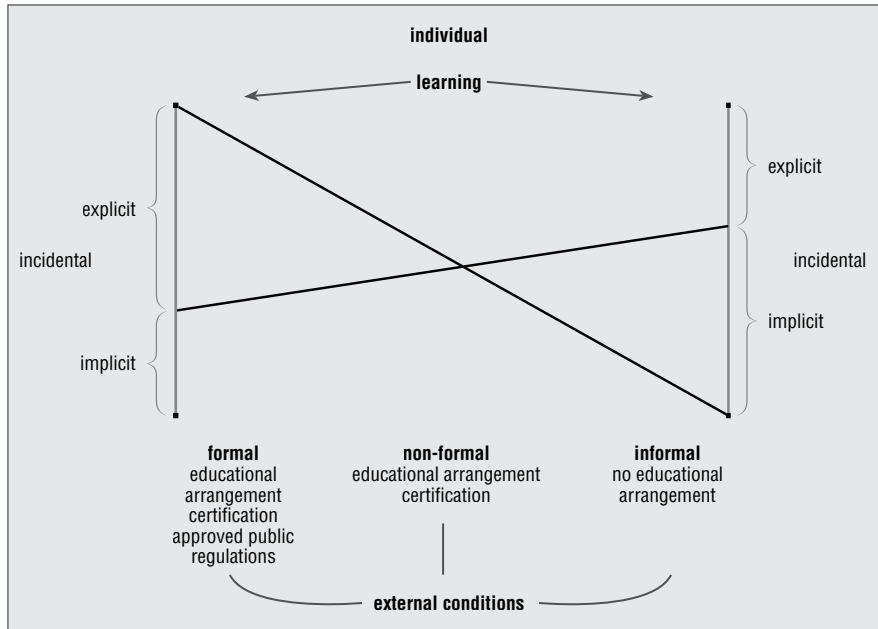
directed learning movement in US adult education – defines self-directed learning as ‘a process in which individuals take the initiative, with or without the help of others (...)’. Other typical examples of formal environments are teachers or trainers in adult education institutes. Another approach is Tough’s (1971) ‘adult learning-project’ concept whose short version is ‘a sustained, highly deliberate effort to learn’ (Tough 1979, p. 7). Such learning is intentional but takes place in formal and informal contexts. However, non-intended learning results may occur in a formal context characterised by learning objectives, learning time and/or learning support, such as a creative solution not foreseen or planned by the student and/or the coach. Such activity and result are unintended but still largely explicit to the learner. There are also learning results possible which are neither explicit to nor intended by the student. Such issues are discussed under the concept of ‘hidden curriculum’ or the creeping acquisition of values during the lifelong socialisation process.

Considering that the terms intentional and non-intentional are ambiguous, the suggestion is to introduce the concepts of explicit and implicit learning (Anderson, 1995; Oerter, 1997). But there is another learning type used: incidental learning. This can be integrated between explicit and implicit learning, but not on the same dimension, as both explicit and implicit learning may be incidental.

The learning focus of the concepts explicit, implicit and incidental is on the person and not on the attributes of external conditions. A typical example is the peer group in a school, which cannot exist without the formal institution school, but which is organised informally. Interactions in such settings may be accompanied by explicit, incidental and *en passant* (Reischmann, 1995) but, above all, with implicit learning, results of which may not always support the official goals of institutions. The same situation may take place in organisations with formal and informal communication patterns; the informal might be the most successful.

Therefore, the key to distinguishing formality from non- or informality is to be found in the features of the external conditions differentiated according to the degree of educational arrangement, certification and approved public regulations. Combining types of formality of external conditions with types of learning, and referring to Colardyn’s and Bjørnåvold’s (2004) argumentation, produces the result shown in Figure 2.

Figure 2. **Types of learning combined with formality of external conditions**



The figure shows that explicit and implicit learning take place in all types of external conditions but tend to be different in importance. Incidental learning may occur anywhere, even under formal conditions.

The focus on external conditions is supported by current conceptualisations (Garrick, 1998). The AERA special interest research group in this domain is called 'informal learning environments research'. According to Livingstone (2001, p. 5) 'informal learning is activity involving the pursuit of understanding, knowledge or skill which occurs without the presences of externally imposed curricular criteria'. Because this pursuit of understanding can also take place in educational institutions, the demarcation line is located in the external conditions. In the same way Eraut argues: 'Informal learning is often treated as a residual category to describe any type of learning which does not take place within, (...) a formally organized learning program or event. However, for those who believe that the majority of human learning does not occur in formal contexts, the utility of such a catch-all label is not very great' (Eraut,

2000, p. 12). He recommends differentiation only with respect to formal and non-formal environments, of which formality can be characterised as a prescribed framework for learning (such as school syllabus, training regulations for companies), an organised event or package, the presence of a designated teacher or trainer, external specification of outcomes, award of a designated qualification, credit or certificate, accreditation or recognition of the qualification, credit or certificate, affiliated with the right of access to further education (Eraut, 2000).

Conclusion

Implicit, explicit or incidental learning may occur under any external condition. All provide no criteria for informality in learning. Independent from the types of learning, their outcomes are validated, not the individual process to realise them. Formality is not a feature of an individual's learning but of the socioculturally shaped conditions external to the individual. The latter aspects are to be found in the following statement in the context of validating non-and informal learning: 'With individuals acquiring knowledge, skills and competences in non-formal and informal settings as well as in formal education and training, Member States and the Commission have underlined the importance of recognising and valuing learning outcomes regardless of where and when these have been acquired' (Cedefop; van Rens, 2005, p. 1). Thus instead of informal, non-formal, and formal learning, the terms 'learning in informal arrangements', 'non-formal' and 'formal education' (Figure 2) should be preferred. The last two denominations have been used during the first phase of non-formality and learning that Colley, Hodkinson and Malcom (2003) found out in their genealogy of this concept. At that time, Unesco (1947) advocated non-formal education as an alternative path for persons who are excluded from or could no complete formal education. Such aspects are also part of EU and OECD focus on lifelong learning. However, learning is exclusively the concern of the individual. Therefore informal, non-formal and formal learning are triggering inappropriate associations in the context of policy.

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