

The Classroom and the Everyday: The Importance of Informal Learning for Formal Learning¹

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Abstract: All education is learning, but not all learning is education. Formal learning takes place in an educational institution. Non-formal learning takes place outside of schools and changes depending on the individual. It is primarily self-directed. Informal learning occurs in everyday life and is not planned. This paper uses the image of the iceberg to illustrate this process: The tip of the iceberg is the conscious, formal learning, then comes the non-formal learning, but under the water there is a much larger part of informal learning.

Keywords: non- formal learning and informal learning; everyday on school.

I. The Different Kinds of Learning

Growing interest in 'learning': There has been and continues to be growing interest in and understanding of 'learning'. Explorations of the different kinds of 'learning' which have been identified are now more frequent (for a recent summary, see Belanger 2011). One reason for this strengthened focus is a move away from talking about education (seen as teacher-centred instruction) to a more learner-centred approach; hence "the introduction of new and different concepts based on learning rather than education" (Federighi 1999 p1).

There are of course dangers in this change of language. There is often some essentialism of 'learning'; it may be regarded as only one thing. And again, there is a tendency to see 'participation' in learning activities as 'learning', although we know one may participate in a learning programme but learn little of what is being taught; this arises from a perception of learning as system rather than as process. Above all, there is often a confusion between 'learning' and 'education': thus in many cases, "lifelong education and lifelong learning are used interchangeably ... there is a tendency to treat education and learning as synonymous concepts" (Jarvis 1990 p 203; see Duke 2001). But it is probably not very helpful to see them as the same thing. We can use the analogy of flour and bread. Bread is made from flour; but not all flour is bread, bread is *processed* flour. Similarly, all education is learning; but not all learning is education, education is *planned* learning.

Typology of learning: The European Commission (2001, cited in UNESCO 2009a) has drawn attention to different kinds of learning [with additional comments in brackets]

Formal learning: Formal learning occurs as a result of experiences in an education or training institution, with structured learning objectives, learning time and support

¹ This is part of a larger study of informal learning which will be published soon under the title: *The base of the iceberg: informal learning and its impact on formal learning*. Details may be obtained from the author at alan.rogers@uea.ac.uk

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which leads to certification. Formal learning is intentional from [both] the learner's [and the institution's] perspective[s].

Non formal learning: Non-formal learning is not provided by an education or training institution and typically does not lead to certification. It is, however, structured (in terms of learning objectives, learning time or learning support). Non-formal learning is intentional from the learner's perspective.

Informal learning: Informal learning results from daily life activities related to work, family or leisure. It is not structured (in terms of learning objectives, learning time or learning support) and typically does not lead to certification. Informal learning may be intentional but in most cases it is non-intentional (or 'incidental' /random) [and frequently unconscious] (UNESCO 2009a p 27).

This set of definitions however needs some elaboration. First, *formal learning* may be seen as intentional by both providers of learning programmes and the learner, whereas non-formal learning may draw on learning sources which are not intentional in respect of learning provision. On the other hand, *non-formal learning* may include some accredited learning programmes, for example, those provided by commercial agencies such as driving schools, language schools and computer training agencies which usually lead to some forms of certification; it can also include apprenticeships and much work-related training (Garrick 1998; Hager 2004); the term has even been used by some educational agencies to mean 'alternative schooling systems' (see Rogers 2004). And *informal learning* clearly includes all the unconscious influences through the family and groups within the wider society, through religion and sport, through shared music and peer pressures in such things as dress and computer games, and through the many accidents which occur during the course of our lives (Rogers 2003).

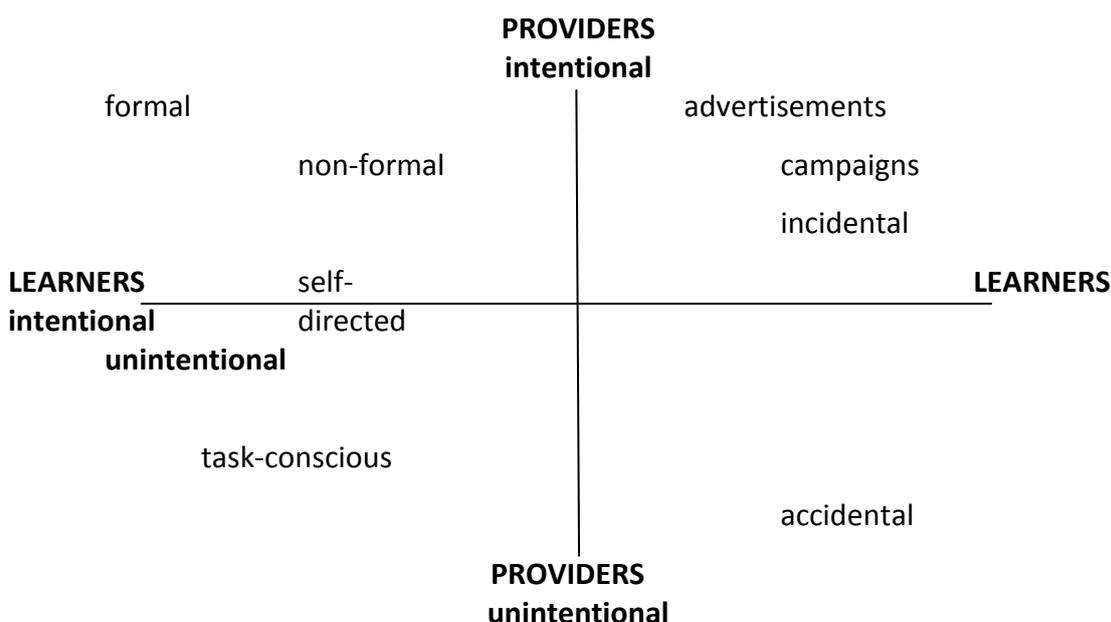
Indeed, it is probably a mistake to see even 'informal learning' as a single process. There are different kinds of informal learning. First, there is *self-directed learning* (Brookfield 1985; Boekaerts 1999). Here we adopt the identity of a 'learner'; we plan and control the learning activities, and we measure our success in terms of how much we have learned. "Virtually all adults are regularly involved in deliberate, self-directed learning projects beyond school and training programs" (Livingstone 2001 p 6). In these 'learning projects' (Rogers and Horrocks 2010 pp 147-57), we may or may not use formal and non-formal learning programmes as we choose, and we will normally include some informal learning also. Secondly, there is all that *incidental learning* which we do when engaged on some purposeful activity. We are vaguely aware we are learning but our focus is on the task - what I have called '*task-conscious learning*' (Rogers 2003). Many people have spoken of 'being on a steep learning curve' in some new situation. We do not construct ourselves in this situation as a 'learner' but as a 'worker'; we do not construct what we are doing as 'learning' but as attempting a task; and we measure our success not in terms of how much we have learned but how well we have mastered the task. But we have learned a lot in the process. And thirdly, there is what may be called *unintentional learning*, unplanned, and almost always unconscious (Hager and Halliday 2009 p 172).

Not all unintentional learning is accidental; some of it is intended, but not by the learner. The many advertisements we are subjected to every day, the many campaigns against smoking, unhealthy eating, HIV/AIDS etc are examples of learning

that is not intended by the learner but is intended by the learning-provider. This *incidental* learning may be distinguished from *accidental* learning, all that unintended learning through the media, unexpected interactions with others or experiences, cancelled journeys, sudden challenges, new friendships, becoming lost and so on.

It may be helpful to give two examples to help explain the difference. In the UK at the time of writing this paper, two major stories competed for the attention of the public. In one, the bones of what have been suggested as one of England's kings were dug up by archaeologists. This created a stir of public interest and a great deal of learning about fifteenth century history and archaeological processes went on – unintentional on the part of both the learners and the media. It was just a good story. This competed with a political storm over the legalisation of same-sex marriages – and again a great deal of public *incidental* learning went on. It was unintentional on the part of the learners but not of those who provided the learning material; this was part of a campaign waged by small group to change the perceptions of others, in other words, to help the public to learn new attitudes through new knowledge. "Sometimes the learning process was intentional and conscious (self-directed), sometimes it was unintentional but conscious (incidental or ... accidental), and sometimes it was unintentional and unconscious (tacit)", "opportunistic rather than planned" (Livingstone 2010 p. 87; Hager and Halliday 2009 pp 7, 237).

Intention in learning: One way then of analysing all learning is through the intentions of both learners and learning providers. Sometimes the learners intend to learn, sometimes they do not so intend. Sometimes the learning agency intends the learners to learn, sometimes they do not but in fact promote learning unintentionally. A distinction has been drawn between 'reactive and deliberative' learning (e.g. Livingstone 2010 p165). Learning may then be set out in a matrix:

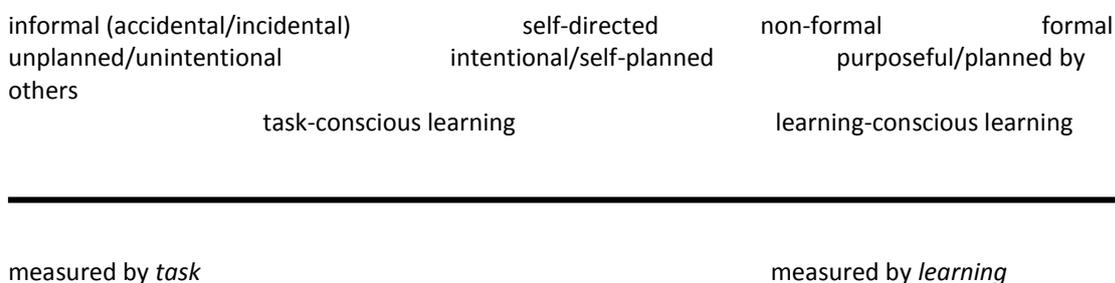


The learning continuum

There is of course a danger in seeing these different kinds of learning - formal, non-formal and various kinds of informal learning - as separate categories. The boundaries between them are often blurred as they merge into each other:

Learning is often thought of as 'formal' or 'informal'. These are not discrete categories, and to think that they are is to misunderstand the nature of learning. It is more accurate to conceive 'formality' and 'informality' as attributes present in all circumstances of learning. The priority is then to identify these attributes, explore their relationships, and identify their effects on learners, teachers and the learning environment (Colley et al 2003)

So that it may be best to see them as a continuum:

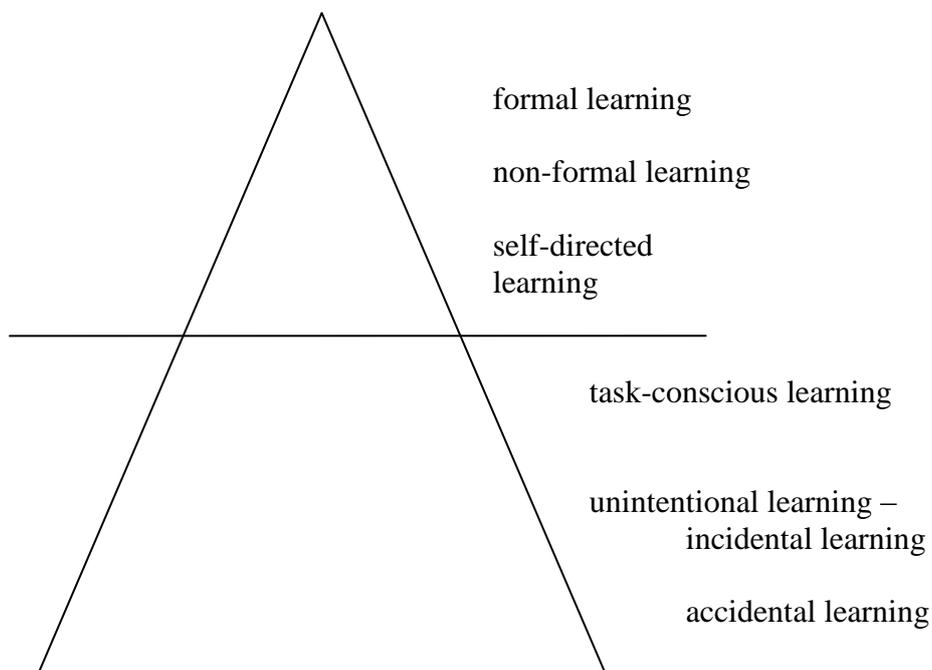


Informal and formal elements in learning: Informal learning and formal learning then may be seen as lying on a continuum ranging from accidental/incidental learning, through task-conscious learning, through self-directed learning to non-formal and formal learning. The boundaries between them are blurred and will change from context to context, from discourse community to discourse community; and there are many hybrid varieties of learning. Indeed, "There are few, if any, learning situations where either informal or formal elements are completely absent" (Colley et al 2003 p 1). In much informal learning, there are some elements of formality, assisted learning with small components which are structured in order to master a particular element, some drawing out of general conclusions, some promotion of more conscious learning, some assessment of learning outcomes. Equally, in most formal learning situations, there are elements of informality, of situated learning, of the application of the generalised learning to the specific life situation of the learners, of the reconciliation of the new learning with the individual experience of the learners, undertaken by the learners themselves, even if these are more or less unconscious or unintentional (Lave 1992).

Relationship between formal and informal learning: Nevertheless, a distinction can be drawn between formal (and non-formal) learning and informal learning, between those occasions where "people learn ... without ... intending to learn", and the "intentional modes of education" (Hager and Halliday 2009 p2). What then is the relationship between formal (and non-formal) learning and informal learning? There is

today a great deal of interest in informal learning; a wide range of recent studies have been devoted to exploring it (e.g. Lucas 1983; Jeffs and Smith 1990; Chaiklin and Lave 1993; McGivney 1999; Carter 1997; Merriam and Cafarella 1999; Aspin et al 2001; Field and Leicester 2000; Hager 2001; Smith 2002; Rogers 2003; Hager and Holliday 2009; Schuler and Watson 2009). And the main conclusion is that informal learning is both larger and more important than formal learning. "Studies monitoring informal adult learning ... show the importance of tacit learning and the informal development of skills and knowledge" (Belanger 2011 p 55). These studies confirm that most learning occurs "outside formal educational establishments" (Straka 2004 p3). "The majority of human learning does not occur in formal contexts" (Eraut 2000 p12). "Most learning doesn't occur during formal training programs. It happens through processes not structured or sponsored by an employer or a school. Informal learning is...what happens the rest of the time"; "well over two thirds of most adults' intentional learning efforts occurred completely outside institutionalized adult education programs or courses" (Livingstone 2001 p6; see also Resnick 1989; Richardson and Wolfe 2001).

Thus, informal learning is now recognized as being far more extensive than formal learning. "Most of the learning that people do is informal and carried out without the help of educational institutions" (Williams 1993). The image has been used many times of an iceberg of learning: what cannot be seen is not only larger but also more influential than what can be seen, for it supports and indeed determines what can be seen above the water line (Tough 1979; Livingstone 2001 p 6; Livingstone 2002; see also Swann 2012 p 21). But because it "takes place below the level of consciousness", much of this informal learning is not recognised as 'learning'. 'Learning' is seen by many people to be what goes on in a structured programme of intentional learning, i.e. formal learning. But much learning is unconscious, informal"; some have spoken of the "invisible reality of informal learning" (Belanger 2011 p 79; Le Doeuff 2003).



Most of those who have written about informal learning have tended to concentrate on the upper levels of the iceberg – self-directed and intentional learning. Indeed, Livingstone, in his ‘mapping the iceberg’ (2002), acknowledges that his tools only allow him to identify the different kinds of learning activities of which the learners were conscious; others like Hager and Eraut have focused on work-place learning. It is important for us to recognise this, for “the focus of ... surveys of adult informal learning is necessarily on self-reported learning that ignores the depths of everyday tacit learning” (Livingstone and Scholtz 2010 p 16; Krogh et al 2000; Greenfield 1984). Surveys of “participation in learning” can never reveal the full extent of informal learning, the invisible part of the iceberg.

I have sometimes used in teaching an alternative image of learning. We can see the whole of life as a current of rich thick soup made up of many everyday learning events, small pieces of learning which occur all the time throughout the whole of life. Floating in this are larger ‘lumps’; dumplings in the soup, so to speak. Some of these are very square and regular – they are formal learning episodes shaped by the educational bodies which provided them. Others are more irregular, shaped in large part by the learners. These ‘learning episodes’, as I have called them (Rogers and Horrocks 2010 pp 133-39), are floating in a river of unconscious and unintended learning.

II. The Effects of Informal Learning

My task today is to begin to explore both the unintended learning and the intended informal learning, and to suggest some of the ways in which informal learning in its totality affects formal learning. What are some of the implications for those who teach of the fact that **all** their learners are simultaneously engaged in what are largely

unconscious processes of learning? What is the impact of all this informal learning on the learners – and thus indirectly on those who teach? I would like to look at this from two aspects – **what** is being learned in informal learning and **how** it is being learned, before discussing some of the implications of this for formal learning programmes.

1. What is being learned in unintentional informal learning?

We can, I think, rephrase this question as ‘what is it that the learners bring with them to the learning experience?’ This has been examined in depth by many writers in different contexts, but I would like to take four studies as examples:

- the ‘pre-understanding’ in hermeneutics (especially historical documents and Biblical studies);
- ‘funds of knowledge’ in work-place learning;
- ‘frames of reference’ in adult learning theories;
- and ‘imaginaries’ and ‘Discourses’ in linguistic studies.

All of these have much wider significance than the immediate academic fields they operate in.

*Pre-understanding*³

This concept of pre-understanding seems to have emerged in Germany in both historical studies (see Dilthey 1961) and theological studies (see Bultmann 1985), building on the philosophical work of Heidegger. As Bleicher has shown (Bleicher 1980 p 63), the term has both a narrow sense and a much wider sense. In its narrow sense (‘fore-knowledge’), it argues that no-one comes to any study without some pre-existing knowledge of the subject being studied; they may not be conscious of that pre-knowledge and may even assert they know nothing about the topic, but pre-understanding already exists. But there is a wider meaning to the term ‘pre-understanding’: it consists of the whole ‘tradition’ in which the learner stands, the pre-suppositions, the assumptions about normalities, the ‘prejudice’ (i.e. pre-judgement) which they bring – “a whole conceptual world” (Turner 1975 p 232).

These discussions draw on the work of scientists like Polanyi (1967), Kuhn (1970) and Popper (1972). Learners already have their own questions, insights and values which determine what they are looking for, they bring expectations, theories and myths with them. Historical studies, following from the work of Croce (1921), Mannheim (1936) and Collingwood (1946), have explored this; historians are now seen to interpret the past according to the pre-understanding they bring from their own life perspectives to their task. Ricoeur (1963) and especially Berger and Luckmann’s major study (1967) formulated this argument most clearly. Every history student brings with

³ I am grateful to Dr John Parr for introducing me to the theological studies cited and the literature relating to them.

them the concerns of their contemporary society; and historians are often “unaware of the extent to which they are assimilating what is historically different from that which is familiar to them, thus subordinating the alien being of the object to their own conceptual framework” (Davies 1983 p 49).

But it is probably in the field of religious studies that the concept of pre-understanding has been most fully explored. Drawing on the studies by Bultmann, Gadamer (1975) drew attention to the (often unconscious) ‘anticipation’, the ‘expectation of meaning’ which exegetes bring to their hermeneutics; “a comprehensive pre-understanding which guides the questions he [sic] formulates within a framework of societal norms” (Bleicher 1980 p 121). The learner brings an existing horizon to the horizon of the learning material. Turner (1975) analysed pre-understanding carefully, drawing attention to two features. The first is what he called the ‘conceptual matrix’ (the collection of concepts already understood and used interpretatively). And because this existing knowledge is mainly reproductive, that is, the knowledge we possess seeks to preserve the predominance of those who created it, this conceptual matrix will shape what we learn from the new material. Secondly, pre-understanding includes ‘cognitive interest’, that “practical interest which determines the perspective within which he [sic] acquires knowledge”. Cognitive interests shape our continuing interests; they sit like antennae, tuning us all the time to pick up what is of both immediate and long-term interest to us. They “organise our experience of reality, ... open up a field of vision, a perspective... the possibility of new forms of knowledge” (Turner 1975 pp 238-40). But equally, cognitive interests close down certain avenues, prevent some aspects of the object of study being perceived.

For ‘pre-understanding’ goes beyond simply a collection of pre-existing concepts and knowledge: “Pre-understanding is ... more nearly identified with what we are and not with what we mean. ... Pre-understanding ... is not the ‘how’ of how we see the world or the ‘how’ of how we judge it, but rather it is that something in us that makes us notice or disregard certain realities. [It] is not a preconceived world-view but rather that factor which gives our intelligence a focus, the source of our ability to see shapes and not just spots and shadows” (Bortnowska cited in Parr 1989 p 251). Davies (1983) explored some of the implications of this meaning of ‘pre-understanding’ for students, especially the way the learner’s existing “preconceptions, ... ideas, presuppositions, theories, knowledge, prejudices, values etc”, determine what the learner sees and what is overlooked. Studies such as these draw on Habermas (1972 pp 196-8) with his concept ‘tacit assumptions’, “the formulation of interpretative schemes which are formulated in everyday language and which both enable and pre-judge the making of experiences” (Bleicher 1980 p 184).

2. Funds of knowledge

In a different field, many of those who have been exploring workplace learning and training have identified that trainees bring with them ‘funds of knowledge’ to their learning (Marsick and Watson 1990; Aspin et al 2001 p92; Moll et al 1992; Eraut 2000; Sallis and Jones 2002; Evans and Kersh 2004; Rose 2004). This includes not only ‘know that’ but also ‘know how’: so that along with these funds of knowledge, banks of skills

(motor and mental) have also been built up. And because the learning process is frequently unconscious, the funds of knowledge and banks of skills that we build up through informal learning are 'tacit'; we do not know we possess them (Moll et al 2005; Baumard F 1999; Gordon and Holoyak 1983; see also Krogh et al 2000; Polanyi 1983). Polanyi (1958 and 1967) drew attention to 'knowledge' which is "displayed in skilful performances which can be seen to follow a set of rules that is not known as such to the performer" (Hager 2001 pp82-3).

Yet these funds of knowledge and banks of skill, although mostly unconscious, are important, for we use them every day in our speech and in our practices without realising it. The most significant thing about such funds of knowledge and banks of skills is that they direct what we do. We all possess tacit knowledge which we have developed through life's experiences, and this knowledge is used to help us negotiate our way through experience and the tasks before us (Reber 1993). These funds are more than mere 'knowledge' – they form what Polanyi calls "a set of criteria [of truth] of our own which cannot be formally defined" (Polanyi 1967 p71). And because they construct our intuitions of 'truth', they shape our actions. Some have called these 'axioms': "A person may know nothing of such axioms but he [sic] *behaves* according to them" (Angyal 1941 pp 144-5). 'The invisible work' of everyday learning is the creation of tacit funds of knowledge and banks of skills which are brought to all life, including new learning situations.

The growing awareness of these funds of knowledge and banks of skills which the learner-trainee brings with her/him to the learning programme has led to the development of new approaches. Those working in this area have often become concerned to give recognition to this knowledge. Programmes have been developed to help educators to work with the learners to identify such prior knowledge and to accredit it (APEL⁴, for example), so that the new learning programmes can build on and develop further these existing funds of knowledge. APEL may take one of two forms, In some cases (mainly in universities and colleges), APEL gives accreditation to the informal certificates which some adult trainees and other learners may have acquired from informal training agencies; but in other cases, APEL may try to recognise, through activities such as portfolio building, the larger but unstructured experiential learning built up through past activities, especially the working life of the trainee (see e.g. Evans 1992; Evans and Kersh 2004; Weil and McGill 1989 etc).

3. Frames of reference

Adult educators more generally however tend to look at this field in an even wider sense. Rather than focus on existing funds of knowledge and banks of skills, they speak of frameworks of reference which are 'transformed' by (formal, non-formal and informal) learning. Mezirow has most fully explored 'transformative learning' (sometimes called 'paradigm transformation'; see Taylor 1998; Cranton 1994). The argument is that we have all built up through experience and prior learning "frames of

⁴ Many different programmes have been developed – the accreditation of prior learning (APL), the recognition of prior learning (RPL), the accreditation of prior experiential learning (APEL), PLAR prior learning accreditation and recognition (Aarts et al 1999) etc.

reference ... the structures of assumptions through which we understand our experiences. They selectively shape and delimit expectations, perceptions, cognition, and feelings. They set 'our line of action'" (Mezirow 1991 p 5).

"Transformative learning refers to the process by which we transform our taken-for-granted frames of reference (meaning perspectives, habits of mind, mind-sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective, so that they may generate beliefs and opinions that will prove more true or justified to guide action ... more dependable" (Mezirow et al 2000 pp 7-8, 104).

Learning, it is argued, takes place when new experience causes a disjuncture with prior experience and there is a search for a new equilibrium.

Mezirow (1991) speaks of 'meaning perspectives': "the structure of cultural and psychological assumptions within which new experience is assimilated and transformed by one's past experience", and 'meaning schemes': those "rules, roles and expectations that govern the way we see, feel, think and act". These form sets of habitual expectations: "We expect to see things in a certain way because of our past experiences" (Cranton 1994 p 26). We all have come to possess the presuppositions of prior learning, "assumptions, or premises" (Mezirow 1991 pp 6, 144).

Literacy as an example: Such meaning perspectives and meaning schemes may on occasion form barriers to change, resistance to new learning; the processes of transformation are not always easy and acceptable. Literacy may provide an example of the limitations that existing frames of reference can impose.

"Literacy Studies has shown that most children and adults are not 'illiterate' when they start school or college but they already have a great deal of experience of leading literate lives in their homes and communities. Most come to education with 'funds of knowledge' in terms of the literacy practices in their everyday lives which might act as resources for literacy development at school or college" (Ivanic 2009 pp 102-3).

But recent studies into what have been called 'hidden literacies' reveal that those who have learned a literacy in the home or for some specific personal purpose, such as religious practices and occupational work-related activities, often do not recognise this as 'literacy' (Nabi et al 2009; Rogers and Street 2012). They will thus be unable to see the relevance these literacy practices may have to learning the schooled literacy of the learning programme which to them is the sole meaning of 'literacy'. Before effective literacy learning can be accomplished, a transformation of these frames of reference is needed.

The transformation of meanings (in Mezirow's sense) is a part of learning. Although Mezirow says that "learning is understood as the process of using a prior interpretation to construe a new or revised interpretation of the meaning of one's experience as a guide to future action", he goes on to agree that "learning may be intentional.., incidental .. or mindlessly assimilative" - i.e. non-transformative (Mezirow et al 2000 p5⁵).

⁵ Not all assimilative learning need be 'mindless'; much is deliberately reinforcement as in practising skills.

4. Imaginaries and Discourses

There is however a sense in which the existing patterns of thought and practice which learners bring to the learning programme is even wider than the meaning frames and perspectives that adult learning theory posits. For we all come from a social context with all that that implies.

Charles Taylor talks about how we all construct what he calls 'social imaginaries':

"The social imaginary is that common understanding that makes possible common practices and a widely shared sense of legitimacy... social imaginaries are not explicitly argued like theories, but are carried implicitly through images, stories, and legends as unquestioned assumptions that frame our understanding of ourselves and others ... such understanding is both factual and normative .. a sense of how things usually go but ... [also] how they ought to go" (Taylor 2004 p 23)

Imaginaries both enable and at the same time control the interpretations we make of experience and new knowledge. Imaginaries not only reflect our existing values and beliefs but they help to create these by reflecting those of our communities. Hence the term 'social imaginaries', for they are shared. We both acquire them from our socio-cultural context through the processes of informal learning, and at the same time we contribute to their creation in the community. They are what Chomsky called our "common notions". They are mutually understood and agreed but not explicitly expressed. For once again they are largely unconscious. The only way we can perceive them, in ourselves and in others, is through the language we use.

Discourses⁶, as writers such as Norman Fairclough (e.g. 1989) and James Gee (e.g. 1990, 2005) have pointed out, is the language we use to express these constructs. "Discourse not only includes language, but also what is represented through language. ... A discourse ... identifies appropriate and legitimate ways of practising ...as well as speaking and thinking" (Grillo and Stewart 1997 p13; Robinson-Pant 2001). We all use many different Discourses at different times, in different places and with different audiences; thus, for example, an academic will use one Discourse in the lecture theatre, another in a social gathering and yet another in the intimacy of the home.

Imaginaries are often represented in Discourses, as Mary Hamilton (2012) has demonstrated, through the metaphors which (often unconsciously) express our understandings. Metaphors often use labels for this purpose: "Labels are by no means neutral: they embody relationships of power and influence the categories with which we think and act" (Escobar 1995). For "a Discourse is not just a set of words, it is a set of rules about what you can and cannot say and about what" (Apthorpe and Gasper 1996 p 4). Thus Discourses determine our actions: "Change is talked into being through Discourses ... Discourses shape and reshape social reality".

⁶ I am grateful to Professor Anna Robinson-Pant for discussions of Discourses. Linguistics tends to use a capital D for Discourse when used in this specialist sense rather than in the everyday use of the word; just as the capital is used in the word Development when the term means international aid rather than simply growth or change.

Both our imaginaries and our Discourses legitimise and de-legitimise thoughts and actions: “prior to any act of knowing, there is a judgment or a decision about the importance or lack of importance attached to ‘re-cognizing’ the existence and value of this or that” (Le Doeuff 2003). And yet they become so commonplace, so normative, that we are unconscious of them; they prevent us from thinking alternatives. We need to stand outside to analyse them. A good example is HIV/AIDS. This can be constructed as a *medical* issue, in which case the response is drugs; it can be seen as a *sexual* issue, in which case the answer is the use of condoms; or it can be viewed as a *social* issue (multiple sexual partners), in which case the answer is abstinence. How we construct and express the issue will determine what we feel should be done about it.

And imaginaries not only relate to the ‘other’ (person or subject) but also to the self. “Everyone is caught up in an ‘imaginary’ network (fantasy or myth) of self-representation, authorizations or inhibitions more significant than the mere intellectual conditions of thought” (Le Doeuff 2003). They help us to formulate our identities, our self-horizons, especially in terms of our sense of our own learning abilities (the ‘I-can’t-learn-maths’ assumptions, for example) (see Rogers 1993).

All these attributes have been learned

All of these – pre-understanding; funds of knowledge and banks of skills; meaning perspectives and meaning schemes; and imaginaries and Discourses - are all pre-existing attributes of learners, and they deeply affect all new learning experiences. But they have all been learned; although unconscious, they are not innate. Most of those who have discussed what the learners bring to new learning have not enquired into how these attributes have come into being, how they have been developed. Some have made general statements: for example, “Frames of references come from the ways we grew up, the culture in which we live, and what we have previously learned” (Cranton 1994 p 26), but the processes by which they have been learned have not been explored.

Some of these attributes have been learned through formal learning for those who have been to school; but working as I do for much of my time in the context of international aid programmes in countries where a very large number of adults (sometimes, as in South Sudan and Afghanistan, the majority) have not been to school, it is clear that the unschooled or inadequately schooled still have pre-understanding, funds of knowledge and banks of skills, frames of reference, and imaginaries and Discourses, and that these have been developed through the everyday learning of their social life. And this is true also for those who have been to school: although their schooling has been influential, most of these attributes have been developed through their informal, unintentional learning.

III. The Reality of Informal Learning

Ethnographic studies in the field have revealed large areas of everyday learning - men and women learning what they need so as to make sense of, and to act in, their

immediate socio-cultural contexts: learning while cooking, having and bringing up children; farming, fishing and engaging in other occupational activities; handling money. They learn community traditional knowledge, values and practices; and they experiment with new values and practices, all without going to school. Informal learning includes all the unconscious influences on us through our family and groups within our wider society, through religion and sport, through our chosen music and our peer pressures in such things as dress and eating habits (Rogers 2003). Many are learning to handle new technologies without any formal or non-formal assistance: "People would not be able to use mobile phones, find their way in strange [places] or use new foods without learning informally how to do so" (Hillier 2011 p143). Learning is all around. To talk of 'non-learners' is to ignore all that non-educational everyday unconscious learning which is usually called informal learning.

The range of informal learning is as wide as life itself: from food to football, from cycling to clothes, from maps to money; from personal relations to pets, from religion to sports, from binge drinking to computer games, from sending text messages to gardening, from life events of births and deaths to individual crises - all our everyday activities and most of our socialisation rely on this informal learning. Through our lived experience, we build from fragments our senses of normality, our patterns of behaviour, our rules for life, what Bourdieu (1990) calls our dispositions (*habitus*) and our expectations.

Even in our formal education, we are learning informally, especially community values and belief systems: in formal learning programmes, "some things are learnt which are not directly intended by those employed by the institution" (Hager and Halliday 2009 p3). For example,

"As children learn to read and write, they are learning to engage with the culture and with specialized cultural practices. ... learning about being black, girls, working-class, even poor, *in this culture*" (Miller 1990 p 159, original emphasis).

So too for adults: although formal learning often claims academic neutrality, in learning (a language or other subject), we are not just learning decontextualised knowledge and technical skills; we are acquiring a set of values, we are being socialised into a particular culture. This is why the unconscious informal learning is so important, both for life and also for formal learning: it determines what and how we learn consciously, the values, assumptions and expectations we bring to all forms of non-formal and formal learning; it determines our aspirations, our motivations.

Not all informal learning is necessarily good or socially desirable (Swann 2012 pp26-27); much that is negative is learned through informal learning. We can learn racism, gender bias, drugs and violence as well as tolerance, generosity, self-control and (in short) wisdom through informal learning. The basic norms and assumptions on which we build our social interactions are the result of unconscious informal learning; we were not born with them. And this means that informal learning, because it is built on experiential learning, is very 'deep learning'. Our pre-understanding and our funds of knowledge, our frames of reference and our social imaginaries, though tacit, are not only of long-standing; they are tied to us by strong bonds of emotion. The fruits of informal learning are built into our identities. The emotional component to informal

learning (Illeris 2002), which may be missing in much formal learning, means that this learning is often difficult to shift.

And this brings up to the issue of how we learn informally.

How do we learn informally?

Natural, like breathing: Informal learning is ubiquitous, universal and continuous; it is part of the process of living in a social context. It is our encounter with experience, it "happens all the time" (Golding 2011 p 69): as has been remarked on several occasions, the sense of 'going off' to learn and then 'coming home' is completely alien to informal learning. "It is not necessarily helpful to draw a distinction between learning and living" (Hager and Halliday 2009 pp 48-49). Everybody is learning during the course of their lives - as they enter new roles (parent, property holder, worker, member of community retired etc) or as they interpret old roles in new ways; as their community changes (for example, with economic changes and the introduction of new technologies); and as their interests change with age: "humans inherently cope with their changing [lives and] environment by learning" (Livingstone 2010 p. 22). "Informal learning reminds us that learning, like culture, is ordinary. It occurs throughout life, in a whole host of affiliations and networks" (Williams 1993). Some learn more than others; some learn more permanently than others - but all learn. Learning, like breathing and ingesting, is a natural process of engaging with our environment and taking from it what we need in order to function and to grow; it is an essential element for living (Swann 2012 p1; Brookfield 1986; Jarvis 1987; Rogers 2003). While times of transitions in the life career may trigger participation in some specific forms of lifelong learning, informal learning is not confined to those times (Cross 1981; Belanger 2011 pp 80-82).

Osmosis: In large part, informal learning takes place through a process of osmosis, assimilation. It is true that "There is a critical difference between an assimilation process, in which new experiences are shaped to conform to an existing knowledge structure, and a transformative process, in which the knowledge structure itself is being changed" (Belanger 2011 p 44; Kegan 2000 pp 48-50). The difference between the two processes has sometimes led to an accusation that unconscious informal learning cannot be critical learning. Some have used the term 'acquisition' for the former learning and reserved the term 'learning' for the more critical, transformative formal and non-formal processes (e.g. Krashen 1982; Gee 1990 p 154; Goodman 1996). But acquisition in this sense is still learning. Nor can it be argued that informal learning cannot result in transformative learning; transformations are not always conscious.

Learning languages informally and formally: This can best be illustrated from language learning. Learning our initial language was undertaken gradually, over an extended time and largely unconsciously. Through imitation of significant others, trial and error, play, experiment, we learned to speak our first language. It did not follow a standard route but a highly individualised route unique to that particular socio-cultural

context. It did not proceed from the easy to the difficult, but from the common everyday language as needed to the language used on rarer occasions. There was very little planning, few goals were set or tests applied to measure achievement or even progress, no time frames were imposed except informally. And the process had (and still has) no end: we continue to learn language as we use it.

We didn't know we were learning a language; we didn't know there were rules and boundaries - which is why children often make what others see as a mistake by following a rule unconsciously (e.g. in English 'sheeps' or 'falled over') and why in multi-lingual contexts, children often feel no sense of inappropriateness at creating their own language by drawing on the words, idioms and rules of the various languages they hear; it is only later that they learn (again largely informally) that some things in a language are forbidden.

Situated learning: Informal learning then is always situated. Although "all learning is primarily contextual ... significantly contextual, ... the influence of context on informal learning is crucial" (Hager and Halliday 2009 pp8, 142, 159). And not just context but particular experiences in a particular setting: "Learning is not just a psychological process that happens in splendid isolation from the world in which the learner lives, but ... it is intimately related to that world and affected by it" (Jarvis 1987 p 11). "The learning process ... always takes place in 'situated activities'" (Lave 1992; Lave and Wenger 1991). As Dewey said: "knowledge must be constructed in a significant context if we expect people to mobilise it and eventually transfer it to other life contexts" (Dewey 1940 p 6).

Task-oriented learning: Indeed, most informal learning occurs during the processes of completing some real-life task in a particular context (Rogers 2003). Because informal learning is closely related to and often springs from attempting some specific task in a specific setting, much informal learning is haphazard, not systematic; it seeks to master the concrete task in hand rather than a generalised activity. It is limited learning - that is, we only learn enough to complete the task to our satisfaction. If I acquire a new camera, I learn how to handle only that camera, not all cameras. It tends to focus on practical learning rather than general principles, often relying on mechanical application rather than a deeper level of understanding. But equally, informal learning never ends; it remains suspended when the particular learning activity is broken off by the learner, until it is needed again. It is the fact that most of our informal learning is situated in real-life activities that leads to the conclusion that in education, moving from the concrete to the abstract rather than from the general to the particular is most effective.

Unconscious and identities: But because most of it is unconscious learning, it is often not seen as 'learning'. In these contexts, the learner does not construct him/herself as a 'learner'; that is the reason why many learners may still feel ignorant, incompetent and unconfident ("we don't know anything about this"), even when knowing a good deal about the subject in hand. In a survey of participants in adult education in UK, less than 30% of those surveyed "view themselves as 'learners'" (Aldridge and Tuckett 2007). Such personal constructs are in many ways a key issue, for the spring of informal learning is often aspirational, a search for the construction of a new aspect of identity and with it new competencies (Visser 2001). Identities are

multiple and flexible; identities are relational, negotiated time and again in new performances before new audiences (Hall 1997). And in the process, much informal learning is undertaken.

Social learning: For, as the learning of an initial language clearly demonstrates, such informal learning was and remains social learning, distributed throughout the lifeworld; it proceeds through social interaction. Indeed, language can only be learned collaboratively, through increasingly effective participation in some form of communication. From the start, it was assisted by informal scaffolding of prompting, encouragement, rewards, and some correction provided by older speakers of the language, parents, other adults, siblings and other peers, or drawn from the visual environment and from other media including radio, television and the phone. The springs for learning are often the urgent need to communicate, the desire to please and impress, the wish to be a member of a particular group, to identify with others. But part is simply to play, or to emulate for love or admiration. Learning a first language was achieved through the *use* of language in real situations with real people for real purposes.

Informal learning occurs not only in the workplace but in our social and cultural interactions: learning can be seen as “engagement with the social world” (Jackson et al 2011 p.132). Research into informal learning shows it to be essentially social in nature. “The understanding of learning as a social process is .. central” (CERI 2010 p 52). Learning is “best conceived of in social terms”; “learning is social and comes largely from our experience of participating in daily life”.(Lave 1992 p 150; Lave and Wenger 1991). “We need ... to stop conceptualising learning as a preparation for a social life, but more as an essential part of social life. In that way, people learn from one another as they live with one another” (Hager and Halliday 2009 p 100). Some have explored learning through involvement in social movements (e.g. Foley 1999; Mayo 2005; Overwien 2005; Welton 1993); but beyond these activities, most of our learning occurs in the interactions of daily living, through “the local communities, and interpersonal relations of parents, children, peers and then those in community organisations associated with them, churches, second hand stores, dance clubs” (Heath 2012).

Individual learning: And yet, although informal learning is a social activity, it is at the same time individual: “a social and yet intimate activity, ... learning is both a socialization process and the inner-driven construction of one-self” (Belanger 2011 pp 92-93). “What we learn as humans (and how we learn) is bound up with the social dimension of our experience ... But none of this need lead us to dispute that learning is an activity that takes place at the level of the individual” (Swann 2012 p 27; see also Huat and Kerry 2008 pp 5, 15, 35-6, 142). “While it is the individual who learns, learning always happens in a social context and is socially constructed within the normative demands and values of different cultures” (Livingstone 2010 p 73). It is this dual nature of learning, both social and individual, which enables us to reconcile the claims of social learning through communities of practice (Lave and Wenger 1991) and at the same time the ‘learning cycle’ of Kolb (1984), consisting active experience, critical reflection, abstract conceptualisation and active experimentation.

Prior learning and the use of analogy: And it is here that the importance of the individualised pre-existing knowledge and skills of each learner is demonstrated most

clearly. For the process of critical reflection on experience calls upon the learner to **search** for relevant prior knowledge to assess discrepancy between the new and the existing (Rogers and Horrocks 2010 pp 120-1). "The most important single factor influencing learning is the learner's prior knowledge" (CERI pp 52-3). The use of analogy, is then a major tool of informal learning. When faced with a new experience, the learner explores his/her existing experience to try to detect experiences which are perceived to be relevant to help to make meaning of the new experience, something which will help to provide some of the tools to be used to resolve the issues created by any perceived 'disequilibrium' between the new experience and the existing experience. Much learning consists of searching the personal experience of the learner and, when that is felt to be exhausted, the experience of others. This depends on one's perception of relevance; there are occasions when some prior knowledge which may be relevant to the new situation is ignored because it is not perceived by the learner to be relevant.

Control: And this raises a further point about informal learning. Part of the difference between formal and informal learning lies in the question of control. In formal learning, control of the programme lies almost exclusively with the agency, not the learner; the providing agency determines what is learned, when and for how long, by what methods: "control of the learning ... characterises formal learning" (Hager and Halliday 2009 pp35, 2). In informal learning, there is greater learner control. It is not just a matter that in task-conscious learning and self-directed learning, the adult learner controls the what, the when and the duration, or that the learner contributes as well to the contents of the learning activity and may choose the 'teacher', however qualified or unqualified they may be. It is that in learning, the learner draws upon those parts of their existing funds of knowledge which appear to them to be most relevant and rejects those parts of their funds of knowledge which appear to them to have little or no relevance; it is the learner who decides and acts.

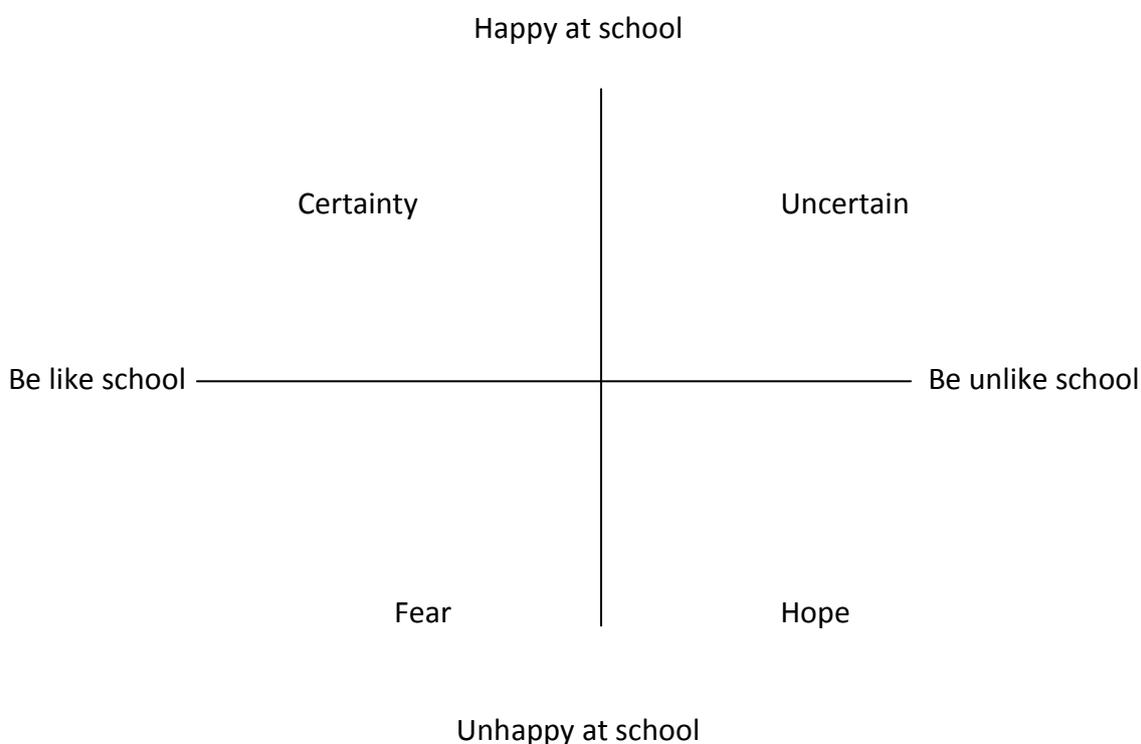
Learning styles: And finally it is from informal learning as much as from formal learning that our individual preferred learning styles have been formed. Through our everyday learning, we all build up our learning styles, both our processes and our preferences (Kolb 1984; Rogers and Horrocks 2010 pp 122-5). These may be strengthened or challenged in the classroom, but the classroom does not create our initial learning styles - these come informally.

IV. The Impact of Informal Learning on Formal Learning Programmes: Implications for the Teacher

All learners then bring to all formal and non-formal learning programmes their own, largely tacit, pre-understanding, their existing funds of knowledge and banks of skills, their frames of reference (perspectives and schemes of meaning), and their social imaginaries and Discourses. Above all, they come already engaged in a continuous process of learning (there is no such person as a non-learner), some of which they are conscious of and much of which they are unconscious. Participants in formal learning, even if unschooled, are not 'new learners'.

Learners come with values etc: This informal learning can be regarded as the most important part of learning, for through it we acquire our beliefs and intuitions, our prejudices. Through informal learning, we develop our attitudes and values, our temperament (e.g. patience or impatience), our perceptions of self and of the subject of the learning programme, our identities and our confidence in any situation. It forms our sense of hierarchies, our ambitions, aspirations and intentions. It develops and transforms our frameworks of meaning and the Discourses we use to express those meanings. It is closely associated with the multiple, flexible and changing identities we all adopt throughout our lives. We may learn some of these things through formal learning, but most learning in these areas is informal, from our experience, from peers and from our communities of practice.

Expectations: And informal learning creates and re-creates our culture(s) - the practices, we engage in, often through habituation. It creates our unspoken (and sometimes unspeakable) assumptions, our expectations based on prior experience and on existing perceptions. Formal learning too, for those who have experienced it, will also help to form much of these, especially our expectations of the new learning situation. Learners who have been to school come expecting the new learning to programme to be like school or unlike schooled; and some will have had pleasing experiences of school and some will have had unpleasant experiences. This these different experiences and expectations mean that learners bring many different hopes and fears to the new learning programme.



Fluidity: It is important that we do not see these attributes as 'fixed'. They are all in a constant process of re-formation. The pre-understanding, funds of knowledge, frames of reference and social imaginaries are not set in concrete. Like the human body, they are constantly changing, growing, being clarified and revised in different social contexts. "The learner, an active agent, is constructing him/herself continuously reorganising his/her knowledge and meanings, deepening his/her interest and curiosity. ... engaged in a self-constructing process throughout his/her life course" (Belanger 2011 p 32) The learner brings a constant search for meaning (cognitive interests) and for harmony, a desire to reconcile any disjuncture that may be identified between the new experience and the existing constructs. There is a constant renegotiation of meaning and identities. Thus what the learner brings is not a set pattern of belief and identity and fixed funds of knowledge and framework of meaning, but a constant striving for self-knowledge and the means to express that self-knowledge: "Learning is about ongoing becoming rather than about attaining a particular state as a preparation for something else" (Hager and Halliday 2009 p238).

Horizons: It is here that the concept of self-horizons is important. As we have seen, Gadamer (1975) speaks of the learner bringing with him/herself a horizon to meet the horizon of the subject matter. The term 'horizon' is important, for a horizon moves with the person, yet at the same time it establishes a particular location and limits the person. Each learner has built up an image of the self, what he/she is capable of and what she/he is not able to do. They are engaged in a self-constricting process as well as a self-constructing process (Rogers 1993). This is closely related to confidence: it is largely our informal, situated learning that builds or destroys our confidence, including our confidence in learning new things.

The relationship of formal and informal learning

What then is the relationship of informal learning to formal learning? "The relationship between everyday learning and ... education is one of the most fundamental questions in educational discourse. Far from being an issue that does not seem very exciting, this is, in fact, explosive" (Larsson 1997 p 250). That there is a distinction is widely recognised: informal learning consists of "ways of ... functioning which explicitly differ from practices to be seen in formal educational environments" (Coben and Llorente 2003). But there is a relationship: "What is learnt formally is affected by what is learnt informally and vice versa" (Hager and Halliday 2009 p87). Understanding and coming to terms with the contrasts and yet the relationships between formal and informal learning (Swann 2012 pp 8, 27; Huat and Kerry 2008 p 142; CERI 2010 pp 45-47) is vitally important for all those promoting formal learning.

Formal learning: is of course wider than institution-based teaching, education. Formal learning includes both formal and non-formal education, indeed, all purposeful learning opportunities provided by educational and non-educational agencies. Formal and non-formal learning may be defined as any situation where one person is "helping someone to learn ... any activity undertaken on the part of one individual with the

aspiration of helping another individual or group of individuals to learn” (Swann 2012 p 95).

Value and limitations of both: It is important that we do not see either form of learning as superior to the other. They are different forms of learning: both have their values and functionalities and their limitations. Informal learning, as we have seen, is limited to the immediate context and task; it frequently remains rooted in the concrete without moving to the abstract or generalisation. Because it is largely unconscious, it is more difficult for the learner to recognise it for what it is and to perceive its relevance to any new learning. But it is very effective practical learning and can be applied to real life immediately - indeed, the learning comes from the application rather than the application coming after the learning. One does first and learns through the doing. In formal learning, on the other hand, one learns first and then does. Formal learning thus addresses some of these issues. It is generalised and can in some circumstances be applied to other contexts. But it tends to be generalised and not always applicable.

The contemporary dominance of formal learning: Both then have limitations and both have values: both have the potential to be emancipatory and both can be oppressive (Habermas 1972; Freire 1972). But, although the informal part of the learning iceberg is larger and more influential than formal learning, in many circles, formal learning is *felt* to be more important because it is visible, while everyday learning is largely ignored. The Western hierarchy of power associated with learning gives greater prominence to formal than to informal learning (Barr 1999). “Much informal learning remains invisible. ... the dominance of [formal schooling] has helped to render informal learning largely invisible”. “The hegemonic force of the formal education system, ... the empire of education” has led to the demeaning of informal learning. “But this learning is no less valuable or important for being somewhat tacit. Current policies, with their almost exclusive focus on what can be formalised and codified” have resulted in “much valuable and worthwhile learning [being] currently almost invisible to policy” (Hager and Halliday 2009 pp 23, 24, 233, 234, 247-8).

Using informal to assist formal learning: Thus, until very recently, informal learning has been neglected by educational planners and policy-makers. But today, with growing concern about the problems which formal learning is facing (e.g. Dore 1976; Corbett 2007; Jeffrey et al 2008), there is growing interest in using informal learning to assist with formal learning: “the international community is increasingly recognising that traditional and pragmatic ways of learning can be as efficient as Western didactic approaches” (UNESCO 2009b p 17). Thus governments and other agencies (e.g. BIS 2008; DIUS 2009) are looking to see if they can use some forms of informal learning as a more effective alternative to, or supplement to, formal learning.

Using formal to redress informal learning: At the same time, some governments are seeking ways to use formal learning to address issues raised by informal learning. For example, it is thought or hoped that the apathy and even antipathy to national political processes which has been learned informally can be redressed by programmes on citizenship; that unhealthy eating practices learned through peer and commercial pressures can be remedied by formal nutrition and health courses; that drug use learned from peers can be unlearned through teaching programmes; that smoking can

be abolished or reduced substantially by standardised learning programmes; that violence and gang behaviours learned on the streets can be addressed by 'personal and social education' (PSE) in the classrooms; that inadequate parenting can be changed by parenting and home science lessons. Most recently in the UK parliament, it was argued that what has been called 'the pornification of childhood' in the media and commercial activities could be countered through formal sex education in schools. But what governments and agencies rarely do is examine more closely **how** these un- or anti-social understandings, practices and values have been learned informally; nor do they seek to use informal learning to promote the development of new more desirable attitudes and activities.

Making the unconscious conscious: Several writers, like Habermas (Bleicher 1980 p 184), have drawn attention to those occasions "where we consciously intervene in this natural-innate process [of informal learning] and attempt to alter accepted interpretative schemes with the aim of learning [i.e. helping the learner] to see what we pre-understood through tradition in a different way and to evaluate it anew". The aim, said Vygotsky, of such interventions is to help the learner to render the unconscious (i.e. the pre-understanding; funds of knowledge; frames of reference; social imaginaries acquired through informal learning) conscious (see Bakker et al 2006; Bjornavold 2000).

"Education ought to make extraordinary sense of this ordinary activity and experience. It should help people to examine critically what is already known by adding new insight and different knowledge so as to help them use their creativity more effectively. That is to say, it should start from where people are but not leave them there" (Thompson 2002).

But such an approach has until recently been resisted by many formal learning programmes: for the acknowledgement of the existence and significance of informal learning "challenges various cherished beliefs, for instance the belief that learning outcomes can be fully specified in advance" (Hager and Halliday 2009 p160). Drawing on the individualised prior learning of each learner will question the standardised approaches of teaching and assessment in formal learning.

Meta-learning: What is needed then is some understanding of meta-learning, a recognition and exploration of what learning (both informal and formal) is all about (Huat and Kerry 2008 p 144). But this can only come about when those who plan formal learning programmes and those who teach on them realise and acknowledge that they too come to their task with their own pre-understanding which determines what they too see and what they do not see, with their own funds of knowledge and banks of skills which form their own horizon, with their own frames of reference which are both inclusive and exclusive, and with their own social imaginaries and Discourses which legitimise certain activities and delegitimise others. Teachers and educationalists too (like the writer of this paper) are limited by their existing "accepted interpretative schemes". Without that recognition, it will not be possible to develop a meta-learning.

Continual dialogic learning: For learning is (or perhaps should be) a dialogic encounter between the conscious culture of formal learning and the largely unconscious culture of informal learning – an unequal contest in which the formal

culture has determined the arena and the exercises, the timing of meeting and the standards to be achieved. The learners are encouraged to please their instructors while being unable to draw upon the skills and knowledge they do not know they possess. Teachers, educational planners and learners alike need to become more aware of informal learning and what it achieves. And this will mean that formal learning will need to be rethought in the light of informal learning.

Some questions for educators arising from this study

Faced, then, with the fact that every learner comes with a wide range of existing knowledge and skills, ever-changing because the learner is at the same time engaged in a continuing process of informal learning, and conscious of the fact that much informal learning will accompany all the formal learning, the educational planner and the teacher in formal and non-formal learning programmes might ask:

- since informal learning is the basis of all formal learning, how can we find out what kinds of learning our student-learners are already engaged in, and what pre-understanding, funds of knowledge, frames of reference, social imaginaries they bring with them into the learning context?
- in what ways can formal and non-formal learning validate and promote this informal learning?
- how do we convince both formal learning providers and potential learners that their approach to learning should perhaps be more informal than much is today?
- what part has formal learning (formal and non-formal education) to play in counteracting some of the results of the very powerful and ubiquitous informal learning?

We need more research into informal everyday learning, the hidden part of the iceberg.

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