

Study Guides
in Adult Education

Alan Rogers

The Base of the Iceberg

Informal Learning and Its Impact on
Formal and Non-formal Learning

Barbara Budrich Publishers



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edited by

Regina Egetenmeyer

Alan Rogers

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If all learning were to be represented by an iceberg, then the section above the surface of the water would be sufficient to cover formal learning, but the submerged two thirds of the structure would be needed to convey the much greater importance of informal learning.

Coffield 2000 p 1

Preface

It is characteristic of the discussion on informal learning that one can find many estimations of the amount of informally learned abilities and knowledge compared to those learned in formal learning settings. Depending on the author, one can find estimations of between 70% and 90%. Although it would hardly be possible to verify these estimations empirically, no one ever questions them. This could be interpreted as a sign of broad agreement in the education discipline that informal learning forms a big part of people's learning activities.

On the other hand, in recent decades two extremes have emerged in the discussion of (informal) learning. At one extreme, one finds a romanticisation of informal learning. This tendency mainly shows the positive aspects of informal learning: that people always learn informally, they learn whether they like it or not and, furthermore, informal learning constitutes the main part of adult learning. At the other extreme, one finds a very critical perspective on the overvaluation of (informal) learning, especially in the critical discussion about international education policy. This argument focuses on how the shift from education to learning leaves learners alone with all their learning tasks. Informal learning is used as an argument for devolving the responsibility for learning to the learning individual. However, they need education and guidance in order to do this.

Alan Rogers' study guide avoids the danger of following either of these extremes. Moreover, the study guide develops a new status for informal learning. Instead of retaining informal learning as a residual category, Alan Rogers provides diverse options for structuring informal learning and its sub-forms. These ways of structuring follow the classic iceberg model, which conforms with Allen Tough's idea of learning projects as one of the first roots of the debate on informal learning. Alan Rogers' study guide is one of the few studies focused on the characteristics of informal learning. The status

of informal learning is moreover developed in relation to formal and non-formal learning.

'The base of the iceberg' was developed in academic teaching practice with diverse students taught by the author. This background could create a very student-centric text, discussing informal learning from a learning and teaching perspective. Several tasks and exercises are provided that encourage students to study further texts on informal learning and to reflect on their own learning experiences. This allows learning not only in a cognitive way but also as a personal reflection and in an experience-oriented way. By this, the study guide supports what it draws out academically: it makes links between the diverse forms of learning.

With this study guide we are entering a new publication phase. Barbara Budrich Publishers provide a new concept in publishing that makes it much easier for authors to publish in this series. This is also the reason for the hard-cover format of Alan Rogers' study guide. Furthermore, with Alan Rogers the series gained for the first time an author from outside the circle of the European Master in Adult Education. I warmly welcome the publication of study guides over this circle and the establishment of study guides that can be broadly used in diverse Master's studies with a focus on adult education and lifelong learning.

Regina Egetenmeyer

I. Introduction: “Unsettling tradition”

1.1 From ‘education’ to ‘learning’: a change of Discourse¹

There has been and continues to be growing interest in ‘learning’. Explorations of the different kinds of ‘learning’ which have been identified are now more frequent (for a recent summary, see Belanger 2011). The most important driver for this strengthened focus is a desire to move away from talking about education seen as teacher-centred instruction to a more learner-centred approach, not so much from a search for more effective ways of teaching but from increasing calls for the measurement of educational outcomes such as PISA and PIAAC (Meyer and Benavot 2013). But equally newly identified ways of learning, especially in the uses of digital technology, have highlighted the processes of learning independently of educational programmes (see e.g. Jacobson 2012; Erstad and Sefton-Green 2013).

As several writers have shown in recent years, there has been “a remarkable rise of the concept of ‘learning’ ... [A] new language of learning” has been developed, especially in the context of discussions of lifelong learning. The introduction of new concepts based on learning rather than education has led to “the redefinition of teaching as the facilitation of learning and of education as the provision of learning opportunities or learning experiences”, “the transformation of adult education into ‘adult learning’, and ... the replacement of ‘permanent education’ by ‘lifelong learning’” (Biesta 2009 p 37; Federighi 1999 p 1).

1 Some socio-linguists write a capital letter to the word ‘Discourse’ when it refers to the shared uses of language within a specific group (a ‘Discourse community’) alongside customary practices and values, ways of thinking and perspectives, rather than to its general meaning of ‘language-in-use’, ‘talk’, ‘conversation’ (see Gee 1990). I am using the word in this sense in this text. See pages 52-53 for a fuller discussion

1.2 The dangers of confusion

This change has not of course gone unchallenged, for there are dangers in what has been called the “learnification of education” (Biesta 2004; Biesta 2006; Haugsbakk and Nordkvelle 2007; Rogers 1997). For one thing, it leads at times to some essentialism of ‘learning’, that is, seeing learning as if it is only one thing – a view which is now increasingly being challenged. Secondly, it “has made it more difficult to ask questions about content, purpose and direction of education” (Biesta 2009 p 39). To talk about ‘helping someone to learn’ says nothing about the value of what is being learned; it seems to regard all forms of learning of equal value (see Biesta 2009 for a powerful argument on this subject).

But perhaps more pervasively, there is a tendency to see ‘learning’ as ‘participation in learning activities’, although we know one may participate in a learning programme but learn little of what is being taught. And this can lead to “the persisting confusion of education with learning” (Jarvis 1990 p 203). “Lifelong education and lifelong learning are [often] used interchangeably”; “... there is a tendency to treat education and learning as synonymous concepts” (Duke 2001 p 502). But it is not very helpful to see them as the same thing: “... a long tradition of scholarship in the sociocultural tradition distinguishes learning from the processes of schooling” (Sefton-Green and Erstad 2013 p 1). 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 processed, i.e. *planned*, learning. Learning is much wider than education.

This con-fusion of learning with education is particularly harmful when it takes the form of “the use of the word ‘learner’ instead of ‘student’ or ‘pupil’” (Biesta 2009 p 37). In much of the Discourse of lifelong learning (see e.g. Longworth and Davies 1996), the term ‘learners’ is used to mean ‘participants in learning programmes’, whether inside educational establishments or outside (e.g. work-place learning programmes). Non-participants in such learning programmes are frequently referred to as ‘non-learners’. But, as we shall see, this ignores or demeans all that everyday learning which non-participants of learning programmes do, much of it unconsciously. It assumes that formal and non-formal learning are the ‘centralities’, and that other forms of learning such as informal learning, if they exist at all, are way out on the periphery. But there is an alternative understanding; that there is no such person as a ‘non-learner’, that everyone learns informally during the course of their everyday lives. And this view suggests that this everyday

learning, far from being minor or unimportant, is central to all discussions of education.

This change from 'education' to 'learning' in our current Discourses may help to make clearer the fact that there is no consensus to be found as yet as to the meaning of the word 'learning'. Many different definitions are in use at the same time, and when engaging with texts where the word 'learning' is being used, it is important to try to identify the meaning attached to the word in those contexts, and whose meaning it is being expounded. In other words, in each situation, we need to ask, "what does 'learning' mean in this context? what practices are included and what are excluded? by whom? on what authority? and why?" This study seeks to explore some of the disagreements in this field and to propose its own construction as part of the "debates that unsettle tradition" (Sefton-Green and Erstad 2013 p 7).

In the context of the current debates between cognitive psychologists and socio-cultural educationalists (see e.g. Anderson et al 1996, 1997; Greeno 1997; Mason 2007), this study is located within the socio-cultural school, with its presuppositions about learning practices, situated learning (Lave and Wenger 1991; Kirschner and Whitson 1997), social learning (Wals 2007; Reed et al 2010) and learning differences, rather than in the schools of the so-called cognitive revolution (or more properly 'revolutions', see Klahr 1976; Rogoff and Lave 1984; Stich 1983; Baars 1986), influenced as these are by brain studies and neuro-science, with their concentration on problem-solving, memory, consciousness and connectivism. But what has struck me strongly is the way in which consensus (at least in terminology) seems to be emerging in several areas, not least in the appreciation of the significance of the constructivist work of the learner in the processes of learning, and the importance of context for learning outcomes (see e.g. Gelman 1994 and sources cited there; Straka 2004; Schugurensky 2007; Egetenmeyer 2011, 2012). I have tried to indicate some of these emerging agreements, but I am sure more are apparent than I have suggested here.

I am grateful to many people for their help in preparing these pages, not least an anonymous reviewer who reminded me of the importance of the cognitivist school and urged that we try to engage rather than talk past each other.

II The Iceberg: Exploring the Relationship between Formal, Non-Formal and Informal Learning

2.1 Three kinds of learning

The focus on learning rather than on education which we have seen in the Introduction has led to an appreciation that rather than there being just one kind of ‘learning’, “lifelong learning should encompass the whole spectrum of formal, non-formal and informal learning” (EU Commission 2001 p 3). These three have been defined as follows (EC 2001 pp 32-33, as summarised by UNESCO 2009a):

Formal learning: Formal learning occurs as a result of experiences in an education or training institution, with structured learning objectives, learning time and support which leads to certification. Formal learning is intentional from the learner’s perspective.

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 (UNESCO 2009a p 27).

Although there are other distinctions in learning, this set of definitions is perhaps the most widely quoted and is useful, although it needs some elaboration.

2.1.1 Expanding the definitions

a) First, *formal learning* may be seen as intentional not only on the part of the learner but also on the part of the provider of the learning programme, whereas non-formal learning, again intentional on the part of the learner, may draw on learning sources which are not intentional in respect of learning provision. We shall look at intentionality in learning below.

b) Secondly, *non-formal learning* is defined in many different ways by different writers, with a good deal of confusion of concepts and language; indeed, some see all *informal learning* as *non-formal*, while others speak of non-formal learning as informal (see Rogers 2004 for a full survey). Eraut (2000), for example, includes what others call ‘informal’ or ‘implicit learning’ in his definition of non-formal learning. But the EC distinction between non-formal learning and informal learning seems to me to be more helpful.

However, we can, I think, discern two main and contrasting approaches to non-formal learning – on the one hand, *formal learning in non-formal contexts* (e.g. driving instruction or private music lessons outside of school, training programmes in the work-place, or structured learning taking place in voluntary bodies such as youth clubs and scouts) and on the other hand *non-formal learning in formal settings* (e.g. extra-curricular voluntary learning activities in schooling contexts such as choirs and drama groups). Some of these non-formal programmes are accredited, for example, those provided by private tutors or commercial agencies such as language and computer training agencies which often lead to some forms of certification; others are not accredited. Non-formal learning programmes can also include apprenticeships and other forms of work-related training (Garrick 1998; Hager 2004). The term ‘non-formal’ has been used by some educational agencies to mean ‘alternative schooling systems’, also certificated (see Rogers 2004).

This means that the context of learning is vital for the kinds of learning which are taking place (Egetenmeyer 2011, 2012). Some writers see the *programmes* as being non-formal in format and processes, while others speak of the *contexts* as being non-formal. We shall explore this in more detail below.

c) Thirdly, just as non-formal learning is wider than formal learning, so *informal learning* is wider than non-formal learning. Perhaps the key distinction is between on the one hand formal and non-formal learning, both seen as planned learning, and informal learning which is unplanned learning. For example, informal learning will include 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). We shall look at this in greater detail in the following chapters. But here we can note that even in our formal education, we are learning informally, especially community values and belief systems, the so-called ‘hidden curriculum’. In formal learning, “some things are learnt which are not directly intended by those employed by the institution” (Hager and Halliday 2009 p 3).

“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).

Even in non-formal learning in the home, much informal learning is going on: “She is learning how to cook, but simultaneously she is also learning gender – she is learning how to be a woman” (Erstad and Sefton-Green p 24). So too for adults: although formal learning often claims academic neutrality, in learning a language or any other subject, for example, we are not just learning decontextualised knowledge and technical skills; through informal learning, we are acquiring a set of values, we are being socialised into a particular culture. This is why informal learning is so important, both for life and also for formal learning. It determines the values, assumptions and expectations we bring to all forms of non-formal and formal learning; it determines our aspirations, our motivations.

Multiple informal learnings: Indeed, it would seem to be a mistake to see ‘informal learning’ as a single process. There are different kinds of informal learning.

- a) First, there is *self-directed learning*², auto-didacticism, intentional activities designed for self-learning (Brookfield 1985; Boekaerts 1999; Solomon 2003). Here we adopt the identity of a ‘learner’; we plan and control the learning activities, we set out purposefully and we measure our success in terms of how much we have learned – it is (largely) conscious learning. “Virtually all adults are regularly involved in deliberate, self-directed learning projects beyond school and training programs ... well over two thirds of most adults’ intentional learning efforts occurred completely outside institutionalized adult education programs or courses” (Livingstone 2001 p 6; see Tough 1979). In these ‘learning projects’, we

2 Some would argue that self-directed learning is non-formal rather than informal; I would locate it across the join between non-formal and informal.

may use formal or non-formal learning programmes (or a mixture of both) as we choose, and we will normally include some informal learning also.

- b) 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, especially at work – for example, mastering a computer process. We do not construct our identity in this situation as a ‘learner’ but as a ‘worker’; we do not construct what we are doing as ‘learning’ but as attempting to complete a task; we do not measure our success in terms of how much we have learned but in terms of how well we have mastered the task. But we have learned a lot in the process.
- c) And thirdly, there is *unintentional learning*, unplanned, and almost always unconscious (Hager and Halliday 2009 p 172), the everyday experiences through which we learn a great deal without ever being conscious of ‘learning’. This is the main focus of this book.

2.1.2 *Intention and agency in learning*

As we have seen in the UNESCO definitions of formal, non-formal and informal learning, one way of analysing all learning is through the *intentions* of both learners and learning providers. The issue of conscious agency to learn is one which is being actively explored among educationalists of all schools (see e.g. Bereiter 2000; Billett and Somerville 2004). But the situation varies widely from instance to instance. Sometimes the learners intend to learn, sometimes they do not. Sometimes the learning providers intend the learners to learn, sometimes they do not but promote learning unintentionally. Thus a distinction can be drawn between those occasions where “people learn ... without ... intending to learn”, and the “intentional modes of education” (Hager and Halliday 2009 p 2; see also discussion in Illeris 2008); between on the one hand that learning we intend to do, what is sometimes called agentic learning because the learner is an active agent of his/her own learning, identifying her/himself as ‘learner’, and on the other hand that learning which we do not intend to do, which happens to us by a ‘network of actors’ (Latour 2005) all working on us in context, in which we do not identify ourselves as ‘learners’.

Some unintentional learning is in fact intended – but not by the learner. The many advertisements we are subjected to every day, the campaigns

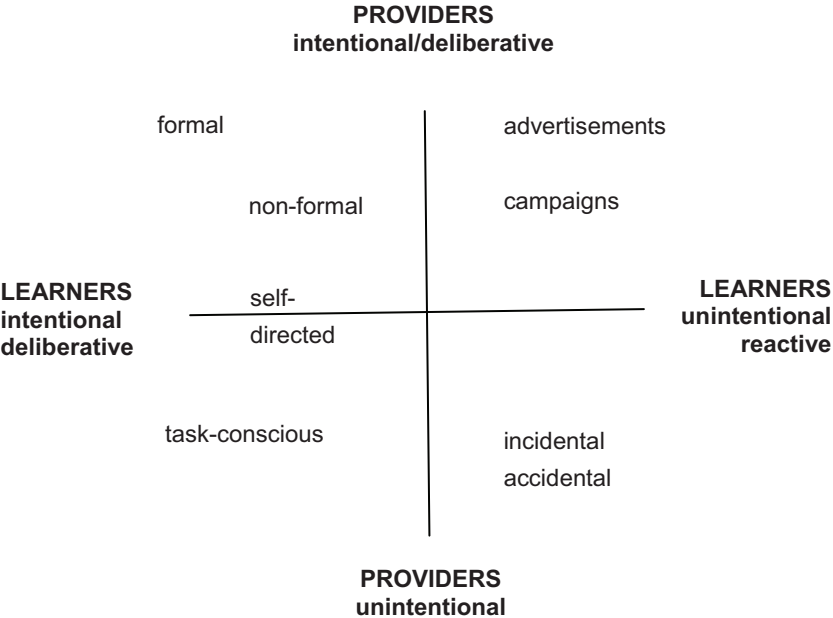
against smoking, unhealthy eating, HIV/AIDS etc are examples of learning that is not intended by the learner but is intended by the learning-provider. I call these 'sponsors' of learning – they are very powerful and often single-minded. So that *incidental* learning may be distinguished from *accidental* learning, all that unintended learning through the media, unexpected interactions with others or experiences, cancelled journeys, sudden challenges, new friendships, accidents, becoming lost and so on, in which neither learner nor learning sponsor intends learning to take place.

It may be useful 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 were suggested to be the remains of one of England's medieval kings were dug up by archaeologists in a city centre car park. This created a stir of public interest, and a great deal of learning about fifteenth century English history, about archaeological processes, about the legal processes surrounding the burial of disinterred bodies and so on went on – unintentional on the part of both the learners and to a large extent the media. No-one planned it as learning – topics were learned as discussion progressed and in no planned sequence. It was just a good story which led to what I would call *accidental* learning. 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 in this case it was deliberative on the part of those who promoted the legislation; this was part of a campaign by one group to change the perceptions of others, to help a wider public to learn new attitudes through new knowledge.

This distinction (though with some variation of the terms used) has been recognised by a number of learning theorists: "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)"; it was "opportunistic rather than planned" (Livingstone 2010 p 87; Hager and Halliday 2009 pp 7, 237). These case studies exemplify the distinction that has been drawn between what have been called 'reactive' and 'deliberative' learning (e.g. Eraut 2000 p 115; Livingstone 2010 p 165), between learning as a reaction to some external stimulus, and learning intended and sought after from the start. The one can lead into the other.

This discussion of intention in learning programmes may be set out in a matrix:

Figure 1: Matrix of intentionality



As we have suggested above, these different intentionalities may be independent of the different contexts within which the learning takes place (for a discussion of contexts and learning, see pages 39-40 below).

2.1.3 The learning continuum

Some writers have seen a danger in viewing these different kinds of learning – formal, non-formal and various kinds of informal learning – as separate categories:

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. (Colley et al 2003 p 1)

So that it may be best to see them in terms of a continuum. Different but parallel continua can be constructed to represent the several dimensions of education, such as control, structure of learning, access, intention, accreditation and quality assurance (see, for example, Werquin 2007 p 25) – each of these has its own continuum from informal to formal.

Figure 2: Continua of learning

informal (accidental/incidental)	self-directed	non-formal	formal
unplanned/unintentional	intentional/self-planned	purposeful/planned by others	
unconscious learning	task-conscious learning	learning-conscious learning	
<hr/>			
not measured	measured by task	measured by learning	

Each learning event can be viewed then as being made up of formal and informal elements of learning. Informal learning and formal learning practices may be seen as lying on a continuum ranging from accidental/incidental learning³, 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, some scaffolding, some 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).

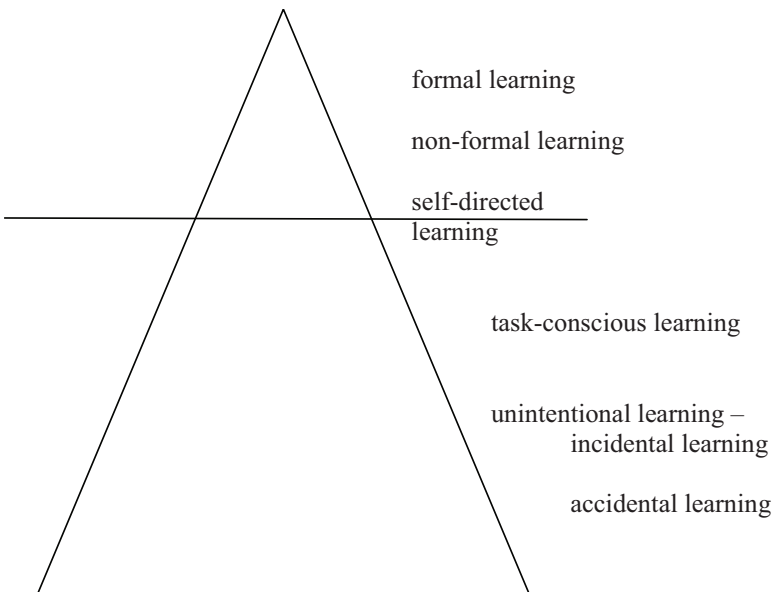
3 One or two writers such as Gnahn 2011 have suggested that early socialisation lies as a separate set of practices at the extreme end of this continuum; but since all informal unconscious learning is a process of socialisation into the culture of the immediate communities of the learner, a process which never ends, and since the early socialisation process is incidental learning, it does not seem necessary to separate early socialisation from informal learning.

2.1.4 Relationship of formal, non-formal and informal learning

What then are the relationships between informal, non-formal and formal learning?

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 p 23). But it is largely invisible. 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 (e.g. Tough 1979; Aarts et al 1999; Livingstone 2001 p 6; Coffield 2000; 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”, so we can speak of “the invisible reality of informal learning” (Belanger 2011 p 79; Le Doeuff 2003).

Figure 3: The iceberg of learning



Learning episodes: 'dumplings in the soup': I have sometimes in teaching used an alternative image of learning. We all engage in a very large number of learning events during the course of our everyday life. It may be helpful here to draw a distinction between learning events and learning practices (based on Street's literacy events and practices, Street 2000). Learning *events* are the day-to-day learning incidents that occur naturally; learning *practices* embody the underlying assumptions and beliefs we hold, often unconsciously, about learning, the accompanying issues of power and cultural values involved. For example, reading to a child at bedtime (Barton 1994), a learning event, is based on an assumption that the child will gain from becoming acquainted with books, from widened horizons, from a stimulated imagination and so on, as well as from quality time with the reader (the practices which underpin the event), and it reflects the culturally-based power relations in that particular context between adult and child.

We can then see the whole of life as a river of rich thick soup made up of many everyday learning events, small events of learning which occur all the time throughout the whole of life; and these can be analysed into more generalised 'learning practices', ways of behaviour which both reflect and contribute to the attributes of the learner. Floating in this everyday learning life are a relatively small number of larger 'lumps', dumplings in the soup, so to speak. Some of these are square and regular – they are formal learning activities shaped by the learning sponsors which provided them with a set beginning and end. Others are more irregular, shaped in large part by the learners. These intentional 'learning episodes' (Rogers and Horrocks 2010 pp 133-39) are situated in a river of largely unconscious and unintended learning events and practices.

Most writers about learning have tended to focus on the formal, the non-formal and (more recently) the self-directed learning episodes – the learning above the level of visibility, the dumplings in the soup – because (as we shall see below) it is very difficult to research adequately the informal, unconscious learning. But this informal learning is important, because the self-directed, non-formal and formal learning episodes draw upon and at the same time contribute to the more ubiquitous and universal learning events and practices that occur every day of life.

Workplace learning: Workplace learning, which has been much explored in the context of both non-formal and informal learning (see for example Garrick 1998; Eraut 2000; Aspin et al 2001 p 92; Sallis and Jones 2002; Evans and Kersh 2004; Rose 2004; Billet 2001, 2002; Billet and Somerville 2004; Beckett and Hager 2002; Bakker et al 2006; Fenwick 2010; Livingstone 2010) provides a good instance of the relationship between the three

kinds of learning (Egetenmeyer 2012). Many employers provide or arrange for learning programmes to be available to their workers. Some are formal – that is, employees are enabled to go to standardised on-campus courses and workshops, some to take part-time degrees. Other programmes take place outside of educational establishments, often in the work place or in private training agency contexts; they may use the same learning programmes and teachers as the formal or they may be developed specifically for the work-based learning group. Inside the works context, individual or group induction programmes for new staff or for existing staff into new processes and equipment are frequent as ‘continuing professional development’ (CPD); mentoring of less experienced staff by more experienced staff, and staff appraisal programmes all provide learning opportunities for the workers. All of these may be called ‘non-formal’ rather than informal, for they are planned, purposeful and assessed (even if not formally certificated) in terms of learning. In addition, individual workers often seek out peer helpers to solve problems and to receive new knowledge and skills – self-initiated learning which starts and ends at the will of the worker-learner. Some of these occasions may be defined as ‘self-directed learning’ but others will not be defined as ‘learning’, merely seeking help with what is seen as a problem.

But surrounding all these learning occasions, there is the continual learning which comes from simply doing the work, for example, working out by trial and error answers to questions, through which new knowledge is arrived at and skills are developed or enhanced. The words ‘new’ and ‘change’ are usually associated with ‘learning’, but even in repetitive activities there is learning, mainly of the reinforcement variety; for much repetitive work can help to embed attitudes of normality which can in turn lead to learned resistance to change – “this is the normal way things are and should be done and I don’t wish to change”. This is informal learning – unconscious at least in terms of ‘learning’. The development of what have been called tacit ‘funds of knowledge’ and banks of skills (see page 48 below) which are then used daily in the activities at work and outside work is a key feature of this unconscious informal learning. These everyday learning activities are more frequent and more influential on working and other practices than the non-formal and formal learning.

2.1.5 A tool of analysis

If this is a reasonable image of what is happening in learning, we can then develop an analytical tool for learning in different sectors. We can take any

subject and ask how much and what has been learned in each sphere, formal, non-formal and the various kinds of informal learning. Some examples are given below:

Table 1: Tool of analysis

LEARNING: AN ANALYTICAL TOOL

CONTEXTS	subjects as examples		
	COOKING	SEX	MUSIC
Formal learning in formal settings (intentional learner, intentional teacher)	Some lessons at school	Some lessons in school on reproduction	Lessons in school certificated or uncertificated
Non-formal learning (intentional learner, (un-) intentional teacher) formal learning in non-formal settings non-formal learning in formal settings	Informal classes on cooking; voluntary bodies; family	Church pre-marriage classes; health campaigns; hospital pre- and post-natal clinics; marriage guidance; family planning agencies	a) private music lessons certificated or uncertificated b) school concerts, choirs, extra-curricular voluntary learning, uncertificated
Self-directed learning (intentional learner; teacher may be intentional or unintentional)	Learner searches in recipe books; experiments; asks others for help and advice; shares ideas etc with friends and family; trial and error entertaining	Read book(s) about sex; experiments; discuss with others	Learning instrument by practising individually
Informal learning i). incidental learning:/learning while engaged in other tasks (unintentional learner, maybe intentional teacher) ii). accidental, experiential learning: (unintentional learner, unintentional teacher)	Information on packets of food etc; advertisements; TV programmes Experience of meals, good and bad (e.g. school meals; own mistakes etc); pick up tips from others	Sex advertisements, pornography; Films, TV, other media, literature; gossip in playground or at work; adult magazines; etc etc etc	concerts etc; record playing; i-pads etc; church-going; absorption of background from films, radio, background music in offices etc (this is where likes and dislikes are formed)

You can use this form to analyse any learning domain, either from your past experience or for planning a learning programme, taking into consideration the influence of existing informal learning

Note: These are examples only – there are many more

2.2 What is learning?

There are then several meanings of the word ‘learning’, even if there is felt to be a common set of processes underlying these meanings. This can be seen when looking more closely at the UNESCO definitions of formal, non-formal and informal learning. For these terms do not indicate what UNESCO means here by ‘learning’; rather, they indicate the *contexts* in which learning comes about. What then is ‘learning’ in its essence? what is the common element?

2.2.1 *Learning as process*

I take as my picture of learning the following: “Learning is a complex set of ongoing practices through which people change their understanding of themselves and the world in ways that facilitate a change of action” (Drotner 2013 p 39). Learning, as I see it, is a set of processes which bring about changed practices in the lives of individuals. Some of these processes and some of these changed practices are unconscious; others are conscious and deliberative.

These processes have been defined by educationalists differently at different times. The most common description is in terms of four main schools. Very briefly, some see them as *behaviourist* – responses to external stimuli; learning only takes place if there is an external stimulus (formerly associated with the writings of Skinner). Some see them as *cognitivist* – that is, the learner processes the new learning material (formerly associated with writers such as Piaget but, since the recent ‘cognitivist revolution’, with writers such as Bransford et al (2000) and Bereiter (2002)). Some see them as *constructivist* – that is, the learner is an active creator of knowledge and changed perspectives, seeking to make meaning of experience, rather than receiving these from outside (usually associated with humanists like Carl Rogers and Mezirow). Some see these processes as taking place in interaction with *socio-cultural* contexts, such as the ‘communities of practice’ view of Lave and Wenger (Wenger 1998). Intense debate is engaged between these schools of thought, but more recently attempts have been made to bridge the gaps (e.g. Mason 2007. For useful surveys of these schools of thought, see Corte 2010, and Belanger 2011 which however does not deal with the ‘cognitivist revolution’ in any detail). Perhaps elements of all of these approaches may be found in any learning event.

2.2.2 *Learning what?*

It can be argued that there is no such thing as ‘learning’ standing on its own, decontextualised. It is not like ‘to sleep’; one cannot just ‘learn’, one can only ‘learn *something*’, although the object may often be implied rather than spoken. ‘To learn’ thus may be seen as a transitive verb rather than intransitive; it takes an object, even if it is often omitted in common speech. To speak of someone having ‘learning difficulties’ without qualification may be misleading; he or she may have difficulties learning certain things but they are quite capable of learning other things. And **what** is being learned has significant effects on **how** learning takes place. This is a very large field of study, but here we might suggest that different kinds of learning (attitudes, skills, knowledge, understanding, insights, emotions etc) may all involve different learning practices (learning by doing, learning by memorisation, learning by reflection or by intuition etc).

Habermas is one writer who has pointed out that ‘what’ one learns has important implications for both the ways one learns and the ways one evaluates the learning undertaken. He suggested that when learning about the world we live in, we acquire and develop what he called ‘practical’ or ‘technical’ knowledge, *instrumental* learning about the socio-cultural and physical environment in which we live, and how to facilitate the management of that environment. When we learn in relation to other people (the difference between ‘I know someone’ and ‘I know about someone’), we develop what he called ‘*communicative* knowledge’. And (although there is now some hesitations about what is exactly implied by this) when we learn about ourselves, we are engaging with what he called ‘*emancipatory* knowledge’⁴ (Habermas 1978). Each calls for different processes of learning and different ways of evaluating learning.

2.2.3 *Learning as change – domains of change*

Learning, I have suggested, is a set of on-going processes which bring about change. If we look at what changes learning brings about, we can see several distinct domains of learning.

Most people see learning as changes in **knowledge** – indeed, learning is often spoken of as knowledge. Certainly, changes in our funds of knowledge lie at the heart of learning. There are big discussions about knowledge and

4 Some suggest that all three kinds of learning can be emancipatory.

how information can be converted into knowledge – too large to go into here. But changes in knowing are a key change in learning.

But if – as I have suggested – the aim of learning is to change behaviour, then knowledge is not enough. We all know from the example of smoking that knowledge does not always bring about changes in practices; smokers know they are engaging in a life-threatening practice but relatively few of them heed that message and break free from their addiction. Further changes through learning are needed. For it is possible to ‘know’ something without understanding it. So changes in **understanding**, in our frames of reference are also needed. So too changes in our banks of **skills** will be necessary for any behavioural change – and skills are learned. But knowing about something, understanding its implications, and being able to make the required changes may still not be enough without changes in our values and **attitudes**. Learned changes in all four domains – knowledge, understanding, skills and attitudes – are necessary before substantial changes in behaviour are brought about by the learner.

It may be helpful to give an example. I found myself on one occasion working with some agricultural extension workers helping farmers in India to learn that there are ways to improve the productivity of their rice fields. The extension workers were trying to teach the farmers that planting out the young rice plants in straight lines across the paddy field would increase their yields. The extension workers provided the *knowledge* of this technique; they taught the very simple *skills*, basic techniques and the rudimentary tools required – and the farmers showed at the farmers’ training centre that they could do it. But on visiting their farms, it was found that many of the farmers were not doing this, although they knew the advantages. The extension workers agreed that the farmers did not *understand* why this technique should raise the crop yields, but they felt that the farmers did not need to understand – they could just follow their instruction mechanically. Indeed, they said that they felt that the farmers themselves just wanted a ‘quick fix’, not complicated explanations. But it quickly became apparent from conversations with the farmers that they had not learned to change their *attitudes* towards what was seen as a ‘modern’ way of planting – the old way of scattering the young plants haphazardly was traditional and valued. Knowledge and skills alone were not enough; without learning changes in understanding and especially in attitudes, these changes would not be brought into play in that area.

Learning then, whether it is formal, non-formal or informal, brings about changes in all four domains, **knowledge**, **understanding**, **skills** and **attitudes**, if it is to be effective in changing **behaviour**. Our training courses developed the acronym of KUSAB to summarise these domains.

2.2.4 *Learning in contexts*

As the UNESCO definitions show, a common set of processes lies behind these different kinds of learning but these take place in different cultural contexts of life – contexts which help to determine the approaches adopted towards promoting learning. Such contexts may be seen as either formal (educational institutions), non-formal (non-educational institutions such as workplaces) or informal (the messy processes of living in social contexts). However, these contexts, although they greatly influence the approaches adopted to learning (Egetenmeyer 2011, 2012), are not absolute; as we have seen, both non-formal (voluntary extra-curricular activities) and informal (the hidden unconscious curriculum) learning take place within the contexts of formal learning, and elements of formal learning often occur within non-formal and informal settings.

2.3 Summary

This chapter has outlined – very briefly – the field of learning. It agrees with those who see some distinction between formal, non-formal and informal learning, though we have suggested some qualifications to this distinction. In particular, it sees informal learning as being made up of self-directed learning (though this may have formal and non-formal elements), incidental learning (learning within other activities which is often not seen as ‘learning’) and accidental unplanned learning. It has looked at intention and agency in learning, suggesting a matrix of intention between learning programme provider and learner. It argues that these kinds of learning lie on a continuum, that elements of each lie in almost all learning activities.

In looking at the relationship between these three kinds of learning, we have suggested that informal learning is much bigger than formal and non-formal learning but because it lies below the level of visibility (as in an iceberg), it has been largely ignored; an analytical tool as proposed here can help us to become more aware of its existence.

We have seen learning as a set of on-going processes which educationalists have examined in detail as behaviourist, cognitivist, constructivist and socio-cultural. We have suggested that what is learned is important for how learning proceeds and how it is evaluated. We have seen the importance of learning in all domains – knowledge, understanding, skills and attitudes. And we have suggested that in the end formal, non-formal and informal learning

are not just distinguished by the context within which learning takes place but by the formal, non-formal and informal processes by which learning is accomplished.

Because informal learning has been so neglected until recently, we shall now focus on informal learning in more detail and explore it more fully.

Further Reading

Paul Belanger 2011 *Theories in Adult Learning and Education* Opladen: Barbara Budrich; the first part is an excellent recent brief summary of a very wide field of learning.

Erik de Corte 2010 Historical developments in the understanding of learning, in *The Nature of Learning: using research to inspire practice* ed Hanna Dumont, David Istance and Francisco Benavides, OECD, Centre for Educational Research and Innovation, pp 20-33 – a useful summary of a wide field. Available at http://www.oecd-ilibrary.org/education/the-nature-of-learning/historical-developments-in-the-understanding-of-learning_9789264086487-4-en;jsessionid=260a4t455s0d6.delta

D Livingstone 2002 *Mapping the iceberg*, NALL Working Paper 54, Toronto: OISE <http://www.nall.ca/res/54DavidLivingstone.pdf> – this relates mostly to formal and non-formal learning rather than informal learning; Livingstone admits that researching the unconscious learning ‘below’ non-formal learning is difficult.

Gert Biesta 2009 Good education in an age of measurement: on the need to reconnect with the question of purpose in education, *Educational Assessment, Evaluation and Accountability* 21 pp 33-46 – an excellent challenge to the Discourse of learning. Available at <http://hetkind.org/wp-content/uploads/2012/02/BIESTA-GOOD-EDUCATION-met-highlights-11.pdf>

Exercise 1

Read the paper by Gert Biesta; then examine any (preferably short) text on lifelong learning available to you and try to determine what is meant in it by ‘education’ and ‘learning’ – whether learning is seen as learning programmes or as a process.

Exercise 2

In your groups, read the paper by Livingstone and discuss the difficulties of researching the tacit informal learning.

Exercise 3

Discuss how far the descriptions of the various schools of thought about learning (behaviourist, cognitive, constructivist and socio-cultural) in Belanger and de Corte differ from each other.

Task 1

Take any subject you wish to choose and work out how much and what kinds of learning you have already done in relation to that subject? Refer above to page 25 for examples and some of the suggestions made there.

CONTEXTS	
Formal learning in formal settings (intentional learner, intentional teacher)	
Non-formal learning (intentional learner, (un-) intentional teacher) a) formal learning in non-formal settings b) non-formal learning in formal settings	
Self-directed learning (intentional learner; teacher may be intentional or unintentional)	
Informal learning a) incidental learning: learning while engaged in other tasks (unintentional learner, maybe intentional teacher) b) accidental, experiential learning: (unintentional learner, unintentional teacher)	

1. *Since these are not distinct categories, and shade from one into another, do not worry if you are uncertain where one element of your learning should go*

2. *Although the learning of which you are conscious was intentional, you will also find yourself engaged in some unintentional learning along the way*
3. *The formal 'tip' of the iceberg tends to be standardised learning; the bottom becomes more and more individualised*

Task 2

Take the same subject as in Task 1 and explore what kinds of a) knowledge; b) understanding; c) skills; and d) attitudes have been learned.

Task 3

Take any formal learning situation you know (class, lecture etc) and reflect on what *informal* learning may be taking place unconsciously at the same time.

Task 4

Take any learning event in or out of an educational institution, describe it in your own words, and try to locate it on the learning continuum.

III The Base of the Iceberg: Informal Learning, its Nature and Processes

There is today what has been called an “explosion of interest in non-formal and informal learning”; and a range of recent studies has been devoted to exploring these fields (Chisholm 2013 p 80; see 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; Field 2000; Hager 2001; Smith 2002; Rogers 2003; Hager and Holliday 2009; Schuler and Watson 2009; Erstad and Sefton-Green 2013). The cognitivists as well as the socio-cultural theorists are focussed on the whole range of implicit, informal and formal learning (see e.g. Bereiter 1991; Bransford et al 2000). But the exact nature of what they have been exploring is not always clear: indeed, it is important to realise that some writers use the term ‘informal learning’ to refer to what I and others have called ‘non-formal learning’ (e.g. Livingstone 2002; Werquin 2007; Hague 2009; Santos and Ali 2012). My focus here is on the learning below the level of visibility of the iceberg – the unrecognised, unconscious everyday learning through life’s experiences, rather than the intended, planned activities of self-directed or non-formal learning that are engaged in outside of any educational context.

3.1 The nature of informal learning

The recognition of learning throughout life, from childhood through adulthood, is thus now widespread:

In some ways, learning is as commonplace (and complex) and banal as living. It is difficult to imagine a state of ‘not learning’, and it is a truism to state that, in all our lives, we constantly draw on and develop knowledge through experience. [This is now] taken for granted.” (Sefton-Green and Erstad 2013 p 1)

As we have seen, the main conclusion of these studies is that this unconscious (tacit) informal learning is both larger and more important than formal learning.

“The evolution of adult skills and competencies can by no means be attributed exclusively or primarily to the organised ... education sector. Rather ... adult skills and competencies evolve from multiple sources, including formal and informal learning, socialisation, as well as implicit learning in childhood, youth, and, of course, in adulthood.” (Gnahs 2011 p 3)

“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 p 3) “The majority of human learning does not occur in formal contexts.” (Eraut 2000 p 12) “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.” (Livingstone 2001 p 6; see also Resnick 1989; Richardson and Wolfe 2001) “Learning is an ongoing process, embedded in a wide range of experiences, across a wide range of social domains.” (Sefton-Green and Erstad p 14)

Learning in life: Learning then takes place during our encounter with life’s experience, “a fundamental, ‘root’ process, one that lies at the very heart of the adaptive behavioral repertoire of every complex organism” (Reber 1993 p 5). It “happens all the time” wherever we are (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); it is learning in life and for life (Erstad and Sefton-Green 2013). Everybody is learning during the course of their lives.

Among the many forces that promote informal learning, we can identify three in particular.

- a) First, we learn unconsciously as we enter *new roles* (adolescent, student, parent, property holder, worker, member of community, retired etc) or as we interpret old roles in new ways (one generation of parent is different from the previous generation).
- b) Secondly, as our socio-cultural *context* changes (for example, with economic changes and the introduction of new technologies), so too we learn and change.
- c) And thirdly, as our *individual interests* change over time, so again we learn new things both consciously and tacitly.

“Humans inherently cope with their changing [lives and] environment by learning.” (Livingstone 2010 p 22).

Natural, like breathing: As Raymond Williams pointed out (1993), learning, like culture, is ‘ordinary’. It occurs throughout life, in a whole host of affiliations and networks. Some learn more than others; some learn more permanently than others – but all learn. Learning is like breathing – we do it all the time, indeed we cannot live without breathing. But most of the time, we breathe unconsciously, only becoming conscious of it when it goes wrong or when we wish to enhance it for purposes such as sports or singing. Learning, like breathing (and indeed ingesting), is a natural process of engaging with our ever-changing environment and taking from it what we need in order to function and to grow; it is an essential element for living (Swann 2012 p 1; Brookfield 1986; Jarvis 1987; Rogers 2003). Although “preparing [for] and coping with changing life pathways and 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; Sefton-Green and Erstad 2013 p 2); it goes on all the time, usually unconsciously.

Ubiquitous and universal: And this means that informal learning, unlike formal and non-formal learning which are spasmodic, situated in specific places and times, is ubiquitous, universal and continuous. Informal learning is part of the practices of living (Erstad and Sefton-Green 2013). “Any place where people act and interact has a learning culture, where learning of some type takes place” (Hodkinson et al 2008 p 33). “Learning is an integral part of generative social practice in the lived-in world” (Lave and Wenger 1991 p 35). Insofar as “learning is an aspect of living, an aspect of development, we cannot *not* learn” (Lemke 2013 p 66, original emphasis); “everyone has a learning life. ... The universal human capacity to learn is self-evident ... everyone does build and experience a learning life” (Chisholm 2013 pp 70, 72, 82). “Learning is intrinsic to people’s lives” (Drotner 2013 p 39).

Learning and the identity of ‘learner’: But because most informal learning is unconscious learning, it is often not seen as ‘learning’. In these contexts, the learner does not construct him/herself as a ‘learner’; for them, ‘learning’ is something which goes on in some kind of educational or training programme. They do not conceive of everyday experience as ‘learning’ 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. And this is the reason why so many people, when surveyed, say that they have done ‘no learning since leaving school’. In a survey of participants in adult education in the UK, less than 30% of those surveyed viewed themselves as ‘learners’ (Aldridge and Tuckett 2007).

Such personal constructs as ‘learner’ are a key issue, for the drive of much learning is aspirational, a search for the construction of a new aspect of identity and with it new competencies (Visser 2001; Kalman 2005 gives a clear example of this). Identities are multiple and flexible; identities are relational, negotiated time and again in new performances before new audiences (Hall 1997; Erstad and Sefton-Green 2013). And in the performance of identities, much informal learning is undertaken.

Difficulty of research: But 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 practices of which the learners were conscious. Others like Hager and Eraut have focused on work-place learning or on agentic learning where the learner identifies what they are engaged in as ‘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, my italics; see also Krogh et al 2000; Greenfield 1984). Surveys of “participation in learning” can never reveal the full extent of informal learning, especially the deep and invisible part of the iceberg; for this, ethnographic approaches are necessary (Heath 2013). But, despite the difficulties, “we need to examine learning across a range of time and place scales to understand it better, however difficult this may be as an empirical challenge” (Sefton-Green and Erstad 2013 p 5).

Extent of informal learning: Such ethnographic studies of the field as have been conducted 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 and changing socio-cultural contexts: learning while cooking, having and bringing up children; farming, fishing and engaging in other occupational activities; handling money. They learn the traditional knowledge, values and practices of their social groups, and they experiment with new values and practices, by engaging in community 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 our

workplaces and leisure activities, through religion and sport, through our chosen music and peer pressures in such things as dress and eating habits (Rogers 2003). Many people 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 p 143). Learning is all around. To talk of ‘non-learners’ is to ignore all that non-educational everyday unconscious learning which everyone does and which is usually called informal learning. “We cannot *not* learn because, in every activity of life, every event in life, some elements will be carried forward and put into close relation with imagined or enacted activities of a few moments, or even a few years, later” (Lemke 2013 p 66, original stress).

The range of informal learning is then as wide as the practice of living it-self: from food to football, from cycling to clothes, from falling in love to falling out with others; from maps to money, from personal relations to pets, 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 and create this informal learning. Through our lived experience, we build from fragments our senses of normality, our patterns of behaviour, our rules for life, our expectations and what Bourdieu (1977, 1990) calls our dispositions. Knoblauch and Brannon (1984), describing the world of digital learning as they see it, express (perhaps a little too enthusiastically) the whole field of informal learning:

“a perpetual search for knowledge, where learning is an endless adventure in making sense of experience, an explanatory effort in which all human beings are both teachers and students, making and sharing meanings through the natural capacities for symbolic representation that define humanity” (cited in Jacobson 2012 p 35).

Anti-social learning: Not all that is learned through informal learning is necessarily correct – one often learns inaccurate material informally. And some of the material that is learned informally may not be socially good or communally desirable (Swann 2012 pp 26-27). Much that is negative is learned through informal learning. Racism, gender bias, drugs and domestic violence are all learned, as are 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.

Deep and emotional: And this means that informal learning, because it is built on experiential social learning, is very ‘deep learning’. What we learn

through informal learning, though tacit, is not only of long standing; it is tied to us by strong bonds of emotion, especially that learning that comes from interaction with a ‘significant other’. The fruits of informal learning are built into our identities. Belanger and others, in the context of lifelong learning, have spoken of “the intimacy of learning” (Belanger 2011 p 92). The emotional component to informal learning (Illeris 2002; Lemke 2013), which may be much less (though not entirely missing) in formal learning, means that this informal learning is often difficult to shift. And because informal learning reflects the power structures of the society from which we are learning, it has an inherent tendency to confirm the existing rather than encourage change.

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

3.2 The processes of informal learning

How do we learn informally?

Osmosis: In large part, unconscious informal learning takes place through a process of assimilation. There is often a good deal of acceptance of the “authoritarian premises and unassailable dogmas of antiquity, ... [much] passive veneration of conventional wisdom and the declarations of privileged ministers of truth”; but equally there is also much challenge to revealed truth in the search for meanings. “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 processes (e.g. Krashen 1982; Gee 1990 p 154; Goodman 1996. Dewey 1922 spoke of the ‘acquisition of knowledge’ as the key to education; for discussion, see Sfard 1998). 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: The differences between formal and informal learning can be illustrated from language learning, not just in a

linguistic sense but also in Bernstein's abbreviated and elaborate language codes which were all learned informally, mainly unconsciously but at times consciously through imitation (Bernstein 1971). Learning our initial language (sometimes called 'mother tongue') orally was undertaken gradually, over an extended time. Through copying significant others and listening to others, through trial and error, play, and 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 expanded from the common everyday language needed to communicate with others 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 all continue to learn language as we use it.

We didn't know we were learning a language. We unconsciously adopted certain customary rules such as plurals and tenses – which is why children often make what others see as a mistake by following a rule unconsciously (e.g. in English, where most plurals take '-s' and most past tenses take '-ed', such adoptions might lead to 'sheepses' or 'falled over') (see James 1997). And we were even less conscious of boundaries, which is 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.

On the other hand, learning a later language (see e.g. Krashen 1982; Mackey and Gass 2005) is usually undertaken through more carefully structured, time-bound and controlled practices, through sequenced teaching-learning materials and designed activities, with pre-determined goals and measures of achievement. Formal (and to a lesser extent, non-formal) learning is seen as governed by conventions created by those in authority outside of the learner; and it tends to concentrate on individual learning (the 'you-must-do-it-for-yourself' syndrome) rather than collaborative learning. It is bound by rules (of grammar and pronunciation). It proceeds by a set of texts chosen as much for their vocabulary as their content. It is teacher- rather than learner-led. It is often remote from the context within which the language will be used.

Situated learning: In contrast, informal tacit learning is always situated in and derives directly from a real-life situation. It is important to stress that almost every educational writer today accepts the importance of 'context' in all forms of learning, formal, non-formal and informal. Many cognitivists with

their discussions of ‘transfer’ from previous learning emphasise that context affects this transfer; explorations of ‘connectivity’, the recognition and formation of patterns, draw heavily on the environment; and symbolic thinking is thought to emerge from the cultures and communities of the learner (Haskell 2001; Bransford et al 2000).

But while “all learning is primarily contextual ... significantly contextual, ... the influence of context on *informal* learning is crucial” (Hager and Halliday 2009 pp 8, 142, 159). “We are shaped by all of what we read and write” (Lemke 2013 p 57). And this context is not just human but also artefactual and cultural: “We ... do not see it [learning] as entirely endogenous but rather as the deployment of resources provided to us socially by a community and described as a part of the culture of that community, both the resources and the norms and typical practices for using them” (Lemke 2013 p 61; see Drotner 2013 p 40: “tools are key to learning and knowledge production”).

And not just context but particular experiences in a particular setting. “Learners do not simply occupy an external and separate context where they learn – they are part of the situation where they learn, and their learning is part of the practices of that situation” (Hodkinson et al 2008 p 32). “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), by “the entire life course” (Drotner 2013 p 43). “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, much informal learning occurs during the processes of completing some real-life task in a particular context, not necessarily a work-place task but any task we have set ourselves (Rogers 2003). Because informal learning is closely related to and often springs from attempting some specific activity in a specific setting for a specific purpose, much informal learning is limited, not generalised. It seeks to master the concrete task in hand rather than a generalised understanding, we learn only enough to complete the task to our satisfaction. If I acquire a new camera, I learn just enough to enable me to handle that camera only, 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 our informal learning is situated in real-life activities

that leads to the conclusion in teaching that moving from the concrete to the abstract rather than from the general to the particular is usually most effective in promoting learning.

Social learning: For, as the learning of an initial language demonstrates, 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 is assisted by an informal scaffolding of prompting, encouragement, rewards and some correction provided by older speakers of the language, parents, other adults, siblings and peers, or drawn from the visual environment and from 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.

It is then generally agreed that tacit informal learning occurs in our social and cultural interactions (see Bereiter and Scardamalia 1996) – in the workplace, in the family, in the community. Research into informal learning shows it to be essentially social in nature, “engagement with the social world” (Jackson et al 2011 p 132). “The understanding of learning as a social process is .. central” (CERI 2010 p 52). Learning is “best conceived of in social terms, ... 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 ... those in community organisations associated with them, [such as] churches, second hand stores, dance clubs” (Heath 2012).

Individualised 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; see Hodkinson et al 2008). “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 practices of critical reflection on experience (Kolb 1984; Schon 1983).

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 learning to assess any discrepancy between the new and the existing (Rogers and Horrocks 2010 pp 120-1). Once again, there seems to be widespread agreement on the importance of the learner’s “earlier learning life that strongly influences his or her current learning... The most important single factor influencing learning is the learner’s prior knowledge” (CERI pp 52-3). Cognitivists describe the ‘transfer’ of learning: “Transfer of learning is our use of past learning when learning something new ... the very foundation of learning, thinking and problem solving” (Haskell 2001 p xiii) (for the assessment of prior learning, APEL, see page 49 below).

The use of analogy is then a major tool of informal learning. When faced with a new experience, the learner explores his/her experience to try to detect analogies which are perceived to be relevant to help to make meaning of the new experience, something which will 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. But this depends on one’s perception of relevance; there are occasions when some prior learning which may be relevant to the new situation is ignored because it is not *felt* 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 practices lies in the question of control. In formal learning, control of the programme lies almost exclusively with the providing agency, not the learner: “control of the learning ... characterises formal learning” (Hager and Halliday 2009 pp 35, 2). The learning sponsor determines what is learned, when and for how long, by what me-

thods, what practices are engaged in and how learning is to be evaluated. On the other hand, in much 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, and that the learner may contribute as well to the contents of the learning activity and may choose the ‘teacher’, however qualified or unqualified they may be. Rather, it is that in learning, the learner draws upon those parts of their prior learning which appear to them to be most relevant and rejects those parts of their prior learning which appear to them to have little or no relevance. It is the learner who acts, even when learning unconsciously.

3.3 Summary

This chapter has looked at the nature and the processes of (non-agentic) informal learning, that larger part of learning below the line of visibility of the iceberg. We saw that it is a natural activity like breathing, ubiquitous and universal – there is no such person as a ‘non-learner’; that its range is as wide as life itself; and that it includes socially unacceptable learning as well as socialisation. Since it is very largely unconscious to the learner, it is difficult to research.

The chapter then looked at the processes of informal learning – absorption from our physical and socio-cultural environment (learning a first language is a good example). It is always situated, embedded in particular life-tasks. It is both at one and same time social and individual, and relies on prior learning (especially the use of analogy). The next chapter will look at this prior learning and how it is adapted in the new learning.

Further Reading

www.infed.org – a useful website

Alan Rogers 2003 *What is the difference? a new critique of adult learning and teaching* (Leicester: NIACE) – a summary of task-conscious and learning-conscious learning

G A Straka 2004 Informal learning: genealogy, concepts, antagonisms and questions
www.itb.uni-bremen.de – a challenging paper

R Egetenmeyer 2012 Informal Learning of managers in a multinational company in Germany, Great Britain and Spain: an intercultural comparison. 5th Conference of the International Society for Comparative Adult Education 3-6 November 2012,

Las Vegas/USA. available at: <http://www.uni-bamberg.de/fileadmin/andragogik/08/andragogik/iscae/2012conf/papers/Egetenmeyer.pdf> – accessed March 2014

Exercise 1

Read and discuss Straka's paper about informal learning, trying to identify some of the problems and issues raised in relation to your own experience.

Exercise 2

Read the summary in Sfard A 1998 On two metaphors for learning and the dangers of choosing just one, *Educational Researcher* vol 27 (2) pp 4-13 at http://www.colorado.edu/physics/phys4810/phys4810_fa08/4810_readings/Sfard.pdf accessed February 2014

Discuss the difference between 'acquisition' and 'participation' as metaphors for learning

Exercise 3

Read Egetenmeyer's paper in your group and discuss how different contexts influence the nature of learning in work-place learning and in other forms of social learning.

Task 1

Choose an example from your own recent experience of any learning event which you did **outside** of school or college (e.g. finding yourself in a new place; or acquiring some new piece of equipment etc). Analyse it carefully – was it deliberative, incidental or accidental? **what** did you learn? **why** did you feel the need to learn? **how** did you learn (what processes)? **who** helped you to learn? what kinds of 'learning **materials**' did you use? In what ways did the **context** affect your learning? How did you **feel** about the learning?

Task 2

Distinguish between task-conscious and learning conscious learning, providing examples from your own experience of both kinds of learning

IV Informal (prior) Learning: What has been Learned

My task here is 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 have already been and still are simultaneously engaged in what are largely unconscious practices 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 start by looking at this from the aspect of what has already been learned in informal learning.

4.1 Prior learning

To repeat my argument: everyone is learning all the time in many different areas, and most of this learning and most of the changes brought about by this learning are unconscious. The difficulty is how to identify the content of this prior learning, what has been and still is being learned which may or may not be relevant to any new learning programme we may propose.

This has been examined in depth in several different contexts, but I would like to take four studies as examples:

- ‘pre-understanding’ in hermeneutics (chiefly historical documents and religious texts);
- ‘tacit funds of knowledge’ and banks of skills in work-place learning;
- ‘frames of reference’ in adult learning theories;
- and ‘social imaginaries’ and ‘Discourses’ in socio-linguistic studies.

All of these have much wider significance than the immediate academic fields they operate in; they all indicate some of the ways in which informal learning impacts on formal and non-formal learning.

4.1.1 *Pre-understanding*⁵

The concept of pre-understanding seems to have emerged in Germany in both historical studies (e.g. Rickman 1961) and theological studies (e.g. 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 some forms of pre-understanding already exist. 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. It has long been recognised that all history students bring with them the concerns of their contemporary society; but 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. Gadamer (1975) pointed to the (often unconscious) 'anticipation', the 'expectation of meaning' which exegeses 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). Gadamer's term 'horizons' is useful here; the learner brings his or her existing horizon to the horizon of the learning material (see page 68 below). Turner (1975) analysed pre-understanding carefully, drawing attention to two features. The first is what he called the 'concep-

5 I am grateful to Dr John Parr for introducing me to the theological studies cited.

tual 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 (but not control) 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". Such 'cognitive interests' help to create 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 and identifying all the rest as background 'noise'. 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 as relevant.

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 "pre-conceptions, ... ideas, presuppositions, theories, knowledge, prejudices, values etc", determine what the learner sees and what is overlooked. "People always operate within systems of expectations: the expectations they bring to the situation, and the expectations that others have about their activities and practices" (Hodkinson et al 2008 p 34). Studies such as these draw on Dewey with his "acquired predispositions to ways or modes of response" (Dewey 1938 p 38), on Bourdieu with his dispositions or *habitus*, and on Habermas (1978 pp 196-8) with his concept of '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); and they relate closely to the constructivist approaches to learning (see above page 26).

4.1.2 *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; Moll et al 1992). 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 Holyoak 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” (cited in Hager 2001 pp 82-3). And a whole school of thought in the cognitive psychology field has been built up around ‘implicit learning’ “that takes place largely independently of conscious attempts to learn and largely in the absence of explicit knowledge about what was acquired” (Reber 1003 p 5; see also Berg 1994; Tirosh 1994; Berry and Dienes 1993; Berry 1997; Eraut 2000).

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 see and do not see, what we do and what we do not 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 p 71). And because they construct our intuitions of ‘truth’, they shape our decisions and actions; they help to determine our self-image, the confidence or lack of confidence we feel in learning. 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, original emphasis). The ‘invisible work’ of everyday learning is the creation and development of tacit funds of knowledge and banks of skills which are brought to all life, including new learning situations.

The growing understanding 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 acknowledge this prior informal

learning (see for example Aarts et al 1999; Bjornavold 2000; Werquin 2007). Programmes have been developed to help educators to work with the learners to identify such prior knowledge and skills, and to accredit them (APEL⁶, for example), so that the new learning programmes can give recognition to, and 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).

4.1.3 Frames of reference

Adult educators more generally however tend to look at this field in a wider sense. Rather than focus on existing funds of knowledge and banks of skills, they speak of frameworks of reference which are ‘transformed’ by new 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 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 some new experience causes a disjuncture with the existing frames of reference developed through prior experience and there is a search for a new equilibrium.

Mezirow (1991) speaks of both ‘meaning perspectives’: “the structure of cultural and psychological assumptions within which new experience is as-

6 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), prior learning accreditation and recognition (PLAR) and so on.

simulated and transformed by one's past experience", and also of '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). And such meaning perspectives and meaning schemes may on occasion form barriers to change, resistance to new learning; the practices of transformation are not always easy and acceptable. What exists on the basis of prior learning seeks to protect itself from change, to defend the integrity of its source of learning

Literacy as an example: Literacy may provide an example of the limitations that existing frames of reference can impose. Many so-called 'illiterates' know a lot about literacy and some practise literacy while regarding themselves as 'illiterate':

"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" (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 work-related activities, often do not recognise this as 'literacy' (Nabi et al 2009; Rogers and Street 2012). They are thus 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'. Part of their prior learning – although directly relevant to the new learning programme – is not then identified by them as relevant and is therefore not brought into play in the new learning. The meaning of the term 'literacy' is for them determined by their existing frames of reference created by prior learning. Such meanings, internalised from the Discourses of educationalists, inevitably defend the elitist and exclusive model of literacy taught in literacy learning programmes which stress the 'correct' forms which have to be learned. Before effective new literacy learning can be accomplished, a transformation of the existing frames of reference is needed.

The transformation of meanings is then a major 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 ... action", he goes on to agree that the picture we may construct of learning is more complex: "learning may be inten-

tional ..., incidental ... or mindlessly assimilative” – i.e. non-transformative⁷ (Mezirow et al 2000 p 5).

There are parallels between the ‘mental models’ of some cognitivists (Gentner and Stevens 1983; Johnson-Laird 1983) and frames of reference. Such mental models, “a more systematic version of the traditional idea of belief ... are there in the minds of students, although not directly observable” and they too direct the responses of students to particular situations (Bereiter and Scardamalia 1996). Learning will involve the transformation of such mental models.

4.1.4 Imaginaries and Discourses

There is however a sense in which the patterns of thought and practice which learners bring to the learning programme are 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 restrict 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 the assumed norms of our communities. Hence the term ‘social imaginaries’, for they are shared. We both build them from our socio-cultural context through the practices of informal learning, and at the same time we contribute to their creation in the community through our social interactions and Discourses. 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.

7 Not all assimilative learning need be ‘mindless’; much is deliberately reinforcement as in practising skills which is highly evaluative. And some assimilative learning can be transformative.

Discourses⁸, as writers such as Norman Fairclough (e.g. 1989) and James Gee (e.g. 1990, 2005) have pointed out, are the language we use to express these constructs. Foucault has drawn our attention to the way that power is embodied in Discourses (Foucault 1972, 1973). “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 p 13; see 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.

Imaginarities are often represented in Discourses, as Mary Hamilton (2012) has demonstrated, through the metaphors which we (often unconsciously) use to express our understandings. Metaphors tend to 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. [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”. Thus Discourses determine our actions and shapes the world we see: “Change is talked into being through Discourses ... Discourses shape and re-shape social reality” (Escobar 1995 p 13; Apthorpe and Gasper 1996 p 4). Thus as many have shown (Said 1977; Escobar 1995; Crush 1995), Discourses can create and remake the ‘Orient’ or the ‘Third World’.

Both our social imaginaries and our Discourses legitimise and delegitimise thoughts and actions. Thus the social imaginary of ‘literacy’ which includes certain practices but excludes other reading and writing practices will determine what is seen and what is not seen. And yet such imaginaries 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 main response is drugs; or it can be spoken of as a *sexual* issue, in which case the key answer is the use of condoms; or it can be viewed as a *social* issue (multiple sexual partners), in which case the programme urged is abstinence. To give another example, where the English speak of ‘lost property’, the French speak of *objets trouves*, thereby changing the whole picture of power and responsibility. How we construct and express any issue will determine what we feel should be done about it. But such constructions are rarely deliberate – we simply adopt them from our socio-

8 See note on page 11. I am grateful to Professor Anna Robinson-Pant for discussions of Discourses.

cultural context by using them, and we assume that others use the same Discourses.

Such social imaginaries relate not only 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 p 16). They help us to formulate our identities, our self-horizons, especially in terms of our sense of our own learning abilities. This can perhaps best be seen in the very widespread ‘I-can’t-learn-maths’ syndrome, for example. We are all engaged in a self-constricting process as well as a self-constructing process (Rogers 1993).

4.2 All these attributes have been and are being learned

Now, all of these four – pre-understanding; funds of knowledge and banks of skills; meaning perspectives and meaning schemes; and social imaginaries and Discourses – are pre-existing attributes which learners bring to the learning programme, which deeply affect all new learning experiences. They have all been learned, although unconscious; the learners were not born with them.

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 ‘set of on-going processes’ by which they have been learned have not been explored.

Some of these attributes have been developed 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 never been to school, it is clear that the unschooled and the inadequately schooled still have their own pre-understanding, their tacit funds of knowledge and banks of skills, their frames of reference, and their social imaginaries and Discourses, and that these have been developed through the everyday informal and unconscious learning of their social life, from family, community, work and life’s experiences. The fact that they have not been to school does not mean that they have done no learning, that they need to engage in ‘learning to learn’ programmes; for they are already learners and have learned much (but they will of course need to learn how to *study*).

And this is also true for those who have been to school. Although their schooling has been influential, most of their pre-understanding, their tacit funds of knowledge and banks of skills, their frames of reference, and especially their social imaginaries and Discourses, have been developed through their informal, unintentional and largely unconscious learning from their everyday experience on their social environment.

The importance of this discussion is that all these prior attributes are involved in the new learning. They not only provide the basis for all new learning; but, as we shall see, they are not set in stone but are in a constant process of development and change. In new learning, pre-understanding is being developed further or challenged; new knowledge and skills are being added to the existing funds of knowledge and banks of skills which are also being enhanced or adapted; the frames of reference are being transformed; the social imaginaries and Discourses are being modified, clarified or expanded.

Learning styles: And it is from their prior informal learning that – strange as it may seem – even the non-schooled have developed their individual learning styles. The debate around learning styles that once raged is more muted today; but some psychologists still insist that the perceived learning styles, visual (sometimes including reading), aural (auditory) and kinaesthetic (tactile), are innate (Pashler et al 2009), while the social learning school insist that their preferred learning styles of concrete experience, reflective observation, abstract conceptualisation, and active experimentation, being combined into so-called ‘convergers’, ‘divergers’, ‘assimilators’ and ‘accommodators’, have been developed individually over the years through their use in informal learning (Kolb 1984). Both schools are critiqued, not just by the other school and by other conceptions of learning (see especially Fenwick 2000; 2001; Mughal 2011) but internally; so that some see Kolb’s learning cycle as too simple (omitting, for example, decision-making, emotional factors, the search for other relevant experience, etc (see e.g. Coffield et al 2004; Reynolds 1997; Sadler-Smith 2001; Rogers and Horrocks 2010 pp 122-5), while others see it as too complex, reducing it to two simple issues, learning by doing and learning by reflection (Wienstra and de Jong 2002; de Jong et al 2006). Whatever the truth behind these arguments, we can I think still agree that through continuous reinforcement in our everyday informal learning, each one of us builds up “repertoires of practice” which display our preferences (Gutierrez and Rogoff 2003; Martin 2010). These may be strengthened or challenged in the classroom, but the classroom does not create our learning styles – these come from the unconscious learning practices of our everyday life.

4.3 Summary

This chapter looked at four different ways in which the main outcomes of prior informal learning in relation to formal and non-formal learning have been analysed. We all develop some *pre-understanding* of the new learning (in terms of both concepts and what have been called ‘cognitive interests’); we all have developed through experience tacit *funds of knowledge and banks of skills* which we use in our everyday practices. We all have built up *frames of reference* with which we judge all new material; and we all have absorbed *imaginaries* from our socio-cultural context while at the same time contributing to those same social imaginaries in the *Discourses* we use (especially the use of metaphors). All of these we bring to any new learning activity, intentional or non-intentional; and all of these are changed in the processes of learning.

Further Reading

- K. Patricia Cross 1981 *Adults as Learners: Increasing Participation and Facilitating Learning*. San Francisco: Jossey Bass (still highly relevant)
- P Campbell and B Burnaby (eds) 2003 *Participatory Practices in Adult Education* Mahwah, New Jersey: Erlbaum
- F Coffield (ed) 2000 *The Necessity of Informal Learning* Bristol: Policy Press
- P Hodkinson, G Biesta and D James 2008 Understanding learning culturally: overcoming the dualism between social and individual views of learning, in *Vocations and Learning* 1 (1) pp 27-47

In the exercises which follow, you will find it helpful to choose an adult learning programme which you know well or which you plan to teach, and apply each exercise to that programme.

Exercise 1

Read the paper by J G Davies 1983 Subjectivity and objectivity in biblical exegesis *Bulletin of John Rylands Library* 66 (1) pp 44-53 available at <https://www.escholar.manchester.ac.uk/api/datastream?publicationPid=uk-ac-man-scw:1m1660&datastreamId=POST-PEER-REVIEW-PUBLISHERS-DOCUMENT.PDF>

Discuss the concept of ‘horizon of understanding’ which all learners possess and bring to their learning in relation to your own chosen subject.

Exercise 2

Read what Janet Lopez has to say about funds of knowledge at

<http://www.learnnc.org/lp/pages/939?ref=popular>

Discuss what the students in your chosen programme *bring to their learning* in the form of tacit funds of knowledge and banks of skills.

Exercise 3

Read the paper by Jack Mezirow on Perspective Transformation from

Adult Education Quarterly 1978 28 (2) pp 100-110 at

<http://aeq.sagepub.com/content/28/2/100.abstract>

What frames of reference do the students in your chosen programme bring with them? How far do these need to be transformed?

Exercise 4

Read the following two short papers

a) On Social Imaginary by Charles Taylor at

<http://blog.lib.umn.edu/swiss/archive/Taylor.pdf>

b) commentary on J P Gee 1990 Social Linguistics and Literacies: Ideology in Discourses, Critical Perspectives on Literacy and Education at

<http://curricublog.files.wordpress.com/2009/01/gee-discourses-1990.pdf>

How do your students *talk* about the subject? what *images* do they possess about it?

Task 1

With reference to adult literacy students, how would you find out the following?

- a) *Pre-understanding*: Who do they think literacy is for? who uses literacy? for what purposes?
- b) *Funds of knowledge and banks of skills*: What reading and writing can they already do?

- c) *Frames of reference*: What do they mean by ‘literacy’? What is included and what is excluded? Is it the same as what you mean by literacy?
- d) *Imaginaries and Discourses*: How do they talk about literacy? what metaphors or images do they use?

Task 2

Take any learning event you have recently been involved in, in or out of an educational institution, and try to assess what prior knowledge and what prior skills you brought to that event; try to assess how you learned such knowledge and skills.

V Interactions between Informal Learning and Formal/Non-Formal Learning

What then are some of the implications of the existence, the size and the significance of informal learning – the larger part of the iceberg, even if invisible – for those who are engaged in formal and non-formal learning, both as teachers and as learners?

5.1 Relations of formal and non-formal learning

In order to explore this more fully, we need to start by looking at the distinction between formal and non-formal learning that we have taken as the basis for our discussion.

Formal learning: Formal learning occurs as a result of experiences in an education or training institution, with structured learning objectives, learning time and support which leads to certification. Formal learning is intentional from the learner's perspective.

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.

This however does not tell us what are the significant *differences* between formal and non-formal learning apart from location. As we have seen above, we can have formal learning programmes in non-formal settings; and we can have non-formal learning programmes provided by educational institutions in formal educational contexts. How then can we distinguish between formal learning and informal learning apart from the settings?

5.1.1 *Teaching and learning*

First, we need to address briefly the issue of whether there is any difference between teaching and learning (Scribner and Cole 1973; Cohen 1971). There are those who deny any difference – they assert there can be no learning without teaching just as they also say there can be no ‘teaching’ without learning: as someone once said, to say, ‘I taught but they did not learn’ is as illogical as saying ‘I sold him a car but he did not buy it’. For them, learning and teaching are the same; and the formal-informal *learning* continuum and the formal-informal *teaching* continuum are one and the same thing. Others suggest the two are different but in parallel – the formal-informal learning continuum is matched by a formal-informal teaching continuum. Both thus are able to speak of informal teaching, informal education.

There is a third view – that teaching consists of intentional formal and non-formal learning only, but that informal learning, being mainly unintentional, learning from experience, from artefacts, from interactions in a social context, cannot be called ‘teaching’ which is an agentic purposeful social activity. They feel that, while it is possible to say that ‘I learned from that experience, from that work of art, from that film or book etc’, it is not really possible, except in a metaphorical sense, to say that the experience, work of art, film or book ‘taught’ in any meaningful sense. For ‘teaching’ in its widest sense is normally taken to mean “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). It is hard to see how artefacts and experiences and interactions etc can have ‘aspirations’ or the power to assess the effectiveness of their activity.

There are thus those who say that teaching is formal and non-formal learning but not informal learning; that a formal-nonformal continuum for teaching parallels the formal-nonformal-informal continuum for learning only for the first two phases; that informal learning comprises a long and single ‘tail’; that ‘informal teaching’ in the sense we are using the word ‘informal’ (unintentional, largely unconscious) is not possible.

5.1.2 *Similarities and differences*

If then we take the view that education-teaching comprises formal and non-formal learning, we are led to ask what are the similarities and differences between formal and non-formal in this context. My own take on it (Rogers 2004) is as follows.

First, while of course we must not essentialise formal learning, for there are varieties of forms, we can I think agree that **formal and non-formal learning** share a similar profile, in that both are intentional learning by the learner in intentional programmes created by learning providers (sponsors); they are both planned learning programmes. Though they take place in different settings which bring with them different orientations to participant learning (Egetenmeyer 2012), both involve ‘teaching’ in its widest sense.

Both forms of learning are of course wider than institution-based education; they include all purposeful learning opportunities where someone is engaged in teaching someone else. “It is problematic to treat formal and non-formal learning as connected to specific sites or situations. Instead, it makes more sense to treat these forms of learning as *participant orientations*” (Arnseth and Silseth 2013 p 27). Both formal and non-formal learning may be defined as any situation where one person is helping someone to learn, although such a statement without further qualification, as we have already seen (see page 12 above), leaves unanswered the questions of the purposes and value of the learning.

But there are differences between formal and non-formal learning. **Formal learning** programmes are, like formal groups and bodies, programmes which do not on the whole change when the participants in them change. A *formal* body like the police or army does not change when a new recruit joins, whereas an *informal* group like a football team or drama group does change materially when one person joins or leaves. Similarly, a chemistry course in a university is a very formal learning programme – it does not change when one student joins or leaves, it is the same for everyone who attends it, it makes no allowances for the very different experiences which the individual learners in that class bring to the learning. Formal learning is standardised, decontextualised. The programme is controlled by the teacher or the learning sponsor; and the evaluation of learning is undertaken by agencies other than the learners.

Non-formal learning programmes, on the other hand, are more adaptable to the participants (Rogers 2004). In non-formal learning, the learners can engage more directly and influence what is taught and how it is taught. Non-formal learning programmes are more flexible in that each different group of student-learners can influence their timing, their length and their location; in addition, through interaction between teacher and learner, in many cases (though not all) the content too will change to meet the intentions and aspirations of different learners, as for example in private music lessons. More of the control lies with the learners (see Campbell and Burnaby 2001; Richardson and Wolfe 2003). It is not so much the setting as the orientation towards

the learners and the learning subject matter which makes non-formal learning different from formal learning: the “learning activities are less circumscribed, ritualised and extensive” (Drotner 2013 p 43). And the evaluation is less frequently defined by the pre-set learning objectives of the learning programme than by the achievement of the learners’ often very different aims (Campbell 2007).

This is of course particularly true of **self-directed learning** where not only the logistics of the learning programme but the goals, much of the content as well as the materials, and sometimes the instructors are all determined by the learner. Here the control is clearly with the learner.

5.1.3 The changing balance between formal and non-formal learning

It is clear from the growing concern with learning through the new technologies such as mobile phones and digital tools (for an introduction to the wide literature, see Jacobson 2012; Erstad and Sefton-Green 2013) and especially digital gaming (Gee undated), that the balance between formal and non-formal learning is changing. “The learner is now required to participate in a range of educational relationships that are significantly different from simply progressing through the planned routes of the education system” (Sefton-Green and Erstad 2013 p 14). In the new digital “lifeworlds, initial institutionalised learning (schools, colleges, universities etc) loses relative salience The traditional superiority of age over youth” is seriously challenged, and formal learning “merely institutionalises the [learning] process and legitimates it by issuing credentials”. “The conditions and demands of working life are no longer predicated on the one-way transmission of knowledge and competence between the more experienced and the less experienced. ... In ageing societies, whose knowledge and competence is seen to be more valuable and useful? That of the young, because innovation is (always) at a premium ...? Or that of the old, because they will be ever more numerous and can exert more influence on social values?” (Chisholm 2013 pp 78-81). Non-formal learning, although outside the educational establishment, is now mainstream and no longer marginal; it is an integral part of educational programmes.

5.2 Relations between formal/non-formal learning and informal learning

If then the balance between the mainstream formal learning and the more marginalised non-formal learning is changing significantly towards increased emphasis on the latter, what is the relationship of the highly marginalised informal learning to more mainstream formal and non-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).

5.2.1 *Similarities and differences*

That there is a distinction is widely recognised. We have suggested above that formal and non-formal learning both take the form of planned learning, while informal learning is unplanned. And the processes of learning in both kinds are different: informal learning consists of “ways of ... functioning which explicitly differ from practices to be seen in formal educational environments” (Coben and Llorente 2003 p 106).

But there is a relationship: “What is learnt formally is affected by what is learnt informally and vice versa” (Hager and Halliday 2009 p 87). 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), and with “the impact of identities and learning outside of school on students’ performance in school” (Arnseth and Silseth 2013 p 34), form major tasks for all those promoting formal learning. If formal and informal attributes are combined within any learning situation, “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 p 1)

It is of course important that we do not see either form of learning as superior to the other. Formal and informal 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. And it is frequently defensive of established relationships, resistant to 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. In informal learning, one acts first and learns through the doing.

Formal learning addresses some of these issues. In formal learning, one learns first (usually in an artificial context) and then does. To focus here on the informal everyday learning is not to demean the formal learning in education, whether in institutional settings or in non-formal settings. Formal learning is more generalised; it claims to be decontextualised, establishing general principles which can (in some circumstances) be applied to other contexts. It provides new knowledge by which the existing pre-understanding, frames of reference, funds of knowledge and social imaginaries can be recognised and challenged and changed and developed through critical reflection. It opens windows and doors into new vistas and arenas; it widens horizons, provides new experiences. Above all, it enables (or should enable) the participant to recognise and validate the learning already done and to build on it to new learning. Informal learning can never see itself for what it is; it takes formal learning to develop such perspectives:

“Education ought to make extraordinary sense of this ordinary activity [informal learning] 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).

5.2.2 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 often largely ignored. The Western hierarchy of power associated with learning gives greater prominence to formal than to informal learning; the academic trumps the practical (Barr 1999). “... 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 [informal] 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).

Thus, although in Western societies, formal learning is regarded as the dominant mode of learning, the standard by which all the other forms of learning are judged, there is a growing awareness (still not yet very widespread) that “Whilst schools and schooling are *the* dominant educational institutions in contemporary societies and determine much of what constitutes, defines and frames learning, how learning works in schools is not the end all and be all of the issue” (Sefton-Green and Erstad 2013 p 1, original emphasis). “School no longer holds the monopoly on future-directed competence formation” (Drotner 2013 p 46; some would doubt if schools ever had that monopoly, though many teachers would believe they had). But the dominance of the schooling model can still be seen in the encroachment of formal learning on both non-formal and informal everyday learning, in “the way in which educational relationships appear to be creeping across other social domains” (Sefton-Green and Erstad 2013 p 15).

All learners then bring to 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; and in the process of learning, they change and adapt these prior-learned attributes. Above all, they come already engaged in a continuous process of learning (to repeat, there is no such person as a non-learner), some of which they are conscious of and much of which is unconscious. Participants in formal learning, even if previously unschooled, are not ‘new learners’; they have done and are still doing much everyday learning, even if in territories remote from the new learning they are now facing. How can all this be taken into account by teachers when engaged in formal learning?

5.3 Taking account of informal learning

5.3.1 The demeaning of informal learning

Formal learning institutions have of course taken account of some forms of non-formal learning, but they have been slow to acknowledge the unconscious, informal and everyday learning that all their participants engage in all the time. It may not be true that “the curriculum pays no attention to what the students do in the hallways and on the street corners, what they do at home

and with their friends” (Lemke 2013 p 67), but the full implication of all this informal learning is very rarely taken into account when constructing learning programmes. It is certainly true in many contexts that “making connections between schooling and the rest of everyday life, in the present or in the future, seems tenuous and opaque, even for the educationally successful and socially well-placed” (Chisholm 2013 p 79). All this unconscious non-agentic learning which equips the learners with their individualised but tacit funds of knowledge, pre-understanding, frames of reference and social imaginaries, needs to be taken into account, not ignored.

5.3.2 What learners bring to new learning from informal learning

Learners come with values etc: For this informal learning can be regarded as the most important part of learning, since (as we have seen) 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 both self and of the subject of the learning programme, and our confidence or lack of it in any situation. It forms our sense of hierarchies, and the ambitions, aspirations and intentions we may or may not have. 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 create and re-create 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.

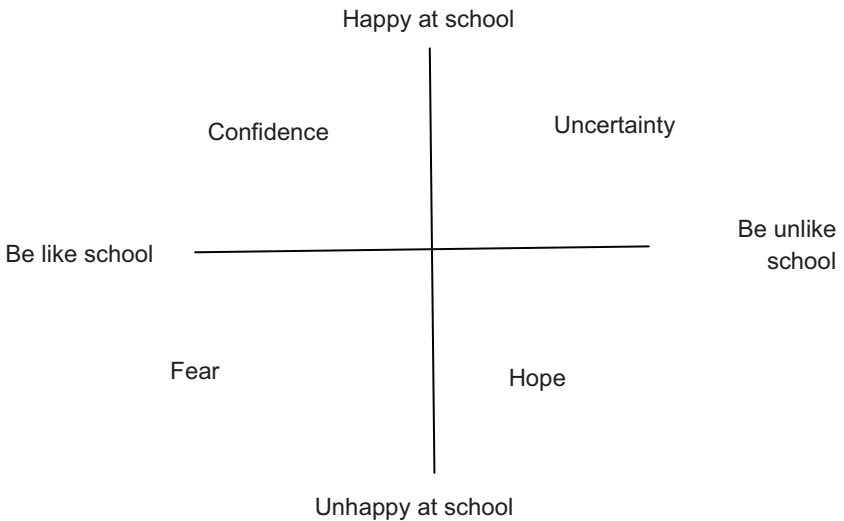
To ignore all this is not only to threaten the effectiveness of our learning programmes; it is de-humanising.

There is something morally and humanly wrong about an educational system that refuses to take into account what students do or do not want to learn, what they enjoy and do not enjoy, what interests them and what does not, and above all, how they feel about the process of learning and more generally about their lives in school. The exclusion of all consideration about how students feel allows a false legitimisation of the claimed right of some to say what all should learn (Lemke 2013 p 66) for a series of examples of formal learning taking account of informal learning, see Mahiri Jabari 2004).

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 ex-

pectations of the new learning situation. Learners who have been to school come expecting the new learning programme to be either *like* school or *unlike* school; and some will have had *pleasing* experiences of school and some will have had *unpleasant* experiences. Thus these different experiences and expectations mean that learners bring to the new learning programme many different hopes and fears developed through their prior learning.

Figure 4: Matrix of expectations of formal and non-formal learning programmes



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 an on-going renegotiation of meaning and identities. Thus what the learner brings is not a set pat-

tern of belief and identity and fixed funds of knowledge and framework of meaning, but a continual 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 p 238).

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 significant, for a horizon moves with the person, yet at the same time it establishes a particular location and limits the person (for horizons in workplace learning, see Hodkinson et al 1996). 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 (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.

5.4 The interaction of informal and formal learning: four approaches

What then might be the reaction of those promoting and managing formal learning to these aspects of informal learning? There are, I suggest, four ways in which formal learning and informal learning can interact:

- a) using informal learning to assist and strengthen formal and non-formal learning
- b) using formal and non-formal learning to redress some of the unsocial outcomes of informal learning
- c) helping the learner to give recognition and value to their informal learning, making the unconscious conscious through meta-learning
- d) engaging in dialogic interaction between formal and informal learning

5.4.1 Using informal to assist formal and non-formal learning

As we have seen, 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 informal learning and its relation to formal learning. Means are being sought to assess whether informal learning can 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).

A curriculum shaped by the standardization of learning processes and contents – a ‘one size fits all’ approach – does not serve the needs of all learners, nor does it respond to the context of their lives. This is becoming increasingly obvious to a growing number of countries which are seeking alternative pathways within educational systems (UNESCO 2009b p 15)

Informal learning can assist in making the generalised (formal) learning more relevant to the different learners, applying the standardised concepts to particular situations. In recent years, the UK government has launched enquiries into ways in which informal learning can be pressed into service to help formal learning (e.g. DfEE 1998, 1999; BIS 2008; DIUS 2009).

5.4.2 Using formal and non-formal learning to redress informal learning

Secondly, and much more frequently, some learning sponsors, especially governments, are seeking ways to use formal learning to address issues raised by informal learning. For example, it is thought or hoped that the widespread and apparently growing apathy and even antipathy among many people, especially the young, to national political processes, which has been learned informally, can be redressed by formal or non-formal programmes on citizenship – although studies of digital practices suggest that political interest is growing in new on-line forms of political engagement, for example in environmental campaigns (Buckingham 2007). Equally, it is thought that unhealthy eating practices learned through commercial pressures and leading to expanding obesity can be remedied by formal nutrition and health courses; that drug use learned from peers can be unlearned from teachers; that learned smoking can be abolished or reduced substantially by standardised learning programmes; that violence and gang behaviours learned in the home or on the streets can be addressed by ‘personal and social education’ (PSE) in the classrooms; that inadequate parenting (seen as an *absence* of learning rather than as the learning of *different* concepts of parental normality) can be changed by parenting and home science lessons. Recently in the UK parliament, it was argued that what has been called ‘the pornification of childhood’ learned informally from the media and commercial activities could be coun-

tered through formal sex education in schools. But what governments and agencies rarely do is examine more closely **how** and **where** these un- or anti-social understandings, practices and values have been learned informally; and rarely do they seek to use informal learning to promote the development of new more socially desirable attitudes and activities.

Promoting unlearning: An example of the processes of unlearning and the implications for the teacher may be helpful here. My example comes from a Christian tradition but one which is widely observed among non-Christian communities – the Nativity celebrations often conducted in Western schools at the end of the autumn term just before Christmas. It is widely – even generally – held (and displayed visually and dramatically) that three kings from the East came to celebrate the birth of the Christ child, bringing with them gifts. But a formal learning institution may require the knowing subject to come to understand that there were not ‘three’ and that they were not ‘kings’ – and thus a learning programme may be launched to correct this inaccurate imagery.

The formal way to do this would be to use authoritative statements from the teacher: ‘they were not kings and there is no evidence there were three’. The learners would probably nod wisely and continue to talk about ‘three kings’; after all, that was what they had been taught since early childhood; that is what they see on Christmas cards and hear in the carols sung in the school, at church and in the streets. One (relatively small) formal authority against a much larger and long-lasting informal one will have little effect.

A more influential (non-formal) approach would be to direct the learners to the source of the story – the New Testament narrative. This merely talks about “certain wise men came from the east”. My guess is that most of the learners would again nod wisely but continue to talk about three kings – for one relatively unemotional authority in a non-formal learning programme against another in the home and in the community at large is likely to lead to compartmentalisation. The strong emotional context within which the story was originally learned and is being continually reinforced informally and unconsciously ensures its long-term survival.

A more productive approach would be to explore with the learners **how** the story changed over the centuries; how the Old Testament talked about “kings shall come from the east”, so the ‘wise men’ became ‘kings’; how the three gifts suggested that there were at least three travellers; how early representations of eastern magi showed them wearing headdresses which were later interpreted as crowns. A dialogic encounter, exploring with the learners the reasons behind the changes and the ways in which they learned about

three kings, in what circumstances and from whom, will make conscious the emotional content of this learning. In these circumstances, when called upon to sing, ‘We Three Kings from Orient are’, they will inwardly comment – ‘but we know better’!!

This is but a trivial example of some of the processes by which teaching (formal and non-formal) can directly engage with the powerful forces of informal learning, demonstrating that it is not possible with any effectiveness to put one layer of authority on top of an existing one. The example is however suggestive of some of the themes that need to be explored when using formal or non-formal learning to redress the effects of informal learning. Drug abuse and violence learned through everyday experience cannot be countered simply by applying new forms of authority in a different setting to counter the existing (informal, unconscious) learning; it will be necessary to assess and perhaps to use the same modes, settings and contents of the informal learning, including the affective elements (Lemke 2013). Such an approach will engage with the elements of unlearning, such as making the unconscious conscious, meta-learning, and the dialogic processes of valuing the existing learning. But it will involve considerable risk in the process.

And there is of course a socio-political danger here – of the powerful using not just formal and non-formal but also informal learning to impose its dominant views and practices on the less powerful. Only by making this process conscious and transparent can this danger be countered. So that it is important to give full recognition to informal learning, its values and limitations.

5.4.3 Giving recognition and value to informal learning

One important, indeed essential, step is for teachers to acknowledge the existence and the power of informal learning – and to help the students to recognise and to value their existing funds of knowledge, banks of skills, frames of reference, social imaginaries. Several writers, like Habermas, 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 [helping the learner] to see what [they] pre-understood through tradition in a different way and to evaluate it anew” (Bleicher 1980 p 184). The aim of such interventions is to help the learner to render the unconscious learning conscious (see Bakker et al 2006; Bjornavold 2000).

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 p 160). Building new learning on the individualised prior learning of each learner will question the standardised approaches of teaching and assessment in formal learning (Campbell 2007). For the learning outcomes will vary from individual student to individual student – drawing on their own prior learning, they will fulfil their own learning goals in different ways – and this will prevent general assessments being valid for all learners. If Mezirow with his transformation of existing frames of reference as a major component of learning is correct, then even in the most formal of learning programmes, the most standardised and generalised of courses seeking universal responses to the new learning material, there will be a myriad of learning outcomes as each learner adapts and at times transforms his/her pre-understanding, their individual funds of knowledge and banks of skills, and their individualised social imaginaries and Discourses as well as their meaning perspectives and schemes to the new material. Even in the most formal of learning programmes, informal learning will be taking part.

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). Like active learning, meta-learning “occurs when learners are simultaneously deeply engaged in learning and consciously reflecting on the learning process itself” (Jacobson p 65; for meta-cognition, see Bransford et al 2000). 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 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.

5.4.4 Promoting continual dialogic learning

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

formal culture determines 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 in many cases to draw upon the skills and knowledge they do not know they possess. Teachers and educational planners themselves need to become more aware of informal learning and what it achieves, and to help the learners to recognise their own tacit knowledge and skills. And this will mean that formal learning will need to be rethought in the light of informal learning.

5.5 Some questions for teachers

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

- since informal learning is the basis of all formal learning, the invisible part of the iceberg, 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 each one of them brings into the learning context? Just asking the learners will not of course be adequate, for much of their informal learning is unconscious or not defined as ‘learning’ – it will require more ethnographic approaches.
- in what ways can formal and non-formal learning *validate and promote* this informal learning? This would seem to call for increased meta-awareness of informal learning among both teachers and learners.
- how might we convince both learning providers and potential learners that their approach to learning should perhaps *be more informal* than much is today? Demonstrating the size and influence of the base of the iceberg will play some part here.
- what part has formal learning to play in *counteracting* some of the results of the very powerful and ubiquitous informal learning? – or perhaps more properly, what kinds of formal learning will most effectively address these issues? This will call for a re-examination of what is done in formal learning.

We need more research into informal everyday learning, the hidden part of the iceberg; and we need more dialogic encounter between formal and informal learning in the classrooms of today.

5.6 Summary

In this chapter, we have looked at the relationship between formal and non-formal learning on the one hand, and teaching, and at the similarities and differences between formal and non-formal learning. We noted that today the balance between formal and non-formal learning is changing – non-formal is becoming more important. Formal and non-formal are now more closely linked; it is informal learning that is still marginalised. In looking at the relationship between formal/non-formal learning and informal learning, we saw that both have values – but different values. Formal and non-formal tend to be more generalised, informal is always applied to (and limited to) specific situations. But formal and non-formal are still dominant in the politics of learning; we need to lay greater emphasis on informal learning, for from it spring the participants’ values, expectations, confidence and self-horizons. We suggested that there are four ways in which formal/non-formal learning and informal learning can relate:

- informal can be used to strengthen formal/non-formal learning;
- formal and non-formal learning can be used to redress some of the perceived anti-social effects of informal learning;
- formal/non-formal learning can help the learners to recognise and validate their unconscious informal learning (making the unconscious conscious through meta-learning);
- and finally in every educational encounter, formal/non-formal learning can enter into inter-cultural dialogue with informal learning.

Further Reading

- Alan Rogers and Naomi Horrocks 2010 *Teaching Adults* (fourth edition: Open University Press)
- P Hager and J Halliday 2009 *Recovering Informal Learning: wisdom, judgement and community* Dordrecht: Springer

D Schugurensky 2000 The forms of informal learning: towards a conceptualization of the field, NALL Working Paper 19
<https://tspace.library.utoronto.ca/bitstream/1807/2733/2/19formsofinformal.pdf>

Exercise 1

If you agree that informal learning forms the basis of all formal and non-formal learning, the invisible base of the iceberg, discuss *how we can find out* what kinds of learning our student-learners are already engaged in, what pre-understanding, funds of knowledge, frames of reference, social imaginaries each one of them brings into the learning context. What kind of ‘research’ do teachers need to do in relation to their students?

Exercise 2

If you agree that informal learning forms the basis of all formal and non-formal learning, the invisible base of the iceberg, discuss how formal and non-formal learning programmes can validate and promote this informal learning

Exercise 3

If you agree that informal learning forms the basis of all formal and non-formal learning, the invisible base of the iceberg, discuss what steps we can take to convince both learning providers and teachers that their approach to learning should perhaps be more informal than much is today?

Exercise 4

If you agree that formal and non-formal learning have the potential to redress some of the unsocial and antisocial outcomes of informal learning, what kinds of learning programmes will be needed to engage with the very powerful and ubiquitous informal learning?

Task 1

Try to develop the outlines of a training programme for teachers to help them understand the nature and value of informal learning for their teaching.

Task 2

Outline for yourself how your own practices in teaching and educational planning can be changed as a result of studying informal learning?

VI Conclusion: Does it matter?

6.1 Why is this discussion important?

It may (and indeed has been) argued that to stress informal everyday learning in this way is being pedantic; that it is taken for granted that everybody learns (in one sense) everyday, that for most people, ‘learning’ means intentional agentic learning, that if the learner is not conscious of engaging in learning, it is not really learning, that acquiring information and values from (for example) advertisements is not the same thing as learning something purposefully.

But the language we use, whether directly or in metaphors, expresses (as we have seen) the social imaginaries we hold, often unconsciously. And the language of lifelong learning today often uses the word ‘learners’ in a narrow restrictive sense. For instance, the motto of NIACE, the UK lead body for adult and lifelong education, is “working for more and different learners”. In this context, ‘learners’ means ‘participants in learning programmes’. Such a statement indicates that NIACE recognises that some people are non-participants in learning programmes, and by implication, these are stated to be ‘non-learners’; NIACE seeks to encourage them to become ‘learners’. Or to take a more extreme case: a recently released UNESCO video promoting the Global Monitoring Report 2013/4 starts with the words: “All across the world, 115 millions girls are doing no learning, either because they are not in school or the school they go to is inadequate”. Such words, heard by millions and coming from an authoritative source, confirms the view that all the learning those girls who are not in school are doing in their homes, in their communities, in their religion, in their occupations, in their family lives, does not count; it is not important, only the learning that goes on in school matters. We less frequently hear the term ‘non-learners’ today but it still survives in the sense of being ‘non-participants’ in learning programmes.

The argument used to defend this language is that the focus here is on ‘agency’ for learning; that the participants construct themselves self-consciously as ‘learners’ and that non-participants do not construct themselves as ‘learners’ – indeed, that they construct themselves as ‘non-learners’.

It is they who say that they have done no ‘learning’ since leaving school. For them too, like NIACE and UNESCO, ‘learning’ means participating in structured intentional and systematic learning programmes.

But that is precisely my argument; that although the non-participants *are* learners, they have come to believe what some educators have told them, and so they do not see what they are engaged in as learning. Their social imaginary of ‘learning’ excludes the day-to-day learning they do through their life’s experiences and instead accepts only structured learning programmes (both formal and non-formal) as ‘learning’. If we collude with them in this fiction, if we encourage them to believe that they are not learning simply because they are not participating in learning programmes of some kind or other, if we agree with them and others that they are not learners because they do not see themselves as learners, then we collude in their social imaginary of learning, with what Freire would call their ‘false consciousness’. We not only make our task of helping them to recognise and value the informal learning they are already doing unconsciously almost impossible; we are also acceding that such unconscious learning is not significant, that only intentional purposeful learning counts – despite the impact on formal learning of the informal learning we have absorbed unconsciously during the course of our lives, which determines what and how much we will learn intentionally and what we reject.

My focus here is on the *non-agentic* learning; and the language that focuses only on agentic learning leads to the confirmation of the assumptions that non-agentic learning is not important, that only participant learning counts, and that non-participants are not learners. This social imaginary, that there are people who do no learning, is both very strong and greatly damaging to our understanding of learning and education. Such an imaginary *ignores* all that everyday learning non-participants are already doing; or it *demeans* it, says it is not as important as the learning done in learning programmes; or it even *denies* informal learning exists (or suggests that it is not ‘learning’, merely ‘acquisition’).

To deny recognition and validation to everyday informal learning is not only harmful to our understanding of and approaches to *non-participants* (they are already learners, even if they do not recognise this); it is also very harmful to our approaches to those *who do participate* in learning programmes. For it does not give adequate recognition to the learning they are already doing, to their individualised pre-understanding, frames of reference, to their tacit funds of knowledge and banks of skills, their assumptions based on their social imaginaries and Discourses which they bring with them to the

learning programme. And all this will reduce the effectiveness of the formal and non-formal learning programmes in which we wish them to participate.

Stressing the importance of the informal (unconscious, everyday) learning is not being pedantic. It is calling for a new orientation, a new perspective, a new dialogue, and this will be expressed in a change of social imaginaries and Discourses. This is the end that any discussion of informal learning leads us to today – a change away from an exclusive focus on purposeful agentic participation in learning programmes to one which sees learning as including the unconscious, non-intentional and individually-inspired social activity which everyone does in the course of their everyday lives. Without informal learning, none of us would grow; and without the products of informal learning, none of our planned learning programmes would be effective.

Further Reading

Alan Rogers and Naomi Horrocks 2012 *Teaching Adults* (fourth edition) Open University Press

Exploring the Everyday available free on <http://www.nirantar.net/index.php/page/view/88>

(an excellent study of how to find out what adult learners bring to learning programmes)

Exercise

Take any (short) text relating to learning you know or are interested in, and

- a) underline the word ‘learning’ whenever it appears, and in each case ask what kind(s) of learning the author is talking about on that occasion, formal, non-formal or informal;
- b) underline the word ‘learner’ and in each case see if the word ‘participant’ would change the sense of the paper

Task

Read *Exploring the Everyday* as above, and develop a research project you as adult teacher would wish to use to find out what your students bring to your learning programme.

Bibliography

- Aarts S, Blower D, Burke R, Conlin E, Howell B, Howorth Carol Ebner, Lamarre Ignite, Van Kleef Joy 1999 *A Slice of the Iceberg: Cross-Canada Study of Prior Learning Assessment and Recognition* Canadian Institute for Recognizing Learning
- Aldridge F and Tuckett A 2007 The Road to Nowhere? *Adults Learning* 18 (9) pp 16-17
- Anderson J R, Reder L M and Simon H A 1996 Situated learning and education *Educational Researcher* vol 25 (4) pp 5-11
- Anderson J R, Reder L M and Simon H A 1997 Learning: situated versus cognitive perspectives, form versus substance *Educational Researcher* vol 26 (1) 18-21
- Angyal A 1941 *Foundations for a Science of Personality* New York Commonwealth Fund
- Apthorpe R and Gasper D 1996 *Arguing Development Policy: frames and discourses* Cass
- Arnseth H C and Silseth K 2013 Tracing learning and identity across sites: tensions, connections and transformations in and between everyday and institutional practices, in Erstad and Sefton-Green 2013 pp 23-38
- Aspin D, Chapman J, Hatton M, Sawano Y (eds) 2001 *International Handbook of Lifelong Learning* Kluwer
- Baars B J 1986 *The Cognitive Revolution in Psychology* New York: Guilford
- Badescu M and Saisana M.2008 *Participation in lifelong learning in Europe: what can be measured and compared?* Luxembourg, EU
- Bakker A, Hoyle C, Kent P and Noss R 2006 Improving work processes by making the invisible visible *Journal of Education and Work* 19 (4) pp 343-361
- Barr J1999 *Liberating Knowledge: Research, Feminism and Adult Education*. Leicester: NIACE.
- Barton, D 2007 *Literacy: an introduction to the ecology of written language* (2nd edn) Wiley
- Baumard F 1999 *Tacit Knowledge in Organizations* Sage
- Beckett D and Hager P 2002 *Life, Work and Learning: practice in post-modernity* Routledge
- Belanger P 2011 *Theories in Adult Learning and Education* Opladen: Barbara Budrich

- Bereiter C 1991 Implications of connectionism for thinking about rules, *Educational Researcher* 20 pp 10-16
- Bereiter C and Scardamalia M Re-thinking Learning, in Olson D R and Torrance N (eds) 1996, *Handbook of Education and Human Development: new models of learning, teaching and schooling* Blackwell
- Berg J 1994 Philosophical remarks on implicit knowledge and educational theory, in Tirosh 1994 pp 245-254
- Berger P L and Luckmann T 1967 *The social construction of reality: a treatise in the sociology of knowledge* Anchor
- Bernstein B 1996/2000 2nd edn *Pedagogy, Symbolic Control and Identity* Taylor and Francis
- Berry D C (ed) 1997 *How Implicit is Implicit Knowledge?* Oxford University Press
- Berry D C and Dienes Z 1993 *Implicit Learning: theoretical and empirical issues* Mahwah, N J: Erlbaum
- Biesta G 2004 Against learning: reclaiming a language for education in an age of learning, *Nordisk Pedagogik* vol 23 pp 70-82
- Biesta G 2006 *Beyond Learning: democratic education for a human future* Boulder: Paradigm
- Biesta G 2009 Good education in an age of measurement: on the need to reconnect with the question of purpose in education, *Educational Assessment, Evaluation and Accountability* vol 21 pp 33-46
- Billett S 2001 Learning through working life: interdependencies at work, *Studies in Continuing Education* vol 23 (1) pp 19-35
- Billett S 2002 Critiquing workplace learning discourses: participation and continuity at work *Studies in the Education of Adults* vol 34 (1) pp 56-67
- Billett S and Somerville M 2004 Transformations at work: identity and learning *Studies in Continuing Education* vol 26 (1) pp 309-326
- BIS 2008 *Informal Adult Learning: shaping the way ahead*, London: Department of Business, Innovation and Skills
- Bjornavold J 2000 *Making Learning Visible: identification, assessment and recognition of nonformal learning in Europe* Thessaloniki: CEDEFOP
- Bleicher J 1980 *Contemporary Hermeneutics: hermeneutics as method, philosophy, and critique* Routledge and Kegan Paul
- Boekaerts M 1999 Self-regulated learning: where we are today, *International Journal of Educational Research* 31 pp: 445-458
- Bourdieu P 1977 *Outline of a Theory of Practice* Cambridge University Press
- Bourdieu P 1990 *The Logic of Practice* Cambridge: Polity
- Bransford J D, Brown A L and Cocking R (eds) 2000 *How People Learn: brain, mind experience and school* Washington: National Academy Press
- Brookfield S D (ed) 1985 *Self-Directed Learning: From Theory to Practice* San Francisco: Jossey Bass.
- Brookfield S D 1986 *Understanding and Facilitating Adult Learning* Milton Keynes: Open University Press.

- Buckingham D (ed) 2007 *Youth, Identity and the Digital Media* Cambridge, MASS: John D and Catherine T MacArthur Foundation Series on Digital Media and Learning
- Bultmann R K 1985 *New Testament and mythology: and other basic writings by Rudolf Bultmann*, selected, edited, and translated by S M Ogden, SCM
- Campbell P (ed) 2007 *Measures of Success: assessment and accountability in Adult Basic Education* Edmonton: Grass Roots Press
- Campbell P and Burnaby B (eds) 2001 *Participatory Practices in Adult Education* Mahwah, New Jersey: Erlbaum
- Carter C 1997 *Recognising the Value of Informal Learning* Chelmsford: Learning from Experience Trust
- CERI: Dumont Hanna, Istance David and Benavides Francisco (eds) 2010 *The Nature of Learning: using research to inspire practice* OECD: CERI
- Chaiklin S and Lave J (eds) 1993 *Understanding practice: perspectives on activity and context* Cambridge University Press
- Chisholm L 2013 Learning lives in second modernity, in Erstad and Sefton-Green 2013, pp 70-86
- Coben D and Llorente J C 2003 Conceptualising Education for All in Latin America, *Compare* 33. 1 pp 101-113
- Coffield, F. 2000 The structure below the surface: reassessing the significance of informal learning, in F.Coffield (Ed) *The Necessity of Informal Learning*, Bristol: Policy Press.
- Coffield F, Moseley D, Hall E and Ecclestone K 2004 *Learning styles and pedagogy in post-16 learning: a systematic and critical review* London: Learning Skills Research Centre
- Cohen Y A 1971 The shaping of men's minds: adaptations to the imperatives of culture, in *Anthropological Perspectives on Education* edited by M. L. Wax, S. Diamond and F O Gearing, New York: Basic Books
- Colardyn D and Bjornavold J 2004 Validation of Formal, Non-formal and Informal Learning: policy and practices in EU Member States *European Journal of Education* 39 (1) pp: 69-89
- Colley H, Hodkinson P and Malcom J 2003 *Informality and formality in learning*, a report for the Learning and Skills Research Centre, Leeds: University of Leeds <http://www.LSRC.ac.uk>
- Collingswood R G 1946 *The idea of history* Oxford: Clarendon Press (and later editions)
- Corbett M 2007 *Learning to Leave: the irony of schooling in a coastal community* Halifax: Fernwood Publishing
- Corte E de 2010 Historical developments in the understanding of learning, in CERI 2010 pp 20-33
- Cranton P 1994 *Understanding and promoting transformative learning: a guide for educators of adults* Jossey Bass
- Croce B 1921 *History, its theory and practice* New York: Harcourt, Brace

- Cross K P 1981 *Adults as Learners* Jossey Bass
- Crush J S (ed) 1995 *Power of Development* London: Routledge
- Davies J G 1983 Subjectivity and objectivity in biblical exegesis *Bulletin of John Rylands Library* 66 (1) pp 44-53
- DfEE 1998 *The Learning Age: a renaissance for a new Britain* Sheffield: DfEE
- DfEE 1999 *Learning to Succeed: a new framework for post-16 learning* Sheffield: DfEE
- de Jong J A, Wienstra R F, Hermanussen J 2006 An exploration of the relationship between academic and experiential learning approaches in vocational education *British Journal of Educational Psychology* 76 (1) pp 155-69.
- Dewey J 1922 *Human Nature and Conduct* Carbondale: Southern Illinois University Press, 1983 edn
- Dewey J 1933 *How we think: a restatement of the relation of reflective thinking to the educative process* Boston, MA: Heath
- Dewey 1938 *Logic: the theory of inquiry* New York: Henry Holt (1948 edn)
- Dewey J 1940 *Education Today* ed J Ratner, New York: Putnam
- DIUS 2009 *The Learning Revolution: adult informal learning* London: Department of Industry, Universities and Skills
- Dore R 1976 *Diploma Disease* (1997 edn) London: Institute of Education
- Drotner K 2013 Processual methodologies and digital forms of learning, in Erstad and Sefton-Green 2013 pp 39-56
- Duke C 2001 Lifelong learning and tertiary education: the learning university, in Aspin et al 2001 pp 501-28
- EC 2001 Commission of the European Communities *Making a European Area of Lifelong Learning a Reality* Brussels COM(2001) 678 final
- Egetenmeyer R 2011 Difference through Cultural Contexts: informal learning in three European companies, *Andragogical Studies: Journal for the Study of Adult Education and Learning* 1 pp 71-86.
- Egetenmeyer R 2012 Informal Learning of managers in a multinational company in Germany, Great Britain and Spain: an intercultural comparison. 5th Conference of the International Society for Comparative Adult Education 3-6 November 2012, Las Vegas/USA. URL: <http://www.uni-bamberg.de/fileadmin/andragogik/08/andragogik/iscae/2012conf/papers/Egetenmeyer.pdf> accessed March 2014
- Eraut M 2000 Non-formal learning, implicit learning and tacit knowledge in professional work, in Coffield 2000:12-31; also as Non-formal learning and tacit knowledge in professional work, *British Journal of Educational Psychology* 70 (1) pp 113-136.
- Erstad O and Sefton-Green J (eds) 2013 *Identity, Community and Learning Lives in the Digital Age* Cambridge University Press
- Escobar A 1995 *Encountering Development: the making and unmaking of the Third World* Princeton University Press
- Evans K and Kersh N 2004 Recognition of tacit skills and knowledge : sustaining learning outcomes in workplace environments *Journal of Workplace Learning: employee counselling today* 16 (1/2) pp 63-74

- Evans N 1992 *Experiential Learning: its assessment and accreditation* Routledge
- Fairclough N 1989 *Language and Power* Longman
- Federighi P 1999 *Glossary of Adult Learning in Europe* UNESCO Institute of Education, Hamburg
- Fenwick J T 2000 Expanding Conceptions of Experiential Learning: a review of the five contemporary perspectives on cognition, *Adult Education Quarterly* 50 (4) pp 243-273
- Fenwick J T 2001 Experiential Learning: a theoretical critique from five perspectives *ERIC Information Series No. 385*
- Fenwick T 2010 Workplace learning and adult education: messy objects, blurry maps and making difference *European Journal for Research on the Education and Learning of Adults* 1 (1/2) pp 79-95
- Field J 2000 *Lifelong Learning and the new educational order* Stoke on Trent: Trentham
- Field J and Leicester M (eds) 2000 *Lifelong Learning: education across the lifespan* Taylor and Francis
- Foley G 1999 *Learning in Social Action: a contribution to understanding informal education* London: Zed Books
- Foucault M 1972 *The archaeology of knowledge and the discourse on language* NY: Pantheon
- Foucault M 1980 Two Lectures: 'Body/Power' and 'Truth and Power', in Gordon C (ed) *Michel Foucault: Power/Knowledge* Harvester
- Freire P 1972 *Pedagogy of the Oppressed* 1972
- Gadamer H G 1975 *Truth and Method* Sheed and Ward
- Garrick J 1998 *Informal Learning in the Workplace: unmasking human resource development* London: Routledge
- Gee J P 1990 *Social Linguistics and Literacies: ideology in discourse* Falmer Press: London and Philadelphia
- Gee J P 2005 *An Introduction to Discourse Analysis: theory and method* Routledge
- Gee J P (undated) Good Video Games and Good Learning, http://www.academiccolab.org/resources/documents/Good_Learning.pdf accessed 14 June 2013
- Gelman R 1994 Constructivism and supporting environments, in Tirosch 1994 pp- 55-82
- Gentner D and Stevens A L 1983 *Mental Models* Hillsdale, N J: Lawrence Erlbaum
- Gnahs D 2011 Competencies: How They Are Acquired and Measured http://www.die-bonn.de/cill/Dieter_Gnahs_Piaac.pdf, accessed March 2014
- Golding B 2011 Men's informal learning and wellbeing beyond the workplace, in Jackson 2011 pp 67-86
- Goodman, K 1996 Learning and Teaching Reading and Writing, in Goodman K 1996 *On Reading* Heinemann pp 117-125
- Gordon P and Holyoak K 1983 Implicit Learning and Generalisation, *Journal of Personality and Social Psychology* 45 pp 492-500
- GRALE 2013 *Second Global Report on Adult Learning and Education* Hamburg: UNESCO Institute of Lifelong Learning, <http://uil.unesco.org/en/home/>

- programme-areas/adult-learning-and-education/confintea-portal/global-report-on-adult-learning-and-education-grale/news-target/second-global-report-on-adult-learning-and-education-rethinking-literacy/858007e117b04ea94a71ac2a789d5ed7/ accessed February 2014
- Greenfield P 1984 Theory of teacher in the learning activities of everyday life, in Rogoff and Lave 1984
- Greeno J G 1997 On claims that answer the wrong questions *Educational Researcher* vol 26 (1) pp 5-17
- Grillo R and Stirrat R 1997 *Discourses of Development: anthropological perspectives* Oxford: Berg
- Gutierrez K D and Rogoff B 2003 Cultural ways of learning: individual traits or repertoires of practice, *Educational Researcher* vol 32 (5) pp 19-25
- Habermas J 1978 *Knowledge and Human Interests* Heinemann
- Hager P 2001 Lifelong learning and the contribution of informal learning, in Aspin et al 2001 pp 79-92
- Hager P 2004 The competence affair or why vocational education and training urgently needs a new 'understanding' of learning *Journal of Vocational Education and Training* 56 (4) pp 409-433
- Hager P and Halliday J 2009 *Recovering Informal Learning: wisdom, judgement and community* Dordrecht: Springer
- Hague C 2009 *A review of the current landscape of adult informal learning using digital technologies: general educators report* Bristol: FutureLab
- Hall S (ed) 1997 *Representation: cultural representations and signifying practices* Open University Press
- Hamilton M 2012 *Literacy and the Politics of Representation* Routledge
- Haskell R E 2001 *Transfer of Learning: cognition, instruction and reasoning* San Diego: Academic Press
- Haugsbakk G and Nordkvelle Y 2007 The rhetoric of ICT and the new language of learning: a critical analysis, *European Educational Research Journal* vol 6 (1) pp 1-12
- Heath S B 2012 *Words at Work and Play: Three Decades in Family and Community Life* Cambridge University Press
- Heath S B 2013 Social entrepreneurship: learning environments with exchange value, in Erstad and Sefton-Green 2013 pp 146-162
- Hillier Y 2011 Counting me in and getting on: the contribution of adult literacy and numeracy in informal and formal learning, in Jackson 2011 pp 142-161
- Hodkinson P, Biesta G and James D Understanding learning culturally: overcoming the dualism between social and individual views of learning, *Vocations and Learning* vol 1 (1) pp 27-47
- Hodkinson P and Hodkinson H 2003 Individuals, communities of practice and the policy context: *Studies in Continuing Education* vol 25 (1) pp 3-21
- Hodkinson P, Sparkes A C and Hodkinson H 1996 *Triumphs and Tears: young people, markets and the transition from school to work* London: David Fulton

- Huat C M and Kerry T (eds) 2008 *International Perspectives on Education Continuum*
- Illeris K 2002 *The Three Dimensions of Learning* Roskilde University Press
- Illeris K 2008 Lifelong learning as a psychological process, in *Routledge International Handbook of Lifelong Learning* 2008 edited by Peter Jarvis, London : Routledge pp. 401-410
- Imel S 2003 Informal Adult Learning and the Internet: Trends and Issues Alert 50, Columbus Ohio: ERIC
- Ivanic R 2009 Bringing literacy studies into research on learning across the curriculum, in Baynham M and Prinsloo M (eds) 2009 *The Future of Literacy Studies* Palgrave Macmillan pp 100-122
- Jackson S (ed) 2011 *Innovations in Lifelong Learning: critical perspectives on diversity, participation and vocational learning* Routledge
- Jackson S, Malcolm I and Thomas K (eds), 2011 *Gendered choices: Learning, work, identities in lifelong learning* Dordrecht, Springer
- Jacobson E 2012 *Adult Basic Education in the age of new literacies* Peter Lang,
- Jarvis P 1987 *Adult Learning in a Social Context* London: Croom Helm
- Jarvis P 1990 *An international dictionary of adult and continuing education* Routledge, 1990.
- Jeffrey C, P and R Jeffery 2008 *Degrees Without Freedom: education, masculinities and unemployment in North India* Stanford: Stanford University Press
- Jeffs T and Smith M 1990 *Using Informal Education* Milton Keynes: Open University Press
- Johnson-Laird P N 1983 *Mental Models: toward a cognitive science of language, inference and consciousness* Cambridge University Press
- Kalman J 2005 Mothers to daughters, *pueblo to ciudad*: women's identity shifts in the construction of a literate self, in Rogers A (ed) 2005 *Urban Literacy: communication, identity and learning in development contexts* Hamburg: UILL
- Kegan R 2000 What 'forms' transforms: a constructivist-development approach to transformative learning, in Mezirow et al 2000 pp 35-70
- Kirschner D and Whitson J (eds) 1997 *Situated Cognition: social, semiotic and psychological perspectives* Mahwah, NJ: Lawrence Erlbaum Associates
- Klahr D (ed) 1976 *Cognition and Instruction* Hillsdale, N J: Lawrence Erlbaum
- Kolb D A 1984 *Experiential Learning: experience as the source of learning and development* Englewood Cliffs, New Jersey: Prentice Hall
- Krashen S D 1982 *Principles and Practice in Second Language Acquisition* Oxford: Pergamon
- Krogh G von, Ichijo K and Nonaka I 2000 *Enabling knowledge creation: how to unlock the mystery of tacit knowledge and the release of the power of innovation*, Oxford University Press
- Kuhn T S 1970 *The Structure of Scientific Revolutions* University of Chicago Press
- Larsson S 1997 The meaning of lifelong learning, in S Walters (ed) 1997 *Globalization, Adult Education and Training: impacts and issues* Zed Books pp 250-261

- Latour, B., 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford UP.
- Lave J 1988 *Cognition in Practice: mind, maths and culture in everyday life* Cambridge: Cambridge University Press
- Lave Jean 1992 Learning as Participation in Communities of Practice <http://www.udel.edu/educ/whitson/897s05/files/Lave92.htm>
- Lave J and Holland D (eds) 2001 *History in Person: enduring struggles. contentious practice, intimate identities* New Mexico: School of American Research Press
- Lave J and Wenger E 1991 *Situated Learning: legitimate peripheral participation* Cambridge: Cambridge University Press
- Le Doeuff M 2003 *The Sex of Knowing* Routledge
- Lemke J L 2013 Thinking about feeling: affect across literacies and lives, in Erstad and Sefton-Green 2013 pp 57-69
- Livingstone D W 2001 Adults' informal learning: definitions, findings, gaps and future research, Toronto: OISE <http://www.nall.ca> accessed 12 January 2006
- Livingstone D 2002 *Mapping the iceberg*, NALL Working Paper 54, Toronto: OISE <http://www.nall.ca/res/54DavidLivingstone.pdf> accessed 27 January 2013
- Livingstone D (ed) 2010 *Lifelong Learning in Paid and Unpaid Work* Routledge
- Livingstone D and Scholtz A 2010 Work and learning in the computer era: basic survey findings, in Livingstone 2010 pp 15-55
- Longworth N and Davies W K 1996 *Lifelong Learning: new vision, new implications, new roles for people, organizations and nations* London: Kogan Page
- Lucas A M 1983 Scientific Literacy and Informal Learning, *Studies in Science Education* 10 pp: 1-36
- Mackey A and Gass S 2005 *Second Language Research: methodology and design* Mahwah, N J : Erlbaum
- Mahiri Jabari (ed) 2004 *What Kids Don't Learn in School: literacy in the lives of urban youth* New York: Peter Lang
- Mannheim K 1936 *Ideology and Utopia: an introduction to the sociology of knowledge* Routledge and Kegan Paul
- Marsick V J and Watkins K E 1990 *Informal and incidental learning in the workplace* Routledge
- Martin S 2010 Teachers using learning styles: caught between research and accountability? *Teaching and Teacher Education* 26 pp 1583-1591
- Mason L 2007 Bridging the cognitive and sociocultural approaches in research on conceptual change: is it feasible? *Educational Psychologist* vol 42 (1) pp 1-7
- Mayo M 2005 *Global Citizens: social movements and the challenge of globalization* London: Zed Books
- McGivney V 1999 *Informal Learning in the Community* Leicester: NIACE
- Merriam S B and Cafarella R S 1999 *Learning in Adulthood: a comprehensive guide* Jossey Bass
- Meyer H S and Benavot A 2013 *PISA, Power and Policy: the emergence of global educational governance* Symposium

- Mezirow J 1991 *Transformative Dimensions of Adult Learning* Jossey Bass
- Mezirow J and Associates 2000 *Learning as Transformation: critical perspectives on a theory in progress* Jossey Bass
- Miller J 1990 *Seductions: studies in reading and culture* Virago Press
- Mughal F 2011 Experiential Learning from a Constructivist Perspective: Reconceptualizing the Kolbian Cycle, *International Journal of Learning and Development* 1 (2) pp 27-37
- Moll L, Amanti C, Neff D and Gonzalez N 1992 Funds of knowledge for teaching: using a qualitative approach to connect homes and classrooms, *Theory into Practice* 31 (2) pp 3-9
- Moll L C, Amanti C, Neff D and Gonzales N 2005 Funds of Knowledge for teaching: using a qualitative approach to connect homes and classrooms, in Gonzales N, Moll L C and Amanti C (eds) *Funds of Knowledge: theorizing practices in households, communities and classrooms*, Mahwah: Erlbaum pp 71-87
- Nabi R, Rogers A and Street B et al 2009 *Hidden Literacies* available at http://www.balid.org.uk/wp-content/uploads/2012/12/HiddenLiteracies_all_02.pdf
- Nirantar 2007 *Exploring the Everyday* available on <http://www.nirantar.net/index.php/page/view/88>
- Overwien B 2005 Informal learning and the role of social movements, in Singh Madhu (ed) 2005 *Meeting Basic Learning Needs in the Informal Sector* Heidelberg: Springer
- Parr J 1989 Jesus and the liberation of the poor, unpublished PhD thesis, University of Sheffield
- Pashler H, McDaniel M, Rohrer D and Bjork R 2009 Learning Styles: concepts and evidence *Psychological Science in the Public Interest* 9 (3) pp 105–119
- Polanyi M 1958 *Personal Knowledge: towards a post-critical philosophy* Routledge and Kegan Paul (and later editions)
- Polanyi M 1967 (reprint 1983) *The Tacit Dimension* New York: Doubleday
- Popper K R 1972 *Objective Knowledge: an evolutionary approach* Clarendon
- Reber A 1993 *Implicit Learning and Tacit Knowledge: an essay on the cognitive unconscious* Oxford University Press
- Reed M S, Evelyn A C, Cundill G, Fazey I, Glass J, Laing A, Newig J, Parrish B, Prell C, Raymond C and Stringer L C 2010 What is social learning? *Ecology and Society* 15 (4) <http://www.ecologyandsociety.org/vol15/iss4/resp1/> accessed February 2014
- Resnick L B (ed) 1989 *Knowing, learning and instruction* Hillsdale: Erlbaum
- Reynolds M 1997 Learning styles: a critique, *Management Learning* 28 (2) pp 115-133
- Richardson L D and Wolfe M (eds) 2001 *Principles and Practice of Informal Education: learning through life* RoutledgeFalmer
- Rickman H P (ed) 1961 *Meaning in history: E. Dilthey's thoughts on history and society* Allen and Unwin
- Ricoeur P 1963 *History and Truth* Evanston: Northwestern University Press
- Robinson-Pant A 2001 Development as discourse: what relevance to education? *Compare* 13 (3) pp 311-328

- Rogers A 1993 Adult learning maps and the teaching process *Studies in the Education of Adults* 25 (2) pp 199-220
- Rogers A 1997 Learning: can we change the discourse? *Adults Learning* Vol. 8, no 5 Jan 1997 pp 116-117
- Rogers A 2003 *What is the Difference? A new critique to adult learning and teaching* Leicester: NIACE
- Rogers A 2004 *Nonformal Education: flexible schooling or participatory education* Hong Kong: University of Hong Kong, and Dordrecht: Kluwer
- Rogers A and Horrocks N 2010 *Teaching Adults* Fourth edition, Open University Press
- Rogers A and Street B 2012 *Adult Literacy in Development: stories from the field* Leicester: NIACE
- Rogoff B and Lave J (eds) 1984 *Everyday cognition: its development in social context* Cambridge, Mass: Harvard University Press
- Rose M 2004 *The Mind at Work: valuing the intelligence of the American worker* New York: Viking Books
- Sadler-Smith E 2001 A reply to Reynold's critique of learning style, *Management Learning* 32 (3) pp 291-304
- Said E 1977 *Orientalism* London: Penguin
- Sallis E and Jones G 2002 *Knowledge Management in Education: enhancing learning and education* Kogan Page
- Santos I M and Ali N 2012 Exploring the uses of mobile phones to support informal learning, *Education and Information Technologies* 17 pp 187–203
- Schön D 1983 *The Reflective Practitioner: how professionals think in action* New York: Basic Books.
- Schugurensky D 2000 The forms of informal learning: towards a conceptualization of the field, NALL Working Paper 19 <https://tspace.library.utoronto.ca/bitstream/1807/2733/2/19formsofinformal.pdf> accessed February 2013
- Schugurensky D 2007 "This is our school of citizenship": informal learning in local democracy, in *Learning in places: the informal education reader* edited by Berkerman Z, Burbules N C and Keller D S , NY: Peter Lang, pp 163-182
- Schuler T and Watson D 2009 *Learning Through Life: report of the Inquiry into the Future of Lifelong Learning* Leicester: NIACE
- Scribner S and Cole M 1973 Cognitive consequences of formal and informal education *Science* 182 (4112) pp 553-559
- Sefton-Green J and Erstad O 2013 Identity, Community and Learning Lives in the Digital Age, in Erstad and Sefton-Green 2013 pp 1-21
- Sfard A 1998 On two metaphors for learning and the dangers of choosing just one, *Educational Researcher* vol 27 (2) pp 4-13 http://www.colorado.edu/physics/phys4810/phys4810_fa08/4810_readings/Sfard.pdf accessed February 2014
- Smith M K 2002 Informal and non-formal education, colonialism and development, www.infed.org accessed 10 January 2006
- Solomon J (ed) 2003 *The passion to learn. An inquiry into autodidacticism*, Routledge-Falmer

- Stich S P 1983 *From Folk Psychology to cognitive science: the case against belief* Cambridge, MA: MIT Press
- Straka G A 2004 Informal learning: genealogy, concepts, antagonisms and questions http://unip-et.org/fileadmin/Download/publikationen/forschungsberichte/fb_15_04.pdf, accessed March 2014
- Street B V 2000 Literacy 'Events' and Literacy 'Practices': theory and practice in the 'New Literacy Studies', in K Jones and M Martin-Jones (eds) 2000 *Multilingual Literacies: Comparative Perspectives on Research and Practice* John Benjamin's; Amsterdam pp 17-29
- Swann J 2012 *Learning, Teaching and Education Research in the 21st Century: an evolutionary analysis of the role of teachers* Continuum
- Taylor C 2004 *Modern Social Imaginaries* Durham, North Carolina: Duke University Press
- Taylor E W 1998 *Theory and Practice of Transformative Learning: a critical review* Columbus: ERIC
- Thompson J 2002 *Bread and Roses: Arts, Culture and Lifelong Learning*, Leicester: NIACE
- Tirosh D (ed) 1994 *Implicit and Explicit Knowledge: an educational approach* Norwood, N.J.: Ablex
- Tough A 1979 *Adults Learning Projects* Toronto: Learning Concepts
- Turner G 1975 Pre-understanding and New Testament understanding *Scottish Journal of Theology* 28 (3) pp 227-242
- UNESCO 2009a *Global Report on Adult Learning and Education*, Hamburg: UILL
- UNESCO 2009b *World Report on Investing in Cultural Diversity and Intercultural Dialogue* Executive Summary
- Visser J 2001 Integrity, completeness and comprehensiveness of the learning environment: meeting the basic learning needs of all throughout life, in Aspin et al 2001 pp: 473-500
- Wals A E J (ed) 2007 *Social learning: towards a sustainable world: principles, perspectives and praxis* Wageningen: Wageningen Academic Publishers
- Weil S W and McGill I 1989 *Making Sense of Experiential Learning: diversity in theory and practice* Buckingham: Open University Press
- Welton M 1993 Social revolutionary learning: the new social movements as learning sites, *Adult Education Quarterly* 43 (3) pp 152-164.
- Wenger E 1998 *Communities of practice: learning, meaning, and identity* Cambridge: Cambridge University Press
- Werquin P 2007 *Recognising Nonformal and Informal Learning: outcomes, policies and practices* OECD
- Wienstra R F A and de Jong J A 2002 A scaling theoretical evaluation of Kolb's learning style inventory, in Valcke M and Gombair D (eds) *Learning styles: Reliability and validity*, pp 431-440.
- Williams Raymond 1993 Culture is ordinary, in J McIlroy and S Westwood (eds) 1993 *Border Country: Raymond Williams in adult education* Leicester: NIACE

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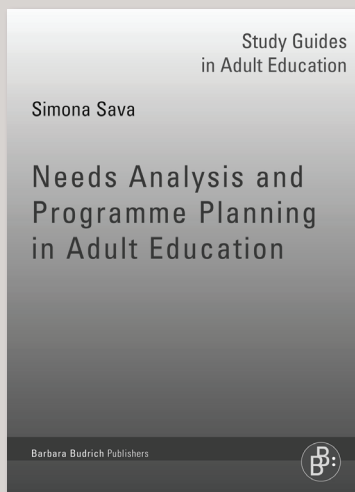
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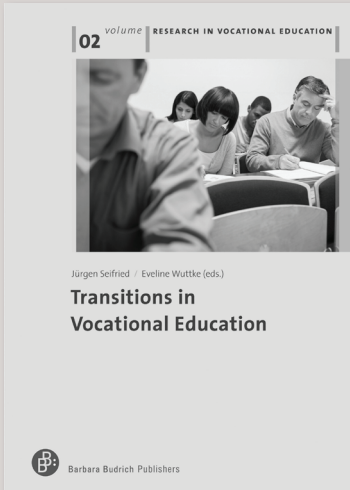


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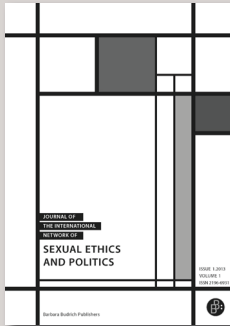
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