

# THE IMPORTANCE OF CONTEXT AND JUDGEMENT IN LEARNING

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## **Introduction**

Recent interest in informal learning and work-based learning, within the ideas of a learning society and lifelong learning, has drawn attention to the importance of judgement and context to learning in general. Systems for assessing work-based learning and accrediting it are now widespread. Examples include the UK National Vocational Qualifications framework and the Australian Qualifications Framework. In both cases, the aim is recognise worthwhile learning from whatever source. For the first time, such frameworks give informal learning and work-based learning equal status with formal qualifications. As well as these more general frameworks, there are increasing instances of informal work-based learning being valued and recognised within specific occupations. For example in Australia there has been a major development in the provision of legal services whereby solicitors can gain accreditation as a specialist in a range of areas. This scheme involves the assessment of learning that could only be acquired by an extended period of successful practice (Gonczi et al. 1994).

The designers of some of these assessment systems claim that qualifications at the highest levels are equivalent to graduate and postgraduate qualifications. Reflecting this, some universities have begun to award degrees on the basis of performance in the workplace rather than on the basis of what might be termed academic performance. Work-based learning degrees are a new mode of mounting university study in which work carried out in the student's job becomes a main basis of the curriculum (Boud & Solomon 2001). Typically students follow a learning plan that derives from their own needs as well as those of the workplace. This plan is negotiated between the student, the employer and the university staff. Thus each student follows a unique learning plan. Learning occurs mostly from workplace projects and the learning outcomes are assessed by university staff against levels and standards that are necessarily transdisciplinary. As well, the level of the award is usually determined by the nature of the learning undertaken and the level of the learner's current competence, rather than by the nature of their existing formal paper qualifications. Clearly, work-based learning degrees are giving academic recognition to types of learning that fall outside of the traditional domain of academic learning.

Another related development in higher education is the proliferation of professional doctorates in such diverse areas as law, education, business, design, and engineering. Unlike the doctor of philosophy degree, which aims to cater for neophyte researchers, these professional doctorates are aimed at successful senior practitioners. Whereas the doctor of philosophy focuses on advancing knowledge ('pure' research), the professional doctorate aims to apply knowledge to the improvement of practice (see, e.g., Brennan 1998). While such distinctions can be debated, the common requirement for admission to professional doctorates, that candidates have significant professional practice experience, does recognise

the importance of the substantial work-based learning that has occurred during the successful practice of an occupation. Other developments such as the British University for Industry support the idea that work-based learning can be at least equivalent to formal learning in colleges and universities, and may even suggest that the former type of learning can be superior in a sense to the latter.

Overall, these sorts of developments represent a wide recognition that much important learning occurs informally, and that such learning is too often disregarded in favour of that which the academy validates. From what has been said so far, a dualism between academic and non-academic might be thought to underpin all these developments and interests. In the first part of the paper we examine and reject this false dualism. We define non-academic learning as that which takes place without the stated purposes of formal educational institutions. We reject the idea that learning is basically a mental process and the related idea that the acquisition of concepts is the forming of a mental state.

We point out that one very common basis for drawing a distinction between academic and non-academic learning is that the former type of learning is seen to focus on propositional knowledge, with the context in which the knowledge is applied appearing to be relatively unimportant. Whereas non-academic learning is more concerned with judgements that are contextually sensitive. For example academic learning is often assessed by asking students to write in an approved way in a context – the examination hall – that is relatively stable, predictable and unimportant to the writing. Other types of learning are often best assessed over a longer period of time during which the learner has opportunities to show how she makes judgements that are sensitive to a wide-range of contexts that are much less predictable, for example in performance of her work.

However, we go on in the first section of the paper to argue that this distinction between academic and non-academic learning is a false dualism - appearances to the contrary are deceptive! We claim that all learning involves knowing and judging with ever increasing contextual sensitivity and that examination halls, hairdressing salons, joiner's workshops and even production lines require context sensitivity in making judgements about how to act. Our arguments here are expanded as the paper progresses both by a series of examples and by a developing discussion of learning centred on the work of Dewey and MacIntyre. In the second section we begin to explicate the meaning of context. This is done by a detailed consideration of the role of contextuality in Dewey's account of learning. It is precisely because of the contextuality of learning that, in Dewey's work, means and ends are not strictly separable.

The third section of the paper continues the examination of context. We look at the relationship between judgement, activity, practice and tradition. We show how these concepts are nested to denote aspects of context. The nested and competing series of notions that this argument suggests are illustrated with reference to MacIntyre's moral theory. We criticise MacIntyre's theory on Deweyan grounds and modify it to suggest a theory of workplace learning which helps to conceptualise the choices that designers of workplace curricula face. This demonstration enables us, by the end of the paper, to say something about the issue of transferability of learning between contexts. For example we try to answer the question of the extent to which a trained hairdresser has to learn afresh her practice when she begins work in a new salon in a different part of the world from where she was trained, or even when moving to a salon within her own country that has a very different approach to the business of hairdressing.

The fourth section of the paper concludes the discussion by drawing out the implications of our argument for the future development of schemes to recognise the importance of non-academic learning. We reject the idea that this sort of learning is necessarily less valuable than academic learning, but attempt to explicate how it may be both enriched and distorted by what might be called academic values. In essence we conclude that the use of standard tools of pen and paper within academic practices allows the social embeddedness of a form of their accreditation that tends to mask the significance of action using other sorts of tools. In contrast the accreditation of learning at work involves tools and contexts that are far more varied, making such accreditation necessarily less reliable and valid than its academic counterpart. Moreover insofar as such learning ought to be encouraged, we conclude that there is an inevitable tension between valuing reliable practice within one context and potential for good practice in another. Ultimately this tension is not resolvable exclusively with reference to learning or economic theory but must include political theory that relates learning to work in creative new ways. Overall, we suggest that learning may usefully be considered as the development of a capacity for judgement. Such development depends crucially upon the context within which the judgement is made.

### **1. Learning, assessing and living – genealogy of learning**

It is important to recognise, amid recent talk of learning societies, learning cultures, lifelong learning and learning organisations, that it is not necessarily helpful to draw a distinction between learning and living. It is also important to recognise, amid growing talk of the credential society, accreditation of prior learning, accreditation of experiential prior learning and accreditation of work-based learning, that assessment too is part of living. Thus it is normal to learn and assess in the course of living. Such learning and assessment might be called informal learning and assessment.

It is not at all obvious that the formalisation within educational institutions of what was previously informal is a good thing. It is worth remembering that people did all kinds of imaginative, useful and beautiful things long before there was talk of the sort referred to above. Great bridges, cathedrals, houses, songs and so on came into existence long before it was fashionable to distinguish between work, living and learning in so sharp a way as is the case now. It is also worth remembering that such enduring creations were not products of the applications of theories, the purported precision of which guaranteed excellence in practice.

Despite this, the influence of technical rationality within educational institutions remains strong. According to Altrichter, Posch & Somekh (1993), the three main assumptions of technical rationality are:

- There are general solutions to practical problems.
- These solutions can be developed outside practical situations (in research or administrative centres).
- The solutions can be translated into practitioners' actions by means of publications, training, administrative orders, etc.

Based on these assumptions, the main business of educational institutions becomes the development, transmission and certification of such general theoretical knowledge. The pervasive influence of technical rationality in education is clear from the almost universal practice of requiring students to solve problems of a particular kind within a discipline until they can consistently gain the right answers. They are then moved on to the next kind of problem, and so on. The tacit messages here are that all problems come clear-cut, that they fit

within distinct disciplines, and that they have correct answers.

We will not here delve into the various dimensions on which problems can be more complex than this (see Beckett & Hager 2001, Ch. 7). However, we reject the implicit rationalism in the theory guiding practice view of work and stress the importance of making good judgement at work and elsewhere. Such judgements cannot nor need not be precise however in the ways implied by the rationalistic view. In this paper we suggest that the apparent need for precision arises out of a mistaken view that academic learning is a paradigm for all other forms of learning. For us there is no paradigmatic form of learning, merely indications of value. These judgements at work are typically fallible, thereby departing from the 'single correct answer' rationalism assumed by technical rationality. Nevertheless, productive work proceeds on these less than secure foundations. We still cross bridges without undue worry that they are going to fall down (Hager 2000, p. 59).

Nevertheless academic learning defined as learning to talk and write in particular ways has become well established and the procedures through which such learning is assessed have become somewhat ritualised in written and, less commonly, oral examination. Such learning has come to colonise the discourse of learning to such an extent that any other sort of learning, such as that associated with living or working, is hardly recognised. Increasingly however governments and individuals have come to realise that privileging just academic learning tends to discourage participation in all those practices that are so important in the functioning of a well-ordered society – plumbing, building, cleaning, and a range of other practices that form the prime focus of different sorts of work. There has been something of a reaction then against the academic in favour of what is termed the vocational and an increasing interest in how the latter can be best encouraged.

All of this raises much wider issues concerned with what Dewey termed the false dualism between the vocational and the liberal, the prime educational purposes of learning and the type of society within which people want to live. While it is not possible to write a paper on the nature of non-academic learning without implying some account of these wider issues, we concentrate our attention on the relationship between non-academic learning, judgement and context. As both of us have argued in different places (Beckett & Hager 2001, Halliday 1996), this false dualism between the vocational and the liberal gives rise to a curriculum that is a travesty of the proper relationship between practice that is linked directly to some monetary reward and practice that is not.

## **2. Dewey's account of learning and its inherent contextuality**

Dewey provides a holistic account of learning which focuses on the whole person. For Dewey (1916, Ch. 11) learning is coterminous with doing and thinking, so that thinking becomes a kind of experience, the basis of the meaning and significance of our experiences. Learners bring to experience certain habits which include a pre-cognitive background of presuppositions and expectations and certain emotional and other attachments. Dewey draws attention to a distinction between learning as a process and learning as a product. He denies that this distinction is in any way ultimate. Rather the two influence and shape one another (as our later discussion of Dewey's conception of the means-consequence dialectic will show). He argues that the latter (product) sense has come to dominate the meaning normally attributable to learning, such that learning is likened to a kind of mental state – that of understanding or knowing. The former (process) sense however implies that learning is a lifelong process and that it is part of living. Dewey sets out conditions for learning as follows: ..... they are first that the pupil have a genuine situation of experience - that there be a

continuous activity in which he is interested for its own sake; secondly, that a genuine problem develop within this situation as a stimulus to thought; third, that he possess the information and make the observations needed to deal with it; fourth, that suggested solutions occur to him which he shall be responsible for developing in an orderly way; fifth, that he have opportunity and occasion to test his ideas by application, to make their meaning clear and to discover for himself their validity.

(Dewey 1916, p. 163)

The solution becomes part of the learner's expectations and she moves on. Significant learning therefore is determined by the degree of sensitivity to context that leads learners to discern an experience as problematic in a way that will facilitate their educative growth. That does not mean that the most productive learners discern all experiences as problematic. Nowhere is this more obvious than in some workplaces where it would simply display a lack of contextual sensitivity to deliberate and refine tentative solutions to potential problems so that nothing else got done. Rather many workers are currently expected simply to act and not to engage in the kind of reflective thinking that would make work a source of productive learning.

Dewey is well aware that much work is alienating in the sense outlined above and that unless workers see the social and political point of their work and the ideas that underpin it, then the educative potential of experience at work is negated. Even in a situation, in which workers do see such points, there remains occasions when it is simply appropriate just to act, perhaps reflecting on that action on some future occasion. Judgement in such situations is crucial but the judgement can never be related only to practice at work. Rather it must be related to and informed by some overall account of purpose and intention in which there will be competing claims on the learner's attention. Moreover those claims may be seen to originate in practices that are not obviously related to work at all Dewey's predilection for "occupation as becoming" and the importance of productive learning at work finds a resonance in more recent writers. According to Standing (1999, p. 3), work is rounded activity combining creative, conceptual and analytical thinking and use of manual aptitudes - the *vita activa* of human existence..... Work involves an individual element and a social element, an interaction with objects - raw materials, tools, 'inputs', etc. - and an interaction with people and institutions.

Standing goes on to contrast labour sharply with work: "Labour is arduous - perhaps *alienated work* - and epistemologically it conveys a sense of 'pain' - *animal laborans*." (1999, p. 4). Thus, for Standing, labour is "activity done under some duress, and some sense of *control* by others or by institutions or by technology, or more likely by a combination of all three."

The economic rationalist labour market policies that have dominated Western countries in recent decades treat individuals as mere economic units ('labour'), rather than as "aspirants with personal and professional goals" (Waterhouse et al. 1999, p. 22). For economists, labour is merely that which is expended in production. The alienation associated with labour reflects an impoverished work context "..... that uses only a narrow range of physical or mental attributes, or that restricts the development or renewal of physical, intellectual or psychological capacities ....." (Standing 1999, p. 7). Whereas the complex set of relationships that characterise work on Standing's account quoted above, require a rich and varying context. So for those like Dewey and Standing who support an understanding of work as creative action that is productive of human growth and development, it will be necessary to develop a fuller account of context.

So far in this paper, we have maintained that all learning involves knowing and judging with ever increasing contextual sensitivity. Since for us the development of contextual sensitivity is a central part of learning, we need to consider what the important features of context are, and how they are related to practices in which the learner has an interest. We will start by considering the role of context in Dewey's work. The key importance of context for Dewey can be appreciated further by considerations relating to what he called "*the philosophic fallacy*". He characterised this fallacy in *Experience and Nature* as "the conversion of eventual functions into antecedent existence" (Dewey 1925, p. 34). As Garrison expresses it: "The greatest philosophical errors arise from confusing the *consequences* of linguistic meaning making and logical inquiry with *antecedent* metaphysical existence" (1999, p. 291-2). For Dewey, knowledge and inferences are the "eventual functions" of inquiry. As such they 'bear the marks' of the processes by which they were produced. Hence, they cannot be timeless, perfect forms or some such. This means that the product/process dualism is dissolved since the process inescapably shapes features of the product.

Dewey later expanded his account of the philosophic fallacy by characterising it as the "neglect of context" (Garrison 1999, p. 292, Tiles 1988, p. 21), that is, committing the philosophic fallacy involves ignoring part of what is needed to understand a phenomenon, namely its context. Something like this happens when we analyse a phenomenon, such as reasoning, into various components as we attempt to understand, improve and predict it. The danger is that mere conceptual distinctions, which Dewey accepts are useful for enhancing understanding, become concretised into fixed dualisms, which create delusion. For instance the Aristotelian rigid separation of theoretical and practical reasoning leads to the two being viewed as distinct entities. According to Dewey, the result is that

[r]easonableness or rationality has ..... been hypostatized. One of the oldest and most enduring traditions in logical theory has converted rationality into a faculty which, when it is actualised in perception of first truths, was called *reason*....  
(Dewey 1938, p. 18)

This hypostatisation creates the problem of how, when attempting to understand and explain a holistic phenomenon like practice, the various hypostatized parts might relate to one another. A common strategy is to attempt to explain the phenomenon solely in terms of the most favoured of the parts. This results in thin, implausible accounts, such as 'practice as application of theory'. But for Dewey this difficulty is due to neglect of the context in which the original phenomenon occurred. Quite simply, the parts devoid of the context will not add up to the original phenomenon. Thus Dewey offers a different way of understanding reasoning and its role in human action in the world. As Garrison puts it

For Dewey, all reason is practical reason; he denied the existence of a realm apart from human action wherein we might complete the quest for certainty and find eternal rest.

(Garrison 1999, p. 294)

The holism and contextuality of a Deweyan approach can be summarised as follows:

Reason itself is a contextual achievement according to Dewey who writes: 'For reason, let it be repeated is an outcome, a function, not a primitive force.' ..... The meaning of reason itself is something that emerges and continuously evolves in the process of conducting inquiries. Reason evolves much as species evolve....

(Garrison 1999, p. 306)

According to Tiles, Dewey takes a distinctive approach to context reflecting a different attitude to the parts and wholes found in reality and ... a correspondingly different method. Dewey always starts with the inclusive and the connected, and considers the process of differentiation. His opponents assume the task is to assemble wholes out of isolated elements. (Tiles 1988, p. 22).

In short, Dewey starts with context, others tend to ignore it.

We may rephrase Dewey's theory of learning as follows: For Dewey, inquiry is initiated by the disruption of an habitual function, i.e. inquiry is set in train by the individual being put into a state of physiological need from which it needs relief. (This contrasts with traditional educational thought in which inquiry is the outcome of an intellectual puzzle or cognitive doubt). So for Dewey all inquiry is contextual in that it "is controlled, in part, by the constraints placed upon the inquiry by the context (situation) it seeks to ameliorate." (Garrison 1999, p. 293). Thus "inquiry is always practical reasoning that seeks means for securing desirable consequences in a given context." (ibid). This leads to Dewey's definition of rationality:

Reasonableness or rationality is .... an affair of the relation of means and consequences. .... Rationality as an abstract conception is precisely the generalised idea of the means-consequence relation as such.

(Dewey 1938, p. 17)

It follows that for Dewey "[a]ll reasoning is practical means-end reasoning, or contributes to it ...." (Garrison 1999, p. 291).

If means-consequence reasoning is at the heart of Dewey's practical reasoning, the desirable end or consequence is a return to a state of smooth habitual functioning such as preceded the triggering of the inquiry. However it needs to be stressed that for Dewey means-ends or means-consequences are not so readily separable:

Ends always *emerge* in the course of inquiry. Means are indistinguishable from the end in a given context until the process of inquiry is complete.... (Garrison 1999, p. 295).

So ends should not be accorded the transcendental status accorded them in much traditional metaphysics. Rather ends are contextual and revisable, apt to transmute into means for redirecting action. To capture this continuity between means and ends, Dewey introduces the notion of "ends-in-view" (e.g. Dewey 1925, p. 88ff.). Ends-in-view are distinguished from ends in that they "are foreseen consequences that pre-interpret events and provide possibility. They allow us to act intelligently in the present." But while guiding present action they

"require constant reinterpretation" (Garrison 1999, p. 296). However, once "achieved, ends-in-view become means or 'pivots', for directing, and redirecting, further action; they provide new beginnings.... Ends-in-view are the pivots or fulcrums for creative redirection *within* action" (Garrison 1999, p. 296). The basis for Dewey's denial of any ultimate distinction between the processes and products of learning should by now be clear.

### **Further elaboration of the notion of context**

Dewey (1933, p. 280) draws attention to the distinction between implicit and explicit context. Explicit context refers to those features of experience that all learners recognise. Implicit context refers to those assumptions that learners have taken for granted, but which might be problematic. For Dewey, implicit context is the more important. He writes:

a person in pursuing a consecutive train of thoughts takes some system of ideas for granted ... Some context, some situation, some controlling purpose dominates his explicit ideas. ... Yet the fact that reflection originates in a problem makes it necessary at some points to inspect and examine this familiar background. We have to turn upon some unconscious assumption and make it explicit (Dewey 1933, p. 281)

Beckett and Hager (2001, p. 294) set out what they consider to be four dimensions of explicit context as follows:

The specific combination of features that characterise any workplace situation at a given time ...  
The changeability over time that characterises any workplace situation...  
The social forces that shape perceptions of and responses to workplace situations  
...  
The integration of the personal characteristics that together constitute humans' responses to workplace situations.

Beckett (1996) explicates the episodic dimension of context in a way that is helpful. He notes, along with Eraut, that the Schonian notion of reflection is problematic and that it is simply incorrect to suggest that judgements are always based on reflection on possibilities for achieving some end in view. He distinguishes between the episodic and sub-episodic nature of judgement and concludes that what he calls 'hot action' involves anticipation rather than reflection. We are not entirely convinced that this distinction is as helpful as Beckett seems to believe it is. What Beckett calls 'feedforwardness' is no more than the acknowledgement of Dewey's and Aristotle's point that judgement involves the modification of ends and means in ways in which it is not always helpful to differentiate between the two. We agree with Beckett however that the selection of 'ends in view' is related to the time frame within which an activity is interpreted. A flick of a wrist may be an unnoticed part of a particular medical operation, surgical practice in general or the projected narrative unity of the surgeon's life depending upon the time frame within which the flick is interpreted and the interests of the interpreter. It is not possible to set out in the abstract the features of context that will or will not be relevant at any time.

Searle (1995) notes the importance of function to consideration of context. For him, context is always a part of a system through which teleology is assigned. For example the context of work is always in part understandable with reference to an assigned purpose of earning money. The context of joinery is always in part understandable with reference to an assigned



purpose such as hanging a door. The function the joiner assigns to a hinge is not necessarily the same function as a cleaner assigns to the hinge. Indeed the cleaner might not notice the hinge at all. The assignation of function is dependent upon some wider notion or system within which the function has meaning. A similar point may be made about intentionality. Intentions are only understandable against a wider background of other intentional states.

Heidegger's use of the term 'ready to hand' also illustrates this point about the way that contexts are understood. What could count as a relevant context is indeed far reaching. As Heidegger puts it in connection with a hammer (1962, p. 116).

With the 'towards which' of serviceability there can again be an involvement with this thing, for instance, which is ready to hand, and which we accordingly call a 'hammer', there is an involvement in hammering: with hammering there is an involvement in making something fast: with making something fast, there is an involvement in protection against bad weather: and this protection is for the sake of providing shelter for Dasein - that is to say, for the sake of a possibility of Dasein's Being.

In this way any single statement or act is capable of a seeming infinite number of interpretations which anticipate patterns of familiarity. These patterns include what Searle (1995, p. 135) calls 'scenarios of expectation' or what Beckett terms 'feedforwardness'. For example in judging how hard to hit a hammer, there is an expectation which can be more or less refined in experience of what will happen. While this background may be unexplicated – it need not be – it may be interpreted in terms of a kind of dwelling (Polanyi 1958), a kind of feel (Polanyi 1958, Prosch 1986, Polanyi & Prosch 1975, Oakeshott 1967) or in terms of the measurement of momentum. The superiority of any one kind of interpretation cannot be assumed.

A further, and perhaps most obvious, way of distinguishing contexts is in terms of the practices that give them meaning. Thus it is appropriate to connect wires to terminal blocks within the practice of electrical installation, and that practice provides the context for the activity of connection. It is appropriate to make sense of cutting and dying hair within the practice of hairdressing, even though the way hairdressing is practiced may differ widely between salons. There is, therefore, some debate about what constitutes a practice. MacIntyre (1981, p. 187) defines a practice as

any coherent and complex form of socially established co-operative human activity through which goods internal to that form of activity are realised in the course of trying to achieve those standards of excellence which are appropriate to, and partially definitive of, that form of activity, with the result that human powers to achieve excellence, and human conceptions of the ends and goods involved are systematically extended.

He goes on to tell us that architecture is a practice whereas bricklaying is not.

In his definition of practice MacIntyre is keen to distinguish internal from external goods. This leads him, as Halliday (1990) has argued, to make too sharp a distinction between practices and non-practices so that it is hard to imagine anything that could now count as a practice. Internal goods are those goods that can only be obtained through the particular practice. Typically they include those standards of excellence that partly define the practice.

External goods are those goods, such as money and power, that can be obtained in other ways. MacIntyre's definition of a practice is too restrictive. It seems to us that bricklaying is as much a practice as architecture. Both are influenced by the external goods of institutions, but both too have internal goods that are realised in the course of trying to achieve standards of excellence which are partly definitive of that activity.

MacIntyre's definition of a practice, with its reliance on an internal vs. external goods distinction, would be rejected by Dewey. For him such distinctions are merely social rather than metaphysical:

The social division into a labouring class and a leisure class, between industry and aesthetic contemplation, became a metaphysical division into things which are mere means and things which are ends. Means are menial, subservient, slavish; and ends liberal and final; things as means testify to inherent defect, to dependence, while ends testify to independent and intrinsically self-sufficing being. (Dewey 1925, p. 102).

As various recent writers (White 1997, Chap.2 and Standing 1999) have argued, supposed distinctions between 'work' (linked to autonomous activity) and 'labour' (associated with heteronomous activity) are social constructions, rather than reflecting any fundamental differences in the nature of activities.

A less restrictive account of practices is given by Pring (2000, p. 27) following Dewey. For him a practice is

a collection of different activities that are united in some common purpose, embody certain values and make each of the component activities intelligible

The above discussion suggests that concepts such as activity, context and practice are nested – activities are located within practices which provide the context for their understanding. MacIntyre extends such nesting to include traditions in a way that resonates with Searle's notion of system. Mulhall and Swift (1992, p. 90) give the following account of tradition

A tradition is constituted by a set of practices and is a mode of understanding their importance and worth: it is the medium by which such practices are shaped and transmitted across generations.

This gives some sense of the widening nests that constitute MacIntyre's moral theory. For MacIntyre the narrative of an individual life is to be understood against the background of the wider social context that the individual finds himself within. This wider social context consists of sets of practices which serve to define the virtues, and those practices, in turn are situated within traditions. Traditions are the repositories of standards of rationality. People are not trapped within traditions however. In a passage that is strongly reminiscent of Lakatos's account of degenerating research programmes, MacIntyre points out that all traditions from time to time experience their own internal contradictions and tensions. When these become serious, the adherents of a tradition may look to other traditions for the conceptual resources to enable them to make progress, perhaps within an emergent new tradition or an altered version of the old.

We may modify MacIntyre's moral theory in a way that helps us to explicate the notion of

context further. For us a practice includes any form of human activity that is identifiable by a single word or phrase, that is made identifiable through reference to some purpose and some community, that shares a common language, and has a tradition of maintaining certain values. Hence relevant features of context enable us to make sense of judgement, to evaluate particular judgements and to suggest the sort of episodes, activities or traditions that are likely to encourage productive learning. We acknowledge that there are degrees of complexity involved in practices that make bricklaying, for example, more likely to encourage the development of the capacity to judge wisely in more contexts than brushing teeth, and that building is more likely to develop them than bricklaying. We hold on to the distinction between internal and external goods, although we assert that it can never be entirely clear whether the problems that people encounter in experience involve internal or external goods. Nevertheless this distinction is important for distinguishing features of context.

In summary, the interpretation of what humans do is related to the context that gives sense and purpose to what they do. These senses and purposes can be nested according to the interests of the interpreter. Moreover they often overlap. The more complex the activity, the more complex the judgements that are involved and the wider the range of contexts within which the activity can be interpreted. Such activities are more likely to lead to productive learning. It is important to note with Dewey that the seemingly endless potential to expand context to include every possible feature of the universe is blocked by the actual experience of the learner, not by any possible experience. Moreover the seemingly endless potential to expand interpretation indefinitely is limited by the actual interest of the interpreter, not by any possible interpretation.

An example may be useful here. A joiner may develop the capacity to make good judgements in the course of work in a variety of contexts, each of which shares some things in common with its predecessor but which also introduces novel features. There comes a point however when the context is stretched so far that we come to identify the joiner's practice as something other than joinery. The notion of context fails to be useful if it is used to cover every possible activity in which a joiner might be engaged. So for example if the joiner starts to do some electrical work following the installation of a door frame because it is convenient to do so, it is normal to talk as if he were practising as an electrician rather than as a joiner. Plainly there is some overlap between practices when it is plausible to refer to contexts of either joinery or electrical work. It is also plausible to interpret such activities with reference to episodes or features of implicit context or internal or external goods or ends in view. Language is not completely elastic however precisely because there are traditional ways of speaking and acting. As Blake et al (1998, p. 33) argue

We can only wait and see what our language lets us do. But that is all we need to do.

We cannot extend the notion of practice to cover all novel contexts in which the learner might find herself. Indeed nesting suggests that some features of context are more likely to be revised than others. Thus it is normal to talk of a novel context, less likely to talk of a novel practice, and very unlikely that we talk of a novel tradition.

Oakeshott (1967, p. 170) conceives knowledge as 'manifolds of abilities' where abilities are conceived as a synthesis of information and judgement. Where Oakeshott goes wrong here is in not seeing that the determination of relevant information requires judgement too, and that is why we prefer an ontology of judgement to make sense of work-based learning rather than a dualistic ontology.

## Judgement

Judgement may be considered as one of the fundamental units of the nested concepts already introduced. Thus activities comprise multiple judgements. The value of judgements depends upon discriminating between those features of context that are pertinent. This is true in relation both to academic and non-academic learning. For Dewey productive learning leads to the development of what he calls 'good habits of thought'

Good habit of thought lies in the power to pass judgements pertinently and discriminatingly (Dewey 1933, p. 120)

He goes on

No hard and fast rules ... can be given. It all comes back, as we say, to the good judgement, the good sense, of the one judging. To be a good judge is to have a sense of the relative indicative or signifying values of the various features of the perplexing situation: to know what to let go of as of no account: what to eliminate as irrelevant: what to retain as conducive to the outcome: what to emphasise as a clue to the difficulty. (Dewey 1933, p. 123).

It is not hard to see the connection between the Aristotelian notion of phronesis and the Deweyan term 'good habit of thought' which is the capacity to make good judgements. Good judgements are good precisely because they include the weighing up of the features of a situation that are salient, the balancing of those features, and the ability to do all these parts with what Mulhall (1990, p. 200) refers to as 'the quality of seamlessness'. Our interest as learning theorists, however, is in elucidating how this quality might be approached.

According to MacIntyre (1981, p. 154).

Phronesis is the capacity to exercise judgement in particular cases. Phronesis is an intellectual virtue: but it is that intellectual virtue without which none of the virtues of character can be exercised. ... It is easy to see why Aristotle held that the central virtues are intimately related to one another.

From this we may say that phronesis is a virtue, the possession of which enables us to make wise judgements in particular cases. Judgements which take into account relevant features of a situation, rejecting those that are irrelevant. It is acquired by

Long familiarity with like operations in the past. (Dewey 1933, p. 123)

But what constitutes 'like operations'. The selection of the relevant features of context is important here. Davis (1998) following Goodman (1970) makes the point that such selection is 'theory dependent'. By this he means that 'we judge actions to be repetitions depending on our purposes and interests' (Davies 1998, p. 83). But these purposes and interests are nested in precisely the ways outlined earlier.

What this means is that there is no way of knowing in advance precisely what features of context are most likely to be relevant to the future interests of learners. To return to the example of the hairdresser mentioned earlier. We may well expect there to be some

similarities between practice in one salon and practice in another, for it to make sense to say that her learning has 'transferred' in some way. To say however that she has learnt some 'key' or 'core' skill is extremely misleading. What she has learnt is to interpret what she and her colleagues do with reference to a variety of contexts nested as already argued. The fact that some of those features are recognisable in her new salon is indeed inevitable. The only guidance that can be offered to the work-place curriculum designer or the worker herself is to situate her judgements, activities and practices in as wide a range of contexts as possible. At the same time it is important to recognise that in many cases the practice of hairdressing gives prime meaning to such judgements. A particular cut may be judged according to the norms of a particular technique, personal appearance, fashion or history or it may not be judged at all. Without sounding too grand about this, it is also possible to judge the cut according to the narrative unity of the hairdresser's life. This possibility highlights the potential of workplace learning for educational growth in the Deweyan sense.

There is no shame in judging the cut according to the monetary reward that it brings. It is a mistake, however, to elevate this criterion of judgement above all others. It is not possible to predict the precise reward on offer. Hence the best way of encouraging workers to grow educationally is to mediate their immediate interests with other interests that enable them to relate judgements, activities, practices and traditions more widely. Each of these shares some features with others but not sufficient features to enable a fixed route to be drawn toward productive learning for each individual.

## **Conclusion**

Consideration of what is involved in learning at work has enabled us to foreground a theory of learning as developing the capacity to make sound judgements. Such capacity depends upon contextual sensitivity. It was therefore necessary to put forward a theory of the relationship between context and judgement. This theory enables us to conceptualise the choices that designers of workplace curricula face. In essence we conclude that there is an inevitable tension between valuing reliable practice within one context and potential for making good judgements in others. Ultimately this tension is not resolvable exclusively with reference to learning or economic theory but must include political theory that relates learning to work in new and creative ways.

Ultimately the distinction between learning at work and elsewhere is not significant. Work provides some additional features of context that makes judgement more complex, but the concepts of judgement, activity, practice and tradition are nested in similar ways to provide relevant contexts. There is no great precision to this – no one way of sorting out good from bad moves, just ends in view. What we are looking for is a kind of seamlessness in judging and acting that comprise a narrative unity of a life. The dominance of a particular view of academic learning leads us astray. There are good reasons for favouring the cognitively rich aspects of context, but rich cognition does not always, or even often, involve the use of pens and paper.

Mulhall notes that for Wittgenstein,

The goal of any given philosophical investigation is the attainment of an *Übersicht* – a surview of a given segment of grammar such that one neither hesitates nor stumbles when requested to modulate from one form of expression to another, and such that one is not brought into confusion by the potentially misleading similarities and differences between one grammatical structure and

another (Mulhall 1990, p. 201).

He goes on to liken this sort of linguistic mastery to the mastery achieved by others in non linguistic practical activities. Hence the academic vocational distinction dissolves in the ontology of judgement. The linguistic representation and interpretation of judgement is derivative and always relative to some more general concept, which is in part defined by its values, purposes and goals.

The following guides may follow from our theory. To make learning more productive in the Deweyan sense, it is necessary to situate it in as wide a range of contexts as possible and this implies some positive intervention in what otherwise would be most easily located within the practice that forms the prime focus of activity at work. To make work more productive in the narrow economic sense, it may well be necessary to do the opposite. That is because economically we may value reliable practice within which the room for varying the quality of judgement is strictly limited. But there is a social and educational price to be paid for this.

As Winch (2000, p. 181) remarks in connection with a discussion of the notion of social capital:

Modern conceptions of social capital show a tendency to ignore its cognitive element. They also fail to take into account its civil element.

Winch here may be taken to draw attention to the fact that each of the nested concepts we referred to do not by themselves guarantee productive learning. He argues that the formation and maintenance of social capital both contributes to production of economic consumption and the development of productive powers. Economic consumption on its own is not enough because it must always be narrowly focussed on the immediate needs of employers. If the logic of globalised postmodernity is accepted, these needs are bound to be subject to rapid and uncertain changes. There are therefore good reasons to make work productive in both senses and for governments to intervene to make it so.

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