From Constructivism to a Pragmatist Conception of Learning

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ABSTRACT This paper contributes to the debate on constructivist learning theory. We contrast the constructivist notion of activity that identifies ‘active’ with ‘conscious’ and ‘intentional’ with John Dewey’s habitual conception of action, knowing and learning by doing. As regards language and truth, we defend an anti-representationalist conception that sees words as tools of communication and coordination rather than representations reflecting reality. To compare our Deweyan pragmatist conception of learning with contemporary viewpoints associated with constructivism, we examine and criticise the notions of ‘knowledge building’ and ‘metacognition’. Finally, we consider what Deweyan ideas about learning and growth might mean for education in the twenty-first century.

Writing about the many faces of constructivism in 1995, D.C. Phillips observed that there was an enormous and growing educational literature on constructivism (Phillips, 1995, p. 5). By 2001, Richard Fox (2001) could already conclude that constructivism has come to dominate educational debates about learning, especially in the field of teacher education where constructivists literally apply metaphors of building or construction to learning and inquiry. Without pretending to offer an exhaustive list, constructivism is said to be rooted in the thinking of Immanuel Kant, John Dewey and William James, Jean Piaget, L.S. Vygotsky and Thomas Kuhn. Both neo-Piagetian and neo-Vygotskian tendencies are recognised in the modern debate, but radical and realist versions have their supporters, too. Mediated learning is a line of its own, as is cognitivist or knowledge-based constructivism. There is feminist construction and there is also postmodernist construction, which includes socio-psychologically oriented constructivism. For some educationalists constructivism is first and foremost about how an individual learner constructs knowledge in his or her mind; whereas for others the main concern is with the construction of human knowledge in general or with the socio-political construction of knowledge. Although one speaks specifically about learning, constructivism is a broad church. Social constructivism, then, can comprise almost anything.

Ian Hacking (1999) says in The Social Construction of What? that the term ‘construction’ has spread like a pest in the humanities and social sciences. From book titles alone, he has found an impressive collection of different kinds of ‘constructions’: the list extends from gender, illness and emotions, through serial homicide, Zulu nationalism and quarks, to nature and reality. The phrase ‘social construction’ is both obscure and overused and the term constructivism is also resistant to unambiguous definition. However, as Hacking (1999, pp. 6–7) observes, it does seem there is a common
conviction in all social construction work that something is not right about the status quo. The main point is that something is not inevitable, it is not determined by the nature of things. What is more, people who use the idea of social construction want not only to criticise but also to change or even destroy whatever they dislike in the established order of things. All too often, constructivists have their own simplified 'straw man' version of what it is they would like to get rid of. Under the title of learning theory, constructivism has been articulated in opposition to 'straw man' versions of behaviourism and information processing theory (see for instance Fox, 2001).

In his educational article 'The good, the bad, and the ugly: the many faces of constructivism', Phillips (1995) comes to the conclusion that the good is the emphasis on the necessity for active participation by learners. The bad is the tendency towards epistemological relativism, and the ugly is the quasi-religious or ideological aspects of constructivism. We have no reason to disagree with the latter point, nor indeed with the emphasis on active participation, but we do have some critical remarks to make about the standard constructivist conception of activity. We agree with Fox (2001) that the constructivist celebration of the 'active' aspects of learning, 'active' being identified with 'conscious' and 'intentional', has led to overly simplified conceptions of learning that do not stand up even to the most commonsensical criticism. However, we will be proposing somewhat different conceptualisations for the discussion of these issues and in so doing reach partly different conclusions about the strengths and weaknesses of the constructivist view. In these issues we base our view on the writings of John Dewey, the classic of pragmatist thought.

Epistemological relativism, described by Phillips as 'bad', needs to be discussed more thoroughly. We therefore proceed to the debates on realism vs. anti-realism and representationalism vs. anti-representationalism. We sharply disagree, for instance, with Fox’s (2001) condemnation of antirealist and anti-representationalist ideas. We will be arguing that Fox's criticism is based on misunderstandings of these conceptions. To clear up the issue, we turn again to pragmatist ideas of Dewey and also of neopragmatist Richard Rorty.

Alongside constructivism, pragmatism can also be said to be a broad church. The term pragmatism was introduced for the first time in 1898 by William James in his Berkeley lecture. In developing his practice and action-oriented philosophy, James insisted that he was merely utilising pragmatic ideas developed earlier by Charles Sanders Peirce. A couple of years later Peirce, however, declared his own philosophy as 'pragmaticism' just to prevent anyone else from adopting such an odd term. However, Peirce's neologism became a dead letter. The pragmatist spectrum encloses, in addition to the classics Charles Sanders Peirce, William James and John Dewey, for instance, in their own right such different philosophers as Thorstein Veblen, George Herbert Mead, W.V.O. Quine or Nicholas Rescher. Then, of course, there is also the self-proclaimed follower of Dewey, the neopragmatist Richard Rorty and the pragmatist denying being a pragmatist, Hilary Putnam. Those interpreting other pragmatists can also be seen to be a school of their own. For instance, Jim Garrison and Larry Hickman have specialised in the writings of Dewey, Hans Joas in those of Mead, and Peirce seems to be the centrepiece of an entire exegetics of its own. Of course pragmatists have received plenty of criticism and they have debated with each other, but in this context we cannot dig into these debates. Moreover, we do not see any reason in trying, in general, to sieve out more or less 'false' pragmatists, nor do we try to interpret what Dewey really said or if Rorty's description of Dewey is absolutely correct. The value of pragmatist ideas is ultimately determined in practice if they serve the purposes of action. As we
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understand pragmatism, it would be totally alien for it to attempt to formulate, for instance, any general theory of society. But pragmatist thinking helps us to form appropriate viewpoints to inquiry and action. Dewey’s and Rorty’s writings, in particular, provide appropriate tools for analysing questions concerning education.

This paper contributes to the debate on learning theory among other things by re-examining Fox’s (2001) ‘Constructivism examined’. We proceed to defend a pragmatist conception of learning, which is compared to some well-known contemporary viewpoints. Our intention is to show that if we combine the best bits from the thinking of John Dewey (1859–1952) and Richard Rorty (1936–), we will have a useful conception of learning and inquiry that will stand us in good stead well into the twenty-first century.

IN WHAT WAY IS LEARNING ACTIVE?

Reacting to the naïve view of learning as remembering and learners as empty vessels that shall be filled with knowledge, or to the behaviourist view of education that is said to treat the learner merely as a recipient of external stimulation, constructivists stress the active nature of learning. Compared to the ‘straw man’ versions criticised by constructivists, their own emphasis on activity no doubt appears progressive; but as Fox (2001, pp. 23–26) asks, why should we emphasise only one pole of human experience? To be sure, human beings acquire knowledge about their environments by acting upon the world, but they are also acted upon. We do things and have things done to us; we act and we react, and we can learn from all kinds of experience. Habituation and conditioning often consist of adaptive reactions of contextual and implicit learning.

For pragmatists, learning is always active. This is neatly captured in Dewey’s famous ‘principle’ of ‘learning by doing’ (MW9, p. 192). As far as Dewey is concerned, experience, and thereby learning and knowing, is an affair of doing. An organism does not wait passively and inertly for something to impress upon itself from without; it acts upon its surroundings and undergoes the consequences of its own behaviour. This connection between doing and undergoing constitutes experience (MW12, p. 129). From a Deweyan perspective, transaction between an organism and its environment is the basis for understanding all kinds of action and learning, including thinking and knowing.

In the way pragmatists think, learning is not active in the sense that the word has been used by many recent constructivists. For Dewey, the activity that is necessary for learning is not merely, or even primarily, cognitive. A crucial difference between pragmatists and cognitively oriented constructivists is that the latter typically conceptualise learning as construction of cognitive structures, whereas a Deweyan pragmatist sees it as formation of habits of action. According to Dewey, the control over the connection between one’s acts and their consequences becomes, with experience, embodied within the person as habits. This can mean the strengthening of certain forms of conduct and the weakening of other possible lines of conduct, but it can also mean the emergence of entirely new lines of action (MW14, pp. 15–16, 21; LW12, pp. 21, 38–39).

Only a minor proportion of all action and knowing is conscious in the sense of articulated thinking. Most of the time our action is directed by habits, without any need for conscious reflection or deliberation. We constantly commit acts that strictly speaking do not belong to our linguistic ‘consciousness’: we choose, reject, favour and avoid things, we begin, readjust and finish what we are doing (cf. Lakoff & Johnson, 1999).
These kinds of ‘unconscious’, not deliberated acts account for a significant part of our action. Even our most intellectual doings that are guided by conscious inference are grounded in this kind of ‘unconscious’ foundation. This is at once the foundation of our ability immediately to pick out the options relevant to the continuity of our action from a countless number of irrelevant options, and our ability to act appropriately even in uncertain situations. In the end only a small proportion of the opportunities and hazards of any situation are considered within a person’s linguistic consciousness (LW1, p. 227).

In contrast to most constructivist writers, a Deweyan pragmatist will argue that only rarely does learning equal conscious studying. The knowledge that comes first and that remains most deeply engrained is knowledge of how to do something: how to walk, talk, write, ride a bicycle, use a machine, sell goods, manage other people, and so on. We acquire the habits necessary for these kinds of activities by doing the acts in question, not by ‘studying’. Formal education, according to Dewey, often fails to recognise that the initial subject matter of studies always exists as a matter of doing, and so it becomes just something to be memorised and reproduced upon demand (MW9, p. 192).

Talking about knowing, Dewey makes a distinction, like Gilbert Ryle (1984/1949) did twenty years later, between ‘knowing how’ and ‘knowing that’. According to Dewey, we may be said to know how on the strength of our habits. We walk and read, dress and undress, and do countless other things without thinking about them. If we choose to call knowledge the kinds of practical skills that are needed in these activities, we must distinguish this kind of ‘how to’ knowledge from the knowledge that is of and about things, knowledge that things are thus and so. Only the linguistic ‘knowing that’ involves explicit conscious reflection. At any given moment, most aspects of our action remain in the sphere of ‘knowing how’—they remain tacit, if we use Polanyi’s (1969) term (MW14, pp. 124–125).

As should be clear by now, it is easy for us as pragmatists to agree with Fox’s criticism of the constructivist idea of learning as a process of making sense of the world. It should be borne in mind though that the ‘sense making’ aspect of learning has been important in avoiding the naïve conception of learning as a simple ‘drinking in’ of new information—although as Fox reminds us, the notion of making sense has its home in the realm of language and therefore cannot be all there is to learning. Learning is also about training, making performance easy. Practice is vital because it is the chief way of eliminating errors from habitual routines, and because it allows us to transfer our limited powers of conscious attention away from routine competencies. Fox quotes the pragmatist William James who says that consciousness goes away from where it is not needed (Fox, 2001, pp. 30–32). As far as the notion of ‘making sense’ is concerned, pragmatists have it that the meaning of words is in their use. More on this later.

THE ANTI-REPRESENTATIONALIST ARGUMENT

Sketching a version of constructivist anti-realism for his attack, Fox (2001, p. 26) says the heart of the view lies in the argument that ‘knowledge is invented not discovered’. Referring, amongst others, to Rorty, he takes this argument to mean that knowledge is not a copy or a true reflection of some independent reality, and that truth, in terms of objective correspondence to an independent reality, simply does not exist. Furthermore, Fox’s version portrays constructivists as claiming that since we cannot know ‘things in themselves’ or ‘reality as it is’, we have to give up the assumption of the existence of an external world independent of human minds.
Admitting that the same reality can be represented in many different ways, Fox reminds us that our views are still views of the world or some part of it—or at least all our actions, communications and investigations inevitably presuppose that they are. Any reasonable empiricist or positivist, Fox says, can agree that our knowledge is fallible and derives from our human point of view, and still retain the conception of knowledge as a testable picture of an independent reality. Constructivists, by contrast, adopt a completely relativistic epistemology and therefore fail to account for the adaptive function of knowledge. For constructivists there can be no objective assessment of how knowledge ‘fits’ the world. Any conceivable framework would do just as well as any other (Fox, 2001, pp. 26–29).

It is quite possible that there are constructivists who are prepared to give up the assumption that there exists an external world independent of human minds, but that is not what a reasonable anti-representationalist would claim. Rorty (1989, pp. 4–7), for instance, works on the premise that most of the world exists independently of us. It is not the creation of our mind or our language. However, when we describe the world, we do so within the confines of a certain language game, or (to use Rorty’s own concept) vocabulary. The world does not break down into ‘facts’ that one of our descriptions could reveal more accurately than others. It is our language that divides the world into facts, and that is why facts only exist within a language. Language as a whole cannot be true or false.

The point that anti-representationalists such as Rorty and Donald Davidson are making is not that there is no external world outside our minds, but that the idea of comparing our descriptions with ‘reality as it is’ makes no sense (Davidson, 1990). This amounts to more than arguing that the same reality can be represented in many different ways. It is not only that there can be several representations, but that it is misleading to call our descriptions ‘representations’ that correspond with reality. By implication it is also misleading to equate, as Fox does, anti-realism with fallibilism.

The position that Fox is prepared to accept could be called representationalist fallibilism: beliefs and linguistic descriptions should be considered as (more or less accurate) representations of the reality that is independent of human mind and language, but as a fallibilist one can never be sure whether or not ones representations are correct. However, this conception of truth is based on the idea that there is a correspondence between the belief and the reality it represents. By contrast, we anti-representationalists argue that it is problematic to think of beliefs and descriptions as representations of an independent reality. It quite simply is not possible to compare our descriptions of the world to the non-described world, the world ‘as it is’. Our descriptions may be testable in some other way, but not by evaluating their ‘correspondence with reality’.

In his evaluation of the anti-realist stance, Fox makes the exact same move as he criticises constructivist theories of learning, for he construes a ‘straw man’ target, according to which any view is as good as any other—a view that virtually no one advocates. He rejects all constructivist ideas of non-representational ‘fit’ without really giving them any serious consideration at all. In what follows we draw on the pragmatist ideas of John Dewey and Richard Rorty to show that this rejection is not such a good idea.

**Words in Action**

Both Dewey and Rorty agree with the basic idea that was made famous by later Wittgenstein: that language should be considered a tool, not a representation, a
‘picture’ of reality. Although they formulate this anti-representational stand very differently, the main idea is the same for Dewey and Rorty: we use words as means of interaction, communication and coordination. The meaning of a word is in its use. Consequently the connection between words and the world should always be established in terms of action, not in terms of some ultimately inexplicable ‘correspondence with reality’.

For Dewey, language is ‘the tool of tools’. Human action is in many ways directed by the use of historically developed tools, but at each point the use of these tools is bound up with communication and coordination made possible by the language of some community. Tools are always found in connection with some division of labour, which depends upon some device of communication (LW1, pp. 134, 146).

Dewey says that something is a tool when it is used as a means for consequences; the consequences give the tool its meaning. Correspondingly, the meanings of language arise in its use. Dewey emphasises that the grounds of linguistic meanings are not purely mental but something between the speaker, the hearer and the object which the speech concerns. Meanings are modes of natural transaction between organisms and their environment; originating in the use of things, they indicate a possible interaction, not a property of a thing in itself (LW1, pp. 146–149). In sum, the meaning of a word is in its use.

Stating an analogous idea in somewhat more analytical terms, Rorty says that words should not be seen as representations reflecting the world, but as nodes in the causal network between the organism and its environment. Communicating and coordinating our actions, language is a tool with which we can seek to grasp causal processes so that we can take more appropriate action. It makes sense to operationalise, as pragmatists have done since C. S. Peirce, beliefs into habits of action (Peirce, 1898; Rorty, 1999).

If we conceptualise the connection between words and the world in the anti-representational way through action, there is no point in asking how our descriptions correspond to the reality. If words are viewed as tools for doing something, then all our descriptions must be seen as being connected with our purposes. All we need to know when evaluating our descriptions is whether another description would be more useful for this particular purpose than the one we have used so far. In William James’s (1975, pp. 34, 97–98, 106) words, truth is the usefulness and expediency of an idea in the long run. According to Dewey (MW9, p. 304), knowledge is that which we take for granted, which we can assume without question. Knowing means certainty: not only as a feeling, but as a willingness to act without reserve under the guidance of the belief considered to be knowledge. Rorty (1998, p. 116) joins this pragmatist line of thinking by saying that ‘real’ is only a definition of something we can trust.

According to Rorty, the only meaningful connection in which we can talk about ‘truth’ is justification, which always needs to be considered in relation to its recipients, the audience, i.e. the group to whom the justifications are presented (Rorty, 1998, p. 3). Here Rorty follows Sellars (1997, sect. 36), according to whom calling an episode knowing is not the same as to describe it empirically, but to place the described episode within the logical field of arguments and justifications. Following this chain of thought, Rorty (1980, pp. 389–390) comes to the conclusion that the right context for understanding knowing is discourse and its standards of justification, not the relationship between the knowing subject and the object of the knowledge.
As we have seen above, our pragmatist outlook combines a Deweyan conception of activity in learning with an anti-representational conception of knowledge as emphasised by Rorty. Ours is a critical position on theories of learning that concentrate on individual cognition and see learning as a matter of acquiring accurate representations of ‘reality’. In these respects it bears some resemblance to the Popperian theory developed by Carl Bereiter and Marlene Scardamalia, which also calls into question the conception of knowledge as a mental representation inside the individual’s mind, emphasising instead the construction of knowledge in social action.

Bereiter and Scardamalia maintain that the traditional metaphor of the mind as a container and knowledge as the matter that fills up the empty vessel cannot be accepted as the basis of education in the ‘information society’. Modern knowledgeable people, they say, should look upon knowledge as a matter of social action, development and criticism rather than as the contents of someone’s head (Bereiter & Scardamalia, 1998, pp. 486–487, 492).

Bereiter’s and Scardamalia’s alternative view revolves around the distinction between learning connected with the individual’s knowledge and skills, and ‘knowledge building’ connected with developing the community-wide level of knowledge. This distinction is based on the idea of three worlds that originates in Karl Popper’s philosophy: the physical world (World 1), the world of mental states (World 2) and the world of objective contents of thought (World 3). World 1 includes physical objects, World 2 the ‘inner’ mental states of the human mind and World 3 the constructions of thought that are in some (unspecified) sense independent of physical reality as well as human beings’ mental states (Bereiter & Scardamalia, 1998, pp. 492–493).

Although this is not the place to dwell upon the issue at any length, it needs to be stressed that within the field of philosophy, Popper’s three-world metaphor has been viewed with some considerable reservation. Since the debate on basic philosophical models falls beyond the scope of this paper, we turn instead to comment on the ways in which Bereiter and Scardamalia apply Popper’s thoughts to suit the needs of the conception of learning they represent.

According to Bereiter and Scardamalia, education should be seen as learning to function in World 3; to become familiar with objects that are important in World 3, to learn to evaluate and interrelate them, and to create new ones. Although the purpose of education is to produce changes in World 2, in students’ mental states, the focus of activity should be on World 3. The actual work is directed not towards improving the students’ minds, but towards improving the knowledge that is being collectively created. Although the knowledge created by students cannot be very original and often consists of little more than a restatement of something found in a book, that does not alter the situation. From the learner’s point of view, there is not much difference between creating new theories and explanations or understanding established ones. (Bereiter, 1994; Bereiter & Scardamalia, 1998, pp. 494, 504).

Bereiter and Scardamalia apply Popper’s concepts in an attempt to view knowledge as objects that shall be worked with in the same way as physical materials, but rather than helping to clear things up they really do little more than mystify the nature of ‘information work’. In fact, what people do who work with scientific theories, literature or other products of verbal culture is read texts, write, and debate issues with other people, and just as all jobs require the skilful use of tools, theirs requires good skills in linguistic practices. In the process of this work they also end up developing
new ways of using language. People learn these skills, like all others, by doing. Talk about the objects of World 3 does absolutely nothing to make this any more comprehensible.

This questioning of the concept of World 3 also calls into doubt the unhelpful distinction that Bereiter and Scardamalia make between knowledge building and learning. If knowledge is seen not as a world of its own that can be built and from which it is possible to take things, i.e. learn, but instead as a form of human action, then it is difficult to see how exactly knowledge building and learning differ. People become more knowledgeable by using tools, reading books, writing papers or exchanging views with colleagues, and the creation of new knowledge is one way of creating new ways of (often verbal) action. The difference between a researcher generating new knowledge in a laboratory and a pupil learning new things at school is not that they are dealing with different kinds of reality in World 2 and 3, but what they (in this one, shared world) are doing and what the consequences of their actions are. The question of consequences is an essential distinctive factor. When a pupil learns a new thing, it is unlikely that this will have at least any immediate effect on the actions of very many people; but if a research group learns in its laboratory how to generate new phenomena, this might affect the actions of the whole of humankind. Action that creates new knowledge can hence be understood without the postulation of several worlds, which unnecessarily complicates things (Kivinen & Ristelä, 2001).

THE CONCEPT OF METACOGNITION QUESTIONED

The pragmatist view we have been developing is at sharp variance with present day constructivists’ emphasis on conscious concentration on learning in itself. Contemporary learning theories often stress that pupils should themselves consciously set the targets for their learning, choose the paths they wish to follow, and evaluate the results of their learning. It is in this connection that the concept of metacognition has been brought up. It rests on the basic idea that a person’s cognitive action is divided between two or more levels in such a way that the higher levels monitor and assess the functioning of the lower levels. For example, if we think about something on the cognitive level, we can simultaneously direct and evaluate our thinking on the metacognitive level. In the same way knowing corresponds to metacognitive knowledge about knowledge: we use our metacognition when we know what we know (see, for example, Nelson, 1996).

This notion of human action divided into two parallel processes fits uneasily with our pragmatist point of view. Consider an example from the realm of motoring. ‘Driving carefully’, for instance, does not refer to two separate, simultaneous processes, i.e. exercising (inner) care on the one hand and driving a car, on the other: it simply means the ability to drive a car in such a way that no harm or danger is caused to oneself or to other people on the road. An experienced driver will take into account the handling and performance of the car, the road conditions and the time available so that the destination is safely reached. On the other hand, the hair-raising traffic behaviour of a novice driver who is totally unused to the car and traffic is a good example of how the combination of driving and being careful should not be attempted.

In The Concept of Mind in 1949, Gilbert Ryle subjected the idea of introspection to a criticism we can apply almost identically to the concept of metacognition. Let us
presume that our mind really is inhabited by a metacognitive process that holds within it information about the activity on the cognitive level. The presumption of this process explains the possibility of introspective, immediately perceived information about the functioning of our own mind. Nevertheless, the existence of this metacognitive level is not perceivable to an external observer; therefore, any information about it also has to be introspective. It is therefore necessary for us to imagine a third level that monitors the second level. This will not help, however, because again this level can only be perceived through introspection: we will always continue to need new metalevels. If the cognitive operations at each level can only be observed via a higher level monitoring it, then we are forced to presume an infinite number of levels—and still we have not explained anything. If, on the other hand, we limit the number of levels arbitrarily, then we have to presume we know something about the highest level even without a higher metalevel. However, in this case we have had to confess that knowledge about a cognitive process is possible without a higher metaprocess, which means there is no longer any reason to presume the first metalevel (see Ryle, 1984, p. 165).

None of this means to say that people cannot have information about their own cognitive action, or that people have exactly the same information about their own mind as others who are observing them. We know many things about our own cognitive action because it is our action; we know what we have thought about because we were thinking, not because we were at the same time monitoring our thinking from a ‘metalevel’ (Ryle, 1984, pp. 166–167). We can reject the idea of ‘levels of cognition’ and still understand how it is possible to know about one’s own knowledge or thinking; or if it is necessary to retain the concept of metacognition, one could simply use it to mean, without referring to various levels monitoring each other, the object or subject matter of thinking, for instance. Metacognitive knowledge can be defined as knowledge about knowledge, or metacognitive thinking as thinking (retrospectively) about thinking. This kind of solution does, however, have an interesting effect: it implies that exercising one’s metacognition means the same thing as pursuing psychology or epistemology, and it is by no means clear that exercising these disciplines may be considered a general characteristic of intelligent action or expertise in the way it has been suggested that metacognition is.

In practice, then, the educational application of the idea of metacognition easily leads to seeing the pupils of an ideal school as a group of psychologists reflecting upon their own actions. Rather than being guided to work as skillfully, intelligently and with as much care as possible, the pupils are taught to contemplate the supposed inner operations of their own learning, knowledge and skills. In this respect, Dewey presents an interesting, opposite view. According to him, learning occurs in the best possible way when pupils are not aware that they are studying. Pupils, he says, should concentrate on the subject matter they are studying, not on learning as such: ‘Just in the degree in which they are induced by the conditions to be so aware, they are not studying and learning’ (MW9, p. 181. See also MW9, pp. 44, 176).

Practices encouraging the observation of one’s own learning as an end in itself can basically be seen as a mere rejustification of testing that has traditionally ruled school activities. Instead of the pupils being taught new skills and knowledge, they are trained to monitor their own studies. A gradual improvement in the ability to work independently is quite rightly an aim for education, but it is by no means self-evident that this can be achieved or promoted by intensive concentration on the operative aspects of one’s own thinking.
Before we proceed to consider the consequences that a pragmatist account of learning might have for education, a few words of caution are in order. Stanley Fish (1998) has pointed out that theories and philosophical outlooks actually have very limited consequences outside academia. He even goes so far as to say that ‘the way you are in the world of practices is independent of the account you might give of those practices, be it realist, rationalist, pragmatist, or whatever’ (Fish, 1998, p. 420). From our pragmatist point of view, this is an exaggeration because giving accounts, including those that are of a scientific or philosophical kind, is itself an integral part of our practices even though the practice of philosophy or theorising in general obviously has a very marginal impact on the everyday activities, needs and problems of most people. Again, Fish (1998) takes a rather strong view here in suggesting that philosophy is a special activity whose successes or failures do not entail successes or failures in activities other than the activity of doing philosophy.

In the field of educational theory these kinds of reminders about the relation between theorising and other practices are perhaps even more pertinent than in other fields. Constructivist theorists, for example, often like to think that their theories imply extensive changes in the practices of schooling, as if those practices were built on theories. The same implausible presumption is made by the critics who argue that constructivism—or pragmatism, or post-modernism—dissolves rationality and corrupts morality, depriving us of everything that allows us to distinguish right from wrong or prudent from imprudent, and thereby undermining the justification of education. We return to this issue at the end of this paper when we consider Dewey’s thinking about the interrelation of philosophy and education.

As we see it, the pragmatist ideas we advocate neither undervalue education nor aim to provide it with new epistemological foundations. On the contrary, the aim is to get rid of the unfruitful epistemological speculations that are based on a representational and contemplative conception of knowledge. Instead of engaging in an endless debate about the requirements of objectivity or rationality, educational theorists should try to create vocabularies and descriptions that are useful in criticising and developing educational practices.

Contemporary constructivists opposed to the filling-empty-vessels conception often repeat the same remarks that Dewey made almost a century ago. Although the notion of teaching as ‘pouring’ knowledge into pupils and learning as passive reception had even then been widely condemned, Dewey had to wonder why they remained so dominant in the practices of teaching. While there was broad theoretical support for the idea that teaching and learning were not about telling and listening but primarily about an active, constructive process (MW9, p. 43), there was very little evidence of that idea being put into practice.

As Dewey (MW9, pp. 192, 311) pointed out, the scholastic conception of knowledge that forgets everything else except scientifically formulated facts has been one reason why it is not understood that the initial subject of education is always about doing something. The contents of school teaching are isolated from the learner’s needs and goals into something that merely has to be memorised and reproduced upon demand. If on the other hand the natural course of development were acknowledged, then one would always start out from situations that include learning by doing. The discussion on activity refers all too often to something purely ‘internal’ to the learner. Although there are phases in studying that require little overt activity, the whole cycle of learning
involves also experimentation, trying one’s ideas out on things and discovering what can be done with materials and appliances, not to forget means-consequences reflection.

Inquiry undertaken by pupils is too often understood as theoretical bystanding, as the application of intellect unconnected with physical action. The connection between action and its consequences is broken; what remains is the meaningless physical part of action and, on the other hand, some separate ‘significance’ of action that it is believed can be accessed in a purely ‘mental’ way. Dewey’s idea, by contrast, is that the substance of learning comprises all the objects, thoughts and principles that either promote or adversely affect the continuity of appropriate action (MW9, pp. 145, 147).

As Dewey likes to use examples from the realm of manual labour, it is a common criticism that he does not fully appreciate the importance of knowledge and intellectual activities in education. However, we as Deweyan pragmatists are convinced that the conception of language as a tool can be fruitfully extended to the linguistic activities of knowing and thinking. Language is a tool the use of which can only be perfected by means of constant training. Just as with other tools, the best way to learn how to use language is to do things with language, to tackle problems and to try to perform better every time in a way which is adequate to one’s aims. In essence it is about the learner learning to think or speak in a new way, learning how to use appropriate descriptions for new kinds of needs. This way, in the process of thinking and communicating with other people, we learn how to coordinate action in an appropriate way.

In Dewey’s view the ultimate end of all education is growth. Education has no end beyond itself; it is its own end. The educational process consists of a continual reorganisation and transformation of habits and thereby a redirection of ongoing activities into other channels. From as early as the nineteenth century Dewey was an advocate of the currently fashionable idea of lifelong learning, since the aim of education is to enable people to grow continually. The precondition for growth is hope, the conviction that the future will be better than the past. Indeed, Dewey’s entire production can be read as advocating hope (MW9, pp. 30, 54, 107; Garrison, 1998; Kivinen & Ristelä, 2002).

Discussing the discovery of new, better and more interesting ways of speaking and thinking about education, Rorty (1980, p. 360) comes to use the term ‘edification’ instead of ‘education’. ‘Edifying’ also refers to action that can be considered deviant and even creative since during its course the human being is disconnected with the ways of the ‘old self’, and new pathways are opened up to becoming a new kind of ‘personality’, so to speak. Rorty thinks that all people should be aware of the conditional nature of their beliefs and desires, and to be able to sociologise how they have become what they are. Here we can hear echoes of the good old German idea of Bildung.

For both Dewey and Rorty, the growth at which education aims is not only individual, but also social by nature. The reconstruction of individual habits does not happen in a vacuum, but in a process of transaction that changes both the individual and the environment. We never educate directly, but by means of the environment, Dewey says, shifting the attention from teaching to studying and learning environments. As the human environment is pervasively social, a crucial mode of transaction is participation in social practices. Any social environment is truly educative, Dewey continues, in the degree in which an individual shares or participates in some conjoint activity: appropriates the purpose which activates it, acquires the necessary knowledge
and skills, and is saturated with its emotional spirit. All this entails communication: co-ordinating activities and sharing experiences (MW9, pp. 14–27).

As the habits of individuals take shape to suit the particular social environment in which they happen to live, any criterion for educational criticism and construction implies a particular social ideal. The ideal Dewey himself recommends follows his principle of continual growth as the aim of education: in a desirable society all its members can share in the mutual interests and activities of the community, with no internal or external barriers to free interaction and communication of experience. Such a society also secures flexible readjustment of its customs and institutions through interaction of different forms of associated life. This kind of society, and the education appropriate for it, is what Dewey defines as democratic (MW9, pp. 105, 107; Garrison, 1998).

What role, then, does a Deweyan intellectual have in a democratic educational project of continual growth? Dewey says philosophy is inherently criticism, having its distinctive position among various modes of criticism in its generality; it is criticism of criticisms, as it were. In another context Dewey says that philosophy may be defined as the general theory of education, having the double task of criticising existing aims of education with respect to the means of their realisation, and on the other hand interpreting the results of specialised science in so far as they have a bearing on future social endeavours. Philosophy is at once an explicit formulation of the various interests of life and a propounding of points of view through which a better balance of interests may be achieved (LW1, pp. 298, 338–339, 341–342).

In a good Deweyan spirit—and leaning also on Garrison (1998)—we may conclude by stating, first, that for Dewey, the aim of education was to enable people to continue their education (compare the recent slogan of lifelong learning). Secondly, growth was for him the greatest good because it could provide an answer to the eternal question of the meaning of life: the meaning of life is to create and enrich the meanings of life. Thirdly, there is no one best method of education, because there is no one best way to grow, and that is why democratic society can offer the best environment for education.

REFERENCES


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