Chapter 12 Pragmatism, Meaning and Learning in the Workplace

Paul Gibbs

In a review of the some of the most important early texts on pragmatism, Russell not only declared that the texts embodied the prevailing spirit of pragmatism but went further. In what might be a credo for work-based learning, he said that pragmatism itself achieved wide appeal through these texts: the 'inventor, the financier, the advertiser, the successful man of action generally, can find in pragmatism an expression of their instinctive view of the world' (Russell 1909/2002, p. 282). It is this comment that foregrounds this chapter's contribution in considering how pragmatism, particularly the neo-pragmatism of Rorty, engages with workplace knowledge and learning.

The history of early pragmatism tends to be portrayed as an American movement vitalized by Peirce, James and Dewey, with a significant contribution from the Oxford philosopher, Schiller, whose essay on humanism was published in the same year as James' own 'What Pragmatism Means' (1904/2007) and was much admired by him. Indeed, the early 1900s were landmark years for pragmatism, for in the same year, Peirce's attempt to clarify the blurred meaning of pragmatism appeared as 'what pragmatism is'. Historically, pragmatism is a strangely compelling mix of scepticism, especially of logic and empiricism, with no recourse to a metaphysical precondition. Meaning is what we take it be or, as Rorty suggests, it is verifiable belief. As James affirmed in his essay on pragmatism, 'Such then would be the scope of pragmatism – first, a method; and second, a genetic theory of what is meant by truth. And these two things must be our future topics'.

This very much follows Schiller's humanist approach to pragmatism as a method that supported his not uncontested (see Russell 1909/2002, p. 292) idea of pragmatism. Schiller positioned pragmatism as 'a special application of Humanism to the theory of knowledge', and his discussion on pragmatism that so annoyed Russell considered next the seven meanings of pragmatism. He suggested these were based

on the following: (1) truths are logical values, (2) the 'truth' of an assertion depends on its application, (3) the meaning of a rule lies in its application, (4) all meaning depends on purpose, (5) all mental life is purposive, (6) a systematic protest against all ignoring of the purposiveness of actual knowing, and (7) a conscious application to epistemology (or logic) of a teleological psychology that implies, ultimately, a voluntaristic metaphysic (1905/2009). This is a teleological basis for pragmatism, and Schiller felt that this method centralized the notion of humanity as the sole arbiter of truth, to be interpreted through the precepts of human awareness rather than the notion of other truths. 'Humanism is really in itself the simplest of philosophic standpoints; it is merely the perception that the philosophic problem concerns human beings striving to comprehend, a world of human experience by the resources of human minds' (1905/2009, p. 12). Schiller's embedding of pragmatism in his notion of humanism concerned not only Russell but the originator of the term, Peirce. When faced with the wider adoption of 'pragmatism' into common usage, Peirce responded, rather unsuccessfully, with a new term, 'pragmaticism'. He referred to this as the maxim of a classification-based condition. Peirce's notion was of a pragmatic method of inquiry, not experimental in the sense of traditional science, for it 'is not in an experiment, but in experimental phenomena, that rational meaning is said to consist' (1998/1905, p. 340). Their definition was needed by Peirce to avoid confusion created by the more general use of the term and especially to avoid the term being substituted for 'practice' (as Elkjaer perhaps does in an interpretation of Dewey's notion of experience, 2009, p. 88).

For all the early pragmatists, truth was defined in terms of consequences; validation of truth was by testing when our historical and common sense understanding of the world failed. It is James, however, who is perhaps the closest to bringing early pragmatism into a learning perspective, and I quote at length:

The observable process which Schiller and Dewey particularly singled out for generalisation is the familiar one by which any individual settles into new opinions. The process here is always the same. The individual has a stock of old opinions already, but he meets a new experience that puts them to a strain. Somebody contradicts them; or in a reflective moment he discovers that they contradict each other; or he hears of facts with which they are incompatible; or desires arise in him which they cease to satisfy. The result is an inward trouble to which his mind till then had been a stranger, and from which he seeks to escape by modifying his previous mass of opinions. He saves as much of it as he can, for in this matter of belief we are all extreme conservatives. So he tries to change first this opinion, and then that (for they resist change very variously), until at last some new idea comes up which he can graft upon the ancient stock with a minimum of disturbance of the latter, some idea that mediates between the stock and the new experience and runs them into one another most felicitously and expediently. (1904/2007, p. 148)

In the wide scope of Dewey's interests, we find the first developed notion of knowing in educational practice, and it is to his work that I now turn.

Quinton's opening line of his essay on Dewey reads, 'Pragmatism began as a theory of meaning' (1977, p. 1) and opens up an approach for this chapter, for it is meaning that drives the search for curiosity and edification apparent in contemporary Deweyan philosophy (e.g. Wittgenstein, Heidegger and Rorty). Dewey's pragmatism has its roots in Peirce, but also more clearly in James, and it is revealed

through the experiential consequences in the future or, as Rorty uses the term, in what we can take as justifiable belief. This introduces an approach to knowledge that makes it fallible and corrigible to claim knowledge of an idea or entity and claim that it 'warrants belief'. That belief is what is required for action, thus making Dewey's theory of knowledge a theory of hermeneutics and of action and, by extension, a theory of experiential learning how to be. Consider the following from Dewey and Bentley's, 'The Knowing and Known':

knowing is co-operative and as such is integral to communication. By its own processes it is allied with the postulational. It demands that statements be made as descriptions of events in terms of durations in time and areas in space. It excludes assertions of fixity and attempts to impose them. It installs openness and flexibility in the very process of knowing. It treats knowledge as itself inquiry –as a goal within inquiry, not as a terminus outside or beyond inquiry. (1976, p. x)

In thus positioning knowledge, he shifts the analysis to inquiry rather than epistemology. In this respect, Dewey's approach echoes a grounding Darwinism and Hegelian idealism (Pringe 2007).

Dewey, especially, contests the notion of experience both as an accumulation of knowledge and as a dialectic transaction examination. In this sense, it is not trial by error but informed experimentation, the environment thus blurring subject and object. This notion of experience leads Dewey to develop a notion of inquiry that is activated by a rupture of the status quo. A rupture is first felt emotionally and then developed through a process of hypothetic base inquiry. The results of inquiry are not radical changes in the state of one's understanding but an evolution, a change where premises are questions and circumstances tested. This process is undertaken with the concepts, theories and the experiences we have at hand and is facilitated by theory and concepts, for these offer alternative ways by which others, be they teachers or craft masters, can help to provide new ways for the learners to understand what they are experiencing. Learning thus is not solely about action; it is equally about a reflection on concepts, theories and experience. Moreover, not all action is learning – consider ritualized activities.¹

Experience thus provides a platform for building a view of the future, not an epistemology based on what has happened but on what might happen, with education as a way of communicating what one has learnt. Rorty, we will see, called this 'pedagogy' (1999b), and for Dewey, it is a process of anticipatory imagination. Moreover, such a view holds that what is known is provisional, fallible and correctable. Schiller offers the example of the abstraction of arithmetic when he argues that 'two and two make four, is always incomplete. We need to know to what "twos" and "fours" the dictum is applied. It would not be true of lions' drops of water, nor of pleasures and pains. The range of application of the abstract truth, therefore, is quite limited' (Schiller 1905/2009).

Dewey's approach places the inquirer as the active agent of knowledge creation, testing it against the context in which it was rationally and socially constructed or

¹ 'Theories thus become instruments, not answers to enigmas, in which we can rest' (James).

adopted. His contestation of propositional knowledge has its roots in Aristotle's work and the more recent philosophies of Kant, Merleau-Ponty, Heidegger, Bourdieu and contemporary approaches to learning and knowledge by post-structuralist thinkers such as Derrida (2004), Lyotard (1984), Foucault (1980) and Winch (2010). Often quoted as a significant but not unchallenged contribution is Ryle's development to epistemology; we know the mode of both 'how' and 'what'. Moreover, the insight of Polanyi (1966) is to acknowledge tacit as well as explicit knowledge as a legitimate notion.

From these central premises, other authors have developed an array of perspectives from which we can come to know within the workplace and how we might manifest that knowledge. Moreover, having been acquired either consciously as coded or experientially and then used in practice, knowledge attracts attention when we consider how we employ it when exercising our judgement to direct practice in new, innovative work spaces. The context of knowledge acquisition and creation in its many forms has also received considerable attention. Work has a conjoint interdependence of social and individual agency (Billett et al. 2005), and judgement based on hermeneutics uses neither a research method intent on holding apart subject and object nor an alienating academic discourse for the investigation of what is a workplace phenomenon (Farrell and Holkner 2006). Beckett and Hager (2002) embrace the notion of *phronesis*, yet want to produce an 'improvement on this analysis whereby we can acknowledge that workplace learning is a phenomenon deep within practical "doing" towards certain localised values' (2002, p. 184).

Knowledge as Validated Belief

As practitioners come together by being involved with one another in action, they may become a community of practice wherein they learn to construct shared understanding amidst confusing and conflicting data. The community of practice returns knowledge back into its context, so that groups learn to observe and experiment with their own collective, tacit processes in action. Action science is called upon to bring the individuals' and group's mental models, often untested and unexamined, into consciousness. It is a form of 'reflection-in-action' that attempts to discover how what one did contributed to an unexpected or expected outcome, taking into account the interplay between theory and practice.

My arguments from here are based on an interpretation of the principles of Rorty's neo-pragmatic, interdisciplinary notion of knowledge that seeks to improve current understanding and that renders as truth that which is justified in terms of belief and explanation. Indeed, this leads Rorty to suggest that we drop the notion of truth, at least in any sense implying correspondence with an external reality and, following this, the notion of disinterested pursuit of knowledge of such truth. As Rorty projects this dissolution of truth for pragmatists, he states that whilst 'there is obviously a lot to be said about justification of various sorts of beliefs, there may be

little to say about truth' (1998, p. 19). Under such a position, epistemological claims are based on plausible argument and judgements and are inherently uncertain, but sufficiently reliable to function for us in our everyday world of work as creative innovators.

I will discuss the application of the Rortyan ideas of justification, edifying conversation and solidarity to the trilogy of the university's function: knowledge creation, teaching and service. Such an approach leads to the university being defined in terms of its core functions of conversational learning, knowledge realization and solidarity. Rorty, like Dewey, positions knowledge as the connection for social solidarity rather than knowledge as power (for instance, as emphasized by Foucault) and, as such, is more supportive of hope than despair. The hope is not as the realization of correspondence with some outside essence revealed through refined method, but as the constitution of a future identity where claims for knowledge are proposals for action. From this Rortyan perspective, we might consider the university's faculty members as those whose function is to act in our technological way of being as an 'interpreter for those with whom we are not sure how to talk. This is the same thing we hope for from our poets and dramatists and novelists' (Rorty 1982, p. 202). As Arcilla comments, 'teachers are in a position to turn the tide of epistemological despair into educational hope' (1990, p. 35).

The edifying conversations are engaged in by 'practical epistemologists' (Barnett and Griffin 1997, p. 170) and are not just intent on generating meaning, but allowing personal growth and development through the re-creation of networks of beliefs and desires. It is not the rehearsal of *habitus*, but the creation of space to question and to build. It is the creation of Rortyan self-creating ironists, not confirmation of commonsensicalists² who have previously avoided formal higher education or only undertaken directed vocational programmes. The edifying conversations 'serve not only to make it easier for the community to accommodate each of our edifying projects but also to root those projects, and us, in the shared tradition from which they initially drew their resources' (Arcilla 1990, p. 37). My own emphasis on conversations is to enable a language game to be constructed between the world in which the university exists and the world of work and labour, so that a new, more relevant learning community can evolve.

The notion of conversation as a generator of knowledge is not explicitly Rorty's notion (see for instance Plato's *Theaetetus* and Schiller's commentary on this, 1905/2009, and more contemporarily the work of Gadamer 1979, Habermas 1984, or Bernstein 1983), but in his work, we find a notion of being similar to that of Heidegger (2003), where the functionality of learning is best interpreted as a hermeneutic engagement with others. Through this thinking, we develop understanding by means of the use of common language that we will take as knowledge ('how topics are defined in terms of one another and how they relate to other topics to form a coherent conceptual system', Ford 2005, p. 374). Under this notion, knowledge has its own lifespan and might be temporary –for example, in deciding if it is raining –or

² See Rorty, 'Private irony and liberal hope', 1989.

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more permanent and enshrined in a notion of fact or theory, or intermediate when it is evidenced in practices. This is not an attempt to find an alternative objective reality that is certain, reified by an unswerving notion of knowledge as absolute truth, but to define the level of confidence we can have in practical judgements.

Such a neo-pragmatic notion of knowledge needs neither a metaphysical classification of modes nor systemic ideas of codification. All can be incorporated and recorded in the edifying conversation, supported by the justification and confidence in the evidence offered. In this way, what we consider to be meaning is situated meaning, developed in a specific conversation in a specific location whose applicability is then tested over time and space and its validity and reliability assured – somewhat like Wikipedia. Moreover, what this 'democratic process of inquiry determines is which descriptions of the human environment, natural as well as social, best enable human beings effectively to interact with it to satisfy their needs and desires' (Elliott 2006, p. 179).

The vocabulary of knowledge is culturally determined and acts to inform, but also to include or exclude those without the appropriate characteristics to belong to a certain form or category for the conversation. Wittgenstein called these 'language games'. According to Rorty, we engage in edifying discourses that seek to help others 'break free from outworn vocabularies and attitudes, rather than to provide "grounding" for the intuitions and customs of the present' (1979, p. 12). The cultural role of such edifying conversations is 'to help us avoid the self-deception which comes from believing that we know ourselves by knowing a set of objective facts' (1979, p. 373). Taking this stance helps us describe and thereby recreate our world. The Rortyan conversation is necessarily ongoing, for it is not a matter of discovering or seeking essences, but of being prepared to listen and learn from others. It requires that we are constructing our own world views as part of our work world with others. In so doing, we reflect upon what our identity is, both in the specific situated learning environment presented and in how we take a stance on our becoming with others.

Like language games, Rorty's vocabularies are 'useful or useless, good or bad, helpful or misleading, sensitive or coarse, and so on, but they are not "more objective" or "less objective", nor more or less "scientific" (1982, p. 203). For Wittgenstein, our belief is not 'single axioms that strike me as obvious, it is a system in which consequences and premises give one another *mutual* support' (italics in original, 1975, §142, 21e). Moreover, he argues our knowledge forms an enormous system: 'And only within this system has a partial bit the value I give it' (1975, §420, 52e). From Wittgenstein, I take it that documentary evidence, which we take to be empirical and measurable evidence³ when compared to the imponderable *a priori* form of knowledge, is more commonly considered sure, that is, reliable and certain.

³ This is based on the passage, 'The question is; what does imponderable evidence *accomplish?* Suppose there was imponderable evidence for the chemical (internal) structure of a substance, still it would have to prove itself to be evidence by certain consequences which can be weighted. (Imponderable evidence might convince someone that a picture was a genuine. But it is possible for this to be proved by documentary evidence as well)' 1999, p. 228e.

For Wittgenstein, however, documentary evidence is not certain; he refers to certainty as being only a personal attitude, a rule of a language game. Indeed, it is in Wittgenstein's (1999) language games that meaning is revealed though use in different contexts – law, social and natural sciences –but where in all uses there is an observed familiarity that gives meaning to entities: 'For if you look at them you will not see something that is common to all, but similarities, relationships, and a whole series of them at that' (Wittgenstein 1999, §66, 31).

What Should We Take as Evidence of Knowledge?

How do we know —for instance, in formulating policy —what is known and thus commonly assumed to be assured? The restricted use of the range of valid epistemic claims for knowledge inhibits our ability creatively to form new knowledge or to verify the existence of entities that remain concealed through empirical methodologies (I am thinking of action research, case studies and one's own dreams, fantasies and motivations). How can we establish 'evidence-of' that provides pragmatic reliability whilst not falling foul of rigour? Perhaps, we start with the right question if we ask, 'What act or agency signifies that evidence is "evidence-of?" This question may be modified when we enquire what level of confidence we have in our evidence to reveal that it is 'evidence-of' something. The question then becomes not 'What is evidence?' in any specific disciplinary sense, but 'in what can we generally have confidence and what is required for us to hold such a belief as to the role the entity plays in providing "evidence-of" something?' This realignment of what is knowable into what is it prudent for us to believe shifts the point of reference from certainty to judgement.

We develop and form solidarity with a community through our choice of story that we tell to identify us with the wider context of that community. Thus, as Rorty proclaims in his important work on knowledge, Solidarity or Objectivity, when a person seeks solidarity, 'he or she does not ask about the relationship between the practices of the chosen community and something outside the community' (2002, p. 422). Rather, what is sought is pragmatic intersubjectivity, where what is believed works and what is sought is something better. Knowledge, then, is 'simply a compliment paid to the beliefs we think so well justified, that for the moment, no more justification is needed' (p. 425). For Rorty, knowledge is contingent upon access to a particular language game that depends on the convergence of social and historical factors to determine the type of conversation taking place. As he explains, 'if we see knowledge as a matter of conversation and of social practice, rather than as an attempt to mirror nature, we will not be likely to envisage a meta-practice which will be the critique of all possible forms of social practices' (p. 171); that is, we need not substitute facts for interpretation. Knowledge justification democratically emerges from a community based on Socratic edifying conversations and, 'while uniform agreement may not necessarily ensue, no difference of opinion so intractable as to bar solidarity with one's fellow could arise' (Nelson 2009, pp. 500–502).

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Where does this lead up to in the notion of knowledge realization? We normally recognize that activities and practices embody knowledge, and knowledge is determined by its usefulness to us to engage with and cope in our everyday activities. Moreover, we generally accept that what one knows might be transferred from the original domain of its justification into other domains for use, but the success of this depends on the ability of those who will use the knowledge to be able to define it as such in their own language games and accommodate the knowledge through their own realization of meaning in ways that continually work for them.⁴

It is often the case that the uncertainty of our worlds requires judgements to be made under conditions of uncertainty and where what is taken as knowledge is a fallible, albeit valuable and worthy, ground on which to base action. However, this fallibility arises because it does not conform to existing descriptors of propositional knowledge and was never intended to be the type of knowledge that can be generalizable and based on the authority of some recognized methodology. It is fallible because it is conspicuous and temporary. Its lifespan is whilst it retains our acceptance of usefulness, being good enough for purpose. It becomes part of practice and is retained, developed and used until it becomes redundant. This type of knowledge is defined by its practical worth by those who use it wisely in and for the world. Such claims, as I will argue later, are created within edifying conversations with those -such as the traditional university -that stand outside the everydayness of society and develop their own internal edifying conversations to be shared with others. A notion of an edifying conversation is well developed in Burbules (1993). Dependent on a Gadamerian perspective, Burbules argues that a conversation adds tolerance, understanding and meaning, and in so doing, we 'speak with and listen to one another in a pedagogical communicative relation whose divergent aim is not a correct and final answer, but a heightened sense of sensitivity and understanding of other persons, and through understanding them, newly understanding ourselves' (1993, pp. 115–116). The conversation can then maintain difference whilst creating common new understanding and justification.

This is a very different form of knowledge, where the practitioners and the knowledge are ontologically and epistemologically linked through the Rortyan notion of edification. The role of reified method contributes nothing to the value of the knowledge in question. Certainly, this form of knowledge includes dogma, myths, psychotherapy and poetic interpretation. As Peters and Ghiraldelli describe, it 'puts science and philosophy on par with the rest of culture and to emphasize a hermeneutic model of conversation as constituting the limits and possibilities of discourse and agreement' (2001, pp. 2–3). The meaning of knowledge is pertinent whilst it proves to be useful in enabling us to understand and cope in and with our environment. This knowledge gains its authority from being developed in the world of activity and in being validated in context. Its function is to resolve problems that occur in our everydayness. It has no claim to persist beyond this practical function;

⁴ As Rorty puts it, 'we do not know what success would mean except simply "continuance" (1982, p. 172, italics in the original).

indeed, the intent is that it is superseded by more beneficial knowledge. It is not at odds with codification, for this is how it retains *conspicuousness* when it is absorbed in practice. This codification might take the form of revisions to procedures and changes to policy. However, the judgement to codify and how manifested that area function of the community of practice. Such knowledge is not codified in theorem but in processes; it is the knowledge required to understand one's way of being in the work, and in this sense, it is both personal and codified. Its persistence is not questioned by empirical experimentation, but in the way it works and is talked about – its usefulness.

When these conversations take place in a community of practice, they might involve the negotiation of meanings of new forms of knowledge or the validation of generally accepted findings. The skills that facilitate this are the skills of the recipient community (or members, leaders, teachers and mentors within it) to learn and give meaning to this new information as presented to them. The use of a pragmatic interpretation of information is in the sense of the beneficial consequences of what constitutes knowledge, not an epistemic justification. This is where this approach differs from others' discussions of knowledge. For Rorty, there is 'no activity called "knowing" which has a nature to be discovered, and at which natural scientists are particularly skilled. There is simply the process of justifying beliefs to audiences' (1999a, p. 36). Following this approach, there is no need to construct propositions to reify the reality of the word game and then discuss the realized knowledge in terms of applied, theoretic, Mode 1 or Mode 2 knowledge.

To be able to undertake and participate in these learning conversations, however, there are prerequisite skills and capacities that determine whether and at what level one might be included or excluded from the language game conversations. I might, for instance, compare this with Wenger's 1999 discussion of how we learn, through the metaphor of being a community member. Here, identity is honed from a community of practice with cultural artefacts such as a specialist language, tools, concepts, roles and procedures, tacit and codified learning, compared with production mode on Mode 2 knowledge. In the former, these artefacts contribute to an understanding of cultural communities where interdependent practitioners share a common set of practices, interpretation of endeavours and situational epistemic perspectives. The application of knowledge is pragmatic which emerges as truth from its commonly defined sufficiency of purpose. Moreover, Peroune (2007) has drawn attention to the levels of peer engagement, based on trust and self-disclosure. These findings indicate that the willingness of participants to share tacit knowledge is heightened when trust and willingness to self-disclose are highest. Such a conversational model compares well with the seduction of Mode 2 knowledge production (Nowotny et al. 2003) that presents us with a number of issues for the pragmatic university. The cause of concern is the production metaphor. Of course, we recognize that whatever metaphor is chosen endows the object of investigation with metaphordependent status. In unpacking the production metaphor, a range of notions is assumed about the kind of knowledge being produced. I may take the notion of production (poiesis, according to Aristotle) as aimed at making or changing something that is not an end in itself, but for the use of something else – building a home, making a car, gaining a qualification. This production is achieved through the use of learned skills and capacities previously acquired in some form and in the continual process of improvement (*techne*). The capacity to do, that is, the skills to be able to recognize, manipulate, converse with others and understand, is a necessary condition for the notion of production of knowledge. This is itself evident in that one needs to be able to understand what to do, in addition to knowing how to do it. Any notion of value associated with the process is not found in *poiesis* but in *praxis*, which leads to practical wisdom (*phronesis*) and the practice of moral judgement. By using the production metaphor, Nowotny et al. (2001) encourage the notion of knowledge production that is scientific and objective and thus value-free in its realization and associated with a need for it to be put to work. In this sense, the knowledge created has to be put to work; it is not of the work. Knowledge viewed through the production metaphor needs to be applied for it to exist; it has no end in itself. Mode 2 knowledge seems like a conflation of knowledge production and the knowledge so produced.

If pragmatic learning is conceived as edifying conversation, not unlike Beckett and Hager (2002), I argue that judgements have to be made. Yet these judgements on the value to the individual and the group of the usefulness of the knowledge and the action to ensue are matters of practical judgement and lead to a skilled judge being considered as a wise person. This requires of the conversationalist an ability to understand other language games so as to interpret meaning from one domain to another and also to challenge interpretations of the notion of knowledge contained. As each domain is in constant flux, this ability to interpret, to give meaning to something in order that it becomes knowledge, is what we consider to be the main attribute of an ability to learn. For the student and faculty member, the ability to transcend their immediate contextual interpretation of knowledge in ways that challenge the accepted interrogation is an ability to create new knowledge, new ways of being useful within the context of action. This requires many virtues besides the Aristotelian virtues of courage (it is a risky thing to acknowledge changing ways of being), prudence and desire and requires, according to Winch (2010), self-regarding virtues such as patience, persistence, diligence, attention to detail and tenacity. Further, this ability to learn involves aretaic and personal characteristics in existing practices as putative abilities in knowledge creation.

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