

John Dewey 1859-1952

Introduction

In a prolific career spanning seven decades Dewey focused on philosophy, education and politics. Such was his prodigious output it is impossible to cover the breadth and range of his work. This paper firstly concentrates on his contribution to education in the twentieth century and then discusses his place amongst those associated with the pragmatic school of philosophy. By doing so we may we gain a clearer insight into the content and context of his work and the connecting themes of pragmatism. The backdrop is America on the move. These were extraordinary times as the juggernaut of economic growth and social change advanced at increasing speed and intensity.

For educationalists, John Dewey was one of the most powerful and influential voices in challenging academic tradition. Remarkably, he is still held in high esteem over sixty years after his death. His contribution to pedagogy was immense. The approach of Dewey was radically different at a time of prescription, regimented systems and slide rule efficiency to grind out a typical education menu across the United States.

The collected works of John Dewey comprise thirty seven volumes that have been the subject of much interpretation by countless scholars. Yet Dewey's ideas have barely permeated the classroom despite his exalted place in the bastions of education. We may wonder why. His ideas still resonate with idealists, progressives and reformers who involve and engage learners through self-discovery, critical enquiry, interaction, reflection and linking theory to practice.

Many of his ideas remain as we continue to debate the purpose and role of education in a helter-skelter world that challenges accustomed ways of doing things. How we learn and the purpose of education are central to that debate. A quote attributed to MIT at Boston sums up Dewey today. "In a world of constant change, learners inherit the earth; meanwhile the learned are superbly equipped for a world that no longer exists." There is unease in British society about whether systems equip students for an uncertain and unpredictable world, so a reprise of John Dewey may be timely in a society obsessed with grades and targets.

Born on 20 October 1859 in picturesque Burlington, Vermont, Dewey was raised in the homely surroundings of his father's general store, a magnet not only for shoppers but those with time, prepared to discuss matters of national and local importance. The store window, according to folklore, displayed the notice: hams and 'cigars -smoked and unsmoked.' Clearly a community spirit was much alive in Burlington.

Early life experience in small town America shaped his views. On the negative side he was unimpressed by the formality and ritual of traditional schooling with its reliance on rote learning, memory and testing. The accepted model of education was passive. Pupils were empty vessels to be filled and imbued with knowledge to be memorised and regurgitated at will. Fixed subjects were taught as if each was a silo with scant

connection between them, often based on scholarly input from a teacher whose own syllabus or scheme of work remained little changed in decades. From around 1870 the economy of the United States took off in a spectacular way, fuelled by the spirit of capitalism, industrialisation, innovation and a burgeoning population, with millions passing through Ellis Island seeking a better life. Taxing the mind of the young Dewey was how young people especially, could be better equipped to learn so they might obtain satisfying and intrinsically rewarding work and, crucially, engage fully in society.

His upbringing left John Dewey with an indelible view of the benefits of community life whether social, technical, economic, cultural, legal or political, by way of example, and he felt strongly such ingredients were important elements in shaping a purposeful life, and especially the quality of life of ordinary citizens. For Dewey "school is primarily a social institution." It is "that form of community life in which all those agencies are concentrated that will be most effective in bringing the child to share in the inherited resources of the race, and to use his own powers for social ends."

Dewey has long been associated with the progressive movements in education such as Maria Montessori and Friedrich Fröbel, nurturing independence, natural curiosity and psychological, physical and social development, but the heart of Dewey's ideas lay with the notion of learning by doing. But this simplistic statement can be misleading, as we shall see, for there is much more to his ideas on pragmatism that are expanded on when discussing the philosophical connotation in the company of fellow Americans William James and Charles Sanders Peirce.

From an educational perspective John Dewey has greatly influenced major thinkers in the decades since, not only in relation to a curriculum and how it is taught, but into how we learn, the environment in which we learn and what constitutes intelligence.

Career

After graduating from the University of Vermont in 1879, John Dewey taught Latin, Algebra and Science for two years at a high school in Oil City, Pennsylvania. During this time, encouraged by a Vermont professor, he wrote three essays accepted for publication by the Journal of Speculative Philosophy. He then entered John Hopkins University in Baltimore where he gained his Phd in Philosophy in 1884. His doctoral thesis was on the psychology of Immanuel Kant.

By his middle thirties Dewey was Head of the Department of Philosophy, Psychology and Pedagogy at the University of Chicago. Here, in 1896 he established his famous experimental school, known better as the Laboratory School. In 1904 Dewey was appointed Professor of Philosophy at Columbia University where he articulated and spread his educational ideas formed in Chicago. On retiring in 1930 at the age of 71 he became Emeritus Professor. Active to the end he died aged 93. Not without this critics, the greatest contribution of John Dewey was to "liberate education from the dead hand of tradition and what he himself termed the "static cold-storage ideal of knowledge."

The Laboratory School

This innovative school was designed to implement a pre-structured pedagogical plan based on his vision of open experimentation and his research into new methods of learning and teaching. An important tenet was to gain the active participation of students, encouraging all to take an experimental approach to their own education. The laboratory school was to be the testing ground for his philosophical ideas and implementation of these. As a pragmatist, John Dewey believed the meaning of an idea or theory is to be found in its practical effects. Dewey sought to eliminate the dichotomy between philosophy and ordinary experience and stated "education is the laboratory in which philosophical distinctions become concrete and are tested."

The design of the traditional school was for Dewey a story of submission, immobility, passivity, absorption and dependency. He uses the analogy of a biologist who through the examination of "a bone or two" can reconstruct an entire animal. He likened this to a typical classroom setting "with rows of ugly desks placed in geometrical order." A uniform arrangement of size and space meant a uniform and prescribed approach to teaching and learning that, for Dewey, was designed only for listening, be it from the teacher or a book that he saw as "only another kind of listening." In this his views echoed those of Rousseau.

Students in the Laboratory School were encouraged to enquire, create, challenge and question, free to move about and form groups, and plan and execute what they saw as practical solutions. School was not only a social institution but a democratic and equal one. Students were to learn by themselves and between themselves. Dewey said guidance "is not an external imposition. It is freeing the life process for its own most adequate fulfilment."

Students were to be placed at the epicentre of learning with an education system that was geared to what we might regard today as personal learning. "The universe of the child's experience is fluid and fluent; its contents dissolve and reform with amazing rapidity." The experience of the child, at least initially, should be formed by subjects that are integrated, not dissected, to give purpose, clarity and meaning. Only then may the journey of learning really commence.

A ritual of prescribed subjects and teaching methods was Dewey felt a "demoralizing doctrine." On the contrary a school should be a "society of free individuals in which all, through their own work, contribute to the liberation and enrichment of the lives of others." He insisted "it was the only environment in which any individual can really grow normally to his full stature."

The teacher has two primary functions Dewey insists. First the teacher has to guide students through the maze and complexities of life, affording opportunities to learn naturally by solving relevant problems. Second is the role to enable and empower the student to cope adequately with contemporary conditions and come to terms with

novel problems in a changing and uncertain world. In *My Pedagogic Creed* he says the role of the teacher is not to “impose certain ideas or to form certain habits” in an ingrained and prescriptive way. Rather, the function is to “to determine, on the basis of larger experience and riper wisdom, how the discipline of life shall come to the child.”

Dewey also sought to avoid fragmented and disconnected knowledge. “It sub-divides each topic into studies; each study into lessons; each lesson into facts and formulae.” It is the logic of the subject matter that determines the objectives and the methods of the teaching and learning process. The student is then a passive receptacle whose only function is to receive the structured and discrete subjects. Human knowledge is merely codified and classified to enable regimented recall according to the logical and epistemological distinctions of students, not according to their own experiences.

Purpose of Education

Quite apart from the curriculum, methods and content, fundamental to Dewey was for students to be active participants through interaction within their social group or what Dewey refers to as a community of, and for, learning. Nurturing involves the active impulses of the child and (hopefully) an enquiring nature. “If we eliminate the social factor from the child we are left only with an abstraction; if we eliminate the individual factor from society, we are left only with an inert mass.”

Whilst education was to be practical, it was not to be defined by a narrowly prescribed syllabus. Neither was it to be rooted in trade skills but vocational, in applying subject content to everyday life. He envisaged using an amalgam of subjects in a practical and helpful way, such as cookery and gardening that would involve maths, science and design embracing the creative arts and other subjects too such as geography. At issue for Dewey was the teaching of discrete subjects that bore little relationship to the real world. A prime example is shopping involving maths, planning, judgement, economics, decision-making, assessment, budgeting, communication and so forth.

Dewey foresaw immense change and was concerned the knowledge and skills fit for today may leave students ill-equipped years later. What he sought were agile and adaptive learners, eager to take responsibility for their learning within a community setting. Teleological explanations were not required as if an ultimate form of truth existed for selected studies. He accepted future uncertainty and idea of improvement through discovery, own methods, critical inquiry, reflection and self-advancement.

Education was not a formulaic process to prepare the student for an idealised future but a mechanism for personal growth through the construction and reconstruction of our own experiences. This felt Dewey may enable students to reorganize knowledge, experiences and expertise to confront whatever life had in store and to maximise our opportunities. Solutions may remain provisional, or least capable of adaptation in a changing and evolving world.

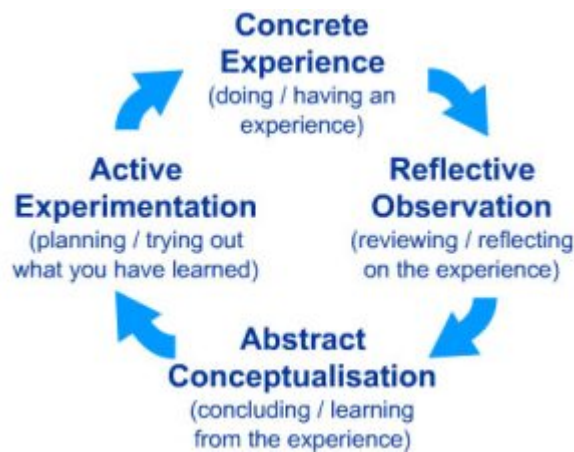
If, asserts Dewey, a student cannot devise his own solution “he will not learn, not even if he can recite some correct answer with one hundred per cent accuracy.” To him

there was little point in recitation merely to satisfy the system. What mattered was how the student used the learning experience. Using a map is much like a plan to help us get to a desired destination, but it is not a substitute for the experience of the journey. For Dewey a theory or fact is helpful only if it has practical application that in one way or another is conducive and helpful to human growth and potential.

Application in the Modern World

In 1984 David Kolb, a social psychologist and a professor of organizational behaviour, produced his Experiential Learning Cycle. The bootprints of John Dewey were evident as Kolb intended learning to be a continuous cycle, so we may spiral and accumulate greater knowledge. The model envisaged by John Dewey is closely connected and forms an important basis of what we know of today as continuous improvement.

The diagram shows how Kolb's Experiential Learning Cycle is in essence a continuous activity, unless we wish to jump ship at a certain point and settle for what we have.



- 1. Concrete Experience** - a new experience or situation is encountered, or perhaps a reinterpretation of an existing one.
- 2. Reflective Observation** - of the experience. Of importance are any inconsistencies between experience and understanding and the reasons why this may be so.
- 3. Abstract Conceptualization** - reflection gives rise to a new idea, or modification of an existing abstract concept.
- 4. Active Experimentation** – learners apply this to the world around them to see what results.

Learning is thus seen as an integral process with each stage being mutually supportive of the next stage, and feeds into it. For Kolb, effective learning takes place only if all four stages of Experience, Reflection, Conceptualisation and Testing are applied.

This important work by David Kolb, and associated Learning Styles Inventory, spawned an enormous amount of research on how we learn and more especially the wide range of learning styles out there and our own preferences, relevant to the activity.

In 2004 the Learning & Skills Research Centre produced a detailed report on learning styles, questioning whether they are valid and their value, if any. The report identified thirteen typologies, concluding that it matters fundamentally which model is selected, germane to the area of study. The researchers examined dimensions of consistency, reliability and validity. The report concluded each of the thirteen models selected all had inherent degrees of weakness on at least one dimension but overall the models were of help, if applied in an appropriate context and setting.

Some of the research into learning styles involves the psychology of learning and is closely connected to psychometric testing and personality profiling. An example is the model produced Myers – Briggs that is based closely on studies by Carl Jung on psychological types. Whilst slightly tangential to the core themes in this paper, it is helpful to show the outline model as how we learn involves four pairs of preferences or dichotomies; they have much to do with our own cognitive functioning and natural inclinations.

	Subjective	Objective
Deductive	Intuition/sensing	Perception/judging
Inductive	Feeling/thinking	Introversion/Extraversion

A close link to action research exists between John Dewey’s concepts, David Kolb’s model and also the Myers-Briggs studies as three domains of learning are activated: cognitive (intellectual capacity), affective (feelings and emotions) and psychomotor (manual or physical skills). Action research involves a relationship between inquiry and practice and is often associated with the instrumentalist view that research serves practical goals. John Dewey would endorse this. He would contend too that learning is a stimulating and invigorating experience, requiring active experimentation as well as intense reflection to enrich and add value to our studies, and shape the future too.

The history of action research is usually traced to social psychologist Kurt Lewin. The starting point was probably a request for Lewin to help solve low productivity in a new manufacturing plant in the early 1940s. He saw action research as involving a spiral process in which a hypothetical solution to a problem is formulated and tested, its relative level of success monitored, the proposed solution reformulated in the light of this, and the strategy recalibrated and so on. There is some evidence the concept was used to speed up the production of liberty boats to assist the war effort though other techniques were used too. Using traditional techniques, the first liberty boat took 244 days to build, a time whittled to just 40 days by the end of the War.

The key notion is that the spiral delivers closer and closer approximation to an ideal solution, based on a sound theoretical understanding of the main processes involved. Fundamental to Lewin was not just using external agents and catalysts to bring about improvement, but use of participation and self-management. For Lewin and indeed Dewey, science, social improvement and democracy were closely intertwined. They would both concur that the desired outcome was an optimal solution at any point in

time, whilst continuing to hone, refine and improve. There was no final destination or absolute pinnacle of perfection. Neither Dewey nor Lewin would envisage such an eventuality. It is a continuous and cyclical process, ever-changing and evolving.

In *How We Think*, Dewey defines the major component in thinking for the purposes of inquiry as “that operation in which present facts suggest other facts or truths.” Though reasonable grounds might exist for believing this, the process may involve a state of perplexity, hesitation or doubt, prompting a search for other facts to corroborate or nullify a suggested belief. Dewey was mindful of uncertainty and welcomed it. Where roads diverge “the perplexed wayfarer” looks for clues, signals, evidence and proof, drawing on past experience and knowledge and searching for a map or signboard to clarify the direction of thought.

Reflective thinking, states Dewey, means avoiding inertia by not accepting evidence at face value. Instead, this requires “a condition of mental unrest and disturbance” and “means judgement suspended during further inquiry; and suspense is likely to be somewhat painful.” Dewey then talks about exploration and testing and having a clear focus before moving onto the nature and exercise of judgement that involves analysis and synthesis.

Ideas presented in his major works are clearly expressed in great detail with a logical, coherent and interesting flow. For brevity, only a brief insight has been provided. The contention of this paper is that Dewey was the torchbearer, not only for experiential learning, social interaction and the quest to examine how we learn, but the concept of action research still widely used in social research especially. He was a catalyst too for motivational theories, believing strongly that each person has a unique potential and the job of the educator is to enable each to grow and maximise their potential.

In exploring Dewey’s work a shaft of light focuses not only on learning and cognition, in using say language and logic, but how people may be good at different and diverse things. Howard Gardner, Professor of Cognition and Education at Harvard, took up this theme in his seminal book *Frames of Mind* first published in 1983. He identified seven intelligences, later increased to eight such as musical, spatial and kinaesthetic. This echoed Dewey’s thoughts. “It is a claim that every human being as an individual may be the best for some particular purpose,” adding the important rider “within a social learning environment.”

A Philosophy of Pragmatism

It is interesting to contrast pragmatism in the world of education to philosophy as a discrete subject that may apply different tests. It is little wonder that Dewey’s ideas, and those of the main proponents of pragmatism, were hotly contested. In forging an independent nation the United States developed its own culture, political systems and uniquely American way of doing things.

That pragmatism does not have deep-rooted international foundations is not that surprising as Americans were used to thinking from first principles and applying their

own conventions and rules, unrestrained by what Europe was doing. For them, what mattered was finding out what worked, and what did not. Attempting to improve was instilled into the psyche and was applied to productive efficiency especially. American history is underpinned by a spirit of optimism, the desire to succeed and wish to lead fulfilling lives. Faced with a fresh challenge, constraint or dilemma the answer often was whatever it takes.

The pragmatic movement was founded by William James in partnership with Charles Sanders Peirce whom he met at the Metaphysical Club in the 1870s. They reacted against the prevailing ideology of Hegel and absolutist metaphysics, insisting that beliefs are only true, if they work. Of interest to them were matters of importance and substance that could be rigorously tested and applied. This resonated too with the third member, John Dewey. Of the three "American Pragmatists," says Bryan McGhee, "the most original was Charles Sanders Peirce; the most enjoyable to read was William James; and the most widely influential was John Dewey."

For Peirce especially, what works was true. He was says Grayling a genius, especially in relation to maths and logic. Tutored by his father, a professor of maths at Harvard, he liked to immerse himself in projects but often lost interest and rarely completed them, if something more profound captured his attention. We are all part of a living world insisted Peirce and it is mainly in the interests of survival that we pursue knowledge, but as participants and not spectators. It was he said the most important instrument we have but only as long as it yields accurate results.

Scientific knowledge he contended is not a body of certainties but of explanations that may morph and adapt and may require replacing with better ones. A case in point is an article in the Independent of 16 April 2015. Using computer modelling about aspects of the earth's crust, scientists have now raised fresh questions about how the earth came to be in its present state.

Whereas Peirce had advanced pragmatism as a theory of meaning, James treated it as a theory of truth. "Everything real" he said "must be experientiable somewhere, and every kind of thing experienced must somewhere be real." For some this was taken to mean that if it works it must be true but James accepted what appears to be true may not necessarily apply to all situations. He recognised the problem of a will to believe as it could not be tested; neither was there any way of assessing the validity of an assertion or statement.

James was an advocate of hunch and feelings if the notion or idea accorded with gut reaction, and if it could be substantiated by strong arguments that might affect how you live your life. Truth for James had a cash value. Whether a single truth or plurality what was true was the most useful. James devised what became to be the main form of pragmatism using scientific methods and believed strongly that that there was one ultimate truth, germane to that situation or event.

In contrast, Peirce contended in the living option you are faced with genuine choices and are forced to take a stance, such as you either believe in God or you do not but

either way your standpoint affects the way you live your life. There was no way to settle a debate relying on free will to state a belief that cannot be disproved. Unlike Dewey, for Peirce the ideal end point was what appears true and what is true. James and Dewey could not maintain this distinction, believing it a false premise. Truth for Peirce was accessible but for Dewey this was not the ultimate goal as he sought only to establish the best practical application. He was mindful this may not represent the optimal solution that might change over time anyway – and probably hoped it would!

For Dewey the importance of pragmatism lay in its application spurred by a desire for social change. His anti-intellectual stance was informed by society itself and a theory of inquiry that sought to discover the nature of things through learning by doing. This involved a collective as well as individual approach with a shared social responsibility to investigate and discuss results. Collaboration was key; so was pooling ideas.

Knowledge is accumulated by collecting, testing and analysing whilst realising what counts as good evidence may well change over time. Dewey believed in warranted assertions that would provide not only a sense of direction but a map for the journey. This entailed a reasoned approach to form a view with sufficient conviction to state the truth as it appeared at the outset. What he was not advocating was engineering evidence to satisfy a given hypothesis. The conception of knowledge itself was via competent inquiry. What you can assert by reason represents the truth, with caveats such as the facts presented, constraints and time, or era in which this form of truth emerges from application in practice.

Peirce, James and Dewey gave different versions that differed from Kant who made the link that ultimate reality is not accessible to us, echoing Descartes too in a sense in posing the question, what if we are mistaken. The legacy of this is anxiety and angst which for Dewey was irrelevant, believing all this to be merely an intellectual game, devoid not so much of reality but purpose. What was the point of meaningless and semantic debate if you did not attempt to test out theory in a practical manner?

Dewey was involved in the New Deal but was critical of it, believing it did not go far enough. Finding solutions to problems required a community effort matched too by social endeavour. He had a strong sympathy and accord with both participation and democracy. He was mindful that with a spiralling population, augmented by mass immigration, workers had scant protection and this applied also to health and safety, a case in point being the notorious Triangle Shirtwaist Factory Fire in New York in 1911, resulting in the tragic deaths of 146 garment workers.

In Conclusion

The most important contribution of John Dewey was not so much to philosophy, with his strong affinity to a form of pragmatism, but to the social psychology of education. That his ideas and ideals were lauded, but little acted upon within his lifetime, does not detract from their validity as they became accepted in other formats. Examples

include personalised learning, inter-dependent as well as independent learning and the use of critical inquiry and reflection.

His most notable contribution was laying foundations for experiential learning and, with this, a growing interest amongst human resources professionals of learning styles and their importance. That Dewey was a catalyst for the creation of action research is accepted. This analytical tool has been extended, refined and developed to provide a hugely important vehicle for social research especially.

The contention is that John Dewey lifted the lid on what may constitute intelligence, a theme taken up decades later by Howard Gardner. In a presentation as recently as February of this year Gardner speaks of linking this to excellence, engagement and ethics which brings us back to John Dewey with his ideas of giving your best, of social learning and being a contributor to society.

Whilst this paper has focused on Dewey's contribution to education, and philosophy to a lesser extent, he was prominent also in his political campaigning and his support for greater democracy and equality, notably the advancement of women. By nature, John Dewey was a theorist but a doer too, helping reshape the purpose of education and how it may be taught to benefit students and society. His ideas still resonate and may have even greater credence in a world of unremitting change and uncertainty.

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