

Chapter 1 Philosophy of education

Introduction

Some people think that the philosophy of education is the most important aspect of teacher training. Others claim it is so far removed from classroom practice that it is a waste of time. This chapter begins by explaining the value of educational philosophy before identifying three major philosophical categories – ideas, experience and development – under which the work of some key theorists is grouped as shown in Figure 1.1. We also outline the educational implications and consequences of these categories and theorists.

The philosophy of education is important because it explains how educational theories arise. By examining the philosophy of education, we are able to see why and how theories complement or oppose each other. An understanding of philosophy is therefore useful in guiding and critiquing the development of educational theory. Philosophical knowledge may provide a justification for teaching methodologies; reveal and challenge assumptions about the nature of teaching; and provide a language for educational debate.

Finally, philosophy is vital for the promotion of teaching as a scholarly and professional activity. Education has only recently been recognized as a subject in its own right. Many educational theories are drawn from other disciplines, and a philosophy of education can provide a pedagogical history of ideas, theories and vocabulary. It helps to place the educational discipline on a similar philosophical footing to other disciplines through the establishment of a distinct discourse and rationale.

Key definitions in educational philosophy

The philosophy of education can be defined as the study of the purposes, processes, nature and ideals of education.

The word ‘education’ derives from one or both of the following concepts:

- ‘Educare’ – to draw out and realize potential;
- ‘Educere’ – to bring up and nurture.

Both of these concepts merge in Kant’s famous claim that the purpose of education is to enable humanity to develop and to improve: ‘Man can only become man by education’ (Kant 1803/1960: 6).

Education attempts to develop personality in a preferred direction. ‘Educare’ and ‘educere’ come together here, because ‘development’ indicates growth and the ‘preferred direction’ indicates a specific direction for that growth to occur.

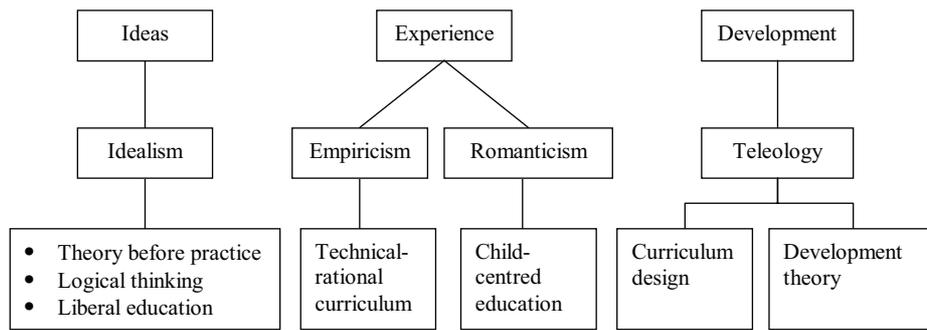


Figure 1.1 Philosophy and its educational implications.

Ideas

This category of western thought claims that ideas are more important than, and take precedence over experiences. Ideas are universal unchanging, and act as the template and organizing framework for experience. From this flows a view of education as the acquisition of the mental training necessary to comprehend ideas. This view is meritocratic – only those capable of abstract thought can benefit from such training.

Idealism

The philosophical doctrine that stems from the category of thought associated with ideas is ‘idealism’ – the notion that ideas represent reality. Idealism originates with Plato, the third-century BC thinker, who believed that there is an objective truth, expressed through the unchanging world of the ‘Forms’. These Forms were originally proposed by Plato’s mentor Socrates, who wrote nothing himself, but who featured in a series of dialogues written by Plato. In these, Socrates engages in discussions with Athenian citizens, drawing out their ideas on virtue.

For Socrates, ideas exist prior to experience in two ways: they are more important, and they are already in existence. In the Socratic dialogues, Socrates gives the example of the slave boy who had no knowledge of geometry but was able to understand a theorem drawn in the sand. He claims that the boy already possessed this knowledge in some way, and was ‘remembering’ it (Weiss 2001). Socrates believed that there were objective mathematical truths and more important still, truths about virtue.

8 APPROACHES TO LEARNING: A GUIDE FOR TEACHERS

A belief in the objective truth of ideas was a rejection of the Sophists' position that truth was relative. The Sophists were paid teachers of argument who saw two sides (at least) to every argument and believed that individuals simply needed help to present their own sides convincingly. For example, stealing is good for a burglar but bad for a householder. Another reason for Plato's commitment to the world of ideas is the unreliability of the senses. In his dialogue, the *Theaetetus*, he shows that the world of experience is misleading, transient and personal, with the same object appearing white at one time and grey at another.

Plato's thinking has significant implications for ideas about education and knowledge. According to Plato, to be morally good is to possess true knowledge. But the process of acquiring true knowledge is painful, because most of us are chained to the world of the senses, unable to look beyond. Clear-sightedness and knowledge involves overcoming prejudice and ignorance after rigorous mental and ideological training (*Republic Bk VII*).

The elevation of mental over physical activity or experience reappears in the writings of the French seventeenth-century philosopher René Descartes. Descartes is famous for the dualism he proposed between the mind and the body – the claim that the mind and body are separate entities, with only the mind in touch with ultimate reality. The body inhabits the gross world of physical sensation and is controlled by the mind, just as the automatons that Descartes saw in the Royal Gardens at St Germaine in Paris were controlled by water.

Descartes' thinking was similar to Plato's. For both, ideas are in the mind and the senses are deceptive. Descartes proposed a method of 'systematic doubt' in which everything in the universe was to be questioned until he came to something he could not doubt. By this means he arrived at his famous principle, 'Cogito ergo sum' – 'I think, therefore I am'. The philosopher cannot doubt that he is thinking; therefore his existence is proven. Having established one certainty, Descartes proceeded, by a sequence of logical deductions, to establish the existence of the universe.

Plato and Descartes illustrate the main characteristics of idealist thought, and their ideas were instrumental in shaping the 'problem of knowledge' – how do we know what we know? What is the role of the senses? Is everything we know in the mind?

Idealism has three main implications for education:

- an emphasis on theory before practice;
- an emphasis on logical thinking;
- a high value attached to liberal education.

Theory before practice

The principle that education should concentrate solely on conceptual and moral development is an educational legacy of idealism. Teaching should deal with abstract subjects such as mathematics and philosophy, with principles expounded before application. The teacher's role is to draw out the knowledge of principles that learners already possess and help learners to organize these coherently. In this view of education, teachers are very important.

Teachers are also needed for the clarification of ideas, because texts alone are insufficient. In the *Phaedrus*, Socrates maintains that the written word is subject to misinterpretation by readers. Dialogue is preferable because the teacher can offer clarification or challenge misinterpretations, guiding learners towards true principles and away from faulty conclusions.

An example of Socratic questioning

In Book I of *The Republic* (37), the Sophist Thrasymachus claims that ‘justice is the advantage of the stronger’. Socrates questions him about this. Here is a simplified version of their dialogue.

Socrates: Do you think it is just to obey all laws?
Thrasymachus: Yes. Laws are made by the stronger for their advantage so it is just to obey all laws.
Socrates: Does a ruler sometimes make mistakes when making laws?
Thrasymachus: Yes. Sometimes he may make a law that is not to his advantage.
Socrates: Because it is just to obey all laws, is it therefore sometimes just to obey laws that are not to the advantage of the ruler?
Thrasymachus: Yes.

(Plato *The Republic* 335 a–d)

Here Socrates has led Thrasymachus to contradict himself. Justice both is and is not to the advantage of the stronger.

Socratic or dialogic questioning provides not only a useful classroom technique but a basic justification of the teacher’s role. In recent times, there has been a renewed interest in teacher questioning and classroom discussion as an aid to students’ acquisition of concepts. For example, the UK ‘Thinking Together’ programme for primary school children aims to develop critical thinking through appropriate questioning by peers and teachers (Dawes et al. 2000). Even in distance or online learning contexts, it is important to create a learning environment that allows for the possibility of multiple interpretations in order to guide learners towards a better understanding of concepts.

Theory before practice: educational implications

- Theoretical subjects are valued more than practical ones in the curriculum.
- Learners’ previous ideas are established.
- Misconceptions are challenged.
- Ideas are organized in a subject outline.
- General theories are extracted from examples.
- Theory is presented and then tested.
- General principles are emphasized over particular examples.
- Learning is guided through dialogue and questioning.

10 APPROACHES TO LEARNING: A GUIDE FOR TEACHERS

- Understanding ideas is emphasized over their memorization.

Logical thinking

Logical thinking is the second educational legacy of idealism. Dialogical approaches such as those used by Plato led to logical thinking and the rules that were laid down by Plato's successor, Aristotle. Some of Aristotle's most important rules concern concept formation and deductive reasoning. Deductive reasoning progresses from the general case to the particular case by logical inference. Aristotle (1995) offers a well-known example in a three-step argument called a syllogism:

1. Major premise – all men are mortal.
2. Minor premise – Socrates is a man.
3. Conclusion – Socrates is mortal.

These ideas are the bases of mathematical and geometrical theorem construction. They allow us to explain why some arguments are faulty as a result of incorrect relationships between premises and their conclusions. Aristotle's rules have had other applications too. For example, in order to evaluate argument, Aristotle classified different types of false reasoning and fallacies. These include reasoning in which argument is swayed by appeals to emotion or by threats. A public demonstration of the rules of argument still survives in the 'viva voce' or defence of the PhD thesis, which developed in the Middle Ages.

Logical and analytical thinking has regained importance in late twentieth-century education. The 'Thinking Skills' and the associated 'Philosophy for Children' movements attempted to incorporate critical thinking and logic into the school curriculum (Lipman et al. 1980).

Descartes' thinking has also had implications for contemporary education. For example, systematic doubt became a forerunner of empiricism and the western scientific method, and is particularly important in defences of higher education whose role is to develop sceptical, critical and independent thinkers.

Logical thinking: educational implications

- Critical thinking is encouraged in schools.
- Scepticism is a valued academic stance.
- Educators search for a range of analytical tools.
- Convergent and divergent thinking are developed as part of education.
- Intellectual freedom and freedom of speech are prized by academic institutions.
- Thinking is promoted as a generic transferable skill.

Liberal education

Aristotle claimed that the good life can be achieved through an education in the liberal arts, where knowledge is valued for its own sake and is its own reward. This is

the third educational legacy of idealism. A liberal education is devoted to the study of first principles, or theoretical ideas, because humanity's goal is to acquire knowledge.

Aristotle's reasons for the promotion of liberal education were not related to the mind alone. A liberal or free education consists of subjects suitable for the free citizen, and includes literature and the arts which develop the whole person. Newman claims that a liberal education promotes the attributes of freedom, equitableness, calmness, moderation and wisdom – in short, a philosophical habit of mind (Heath 1959). On the contrary, 'illiberal subjects' like trades and skills 'absorb and degrade the mind' and are only suitable for slaves and wage-earners. Therefore, no subject should be included in the curriculum simply because of its vocational value.

Cartesian mind–body dualism has also influenced curriculum design in the past; some subjects have been valued above others because of their emphasis on ideas and the mind, at the expense of experience and the body. For example, the curriculum in the English grammar school and the German gymnasium reflected an elitist preference for the theoretical and cerebral above the practical and physical.

The role of the liberal education teacher or curriculum designer is to introduce learners to the finest exemplars of thought from all ages. For Hirst (1965), a British educationalist, the curriculum must initiate the learner into all the major forms of thought. The curriculum should therefore be broad and wide-ranging. Even when the overall concept of a liberal education was under attack from narrow vocationalists in the twentieth century, it survived in a subject called Liberal Studies, taught as part of further and higher education.

Liberal education: educational implications

- Education is valued for its own sake rather than for its usefulness.
- A balanced curriculum is necessary to develop the whole person intellectually and morally.
- Some subjects are more highly valued than others – for example, the arts and humanities are valued over vocational subjects.
- Liberal education introduces learners to a range of disciplines and ways of thinking.
- Teaching is a complex human activity demanding personal characteristics and insight.
- Debate and discussion are encouraged in liberal classrooms.

Experience

The second major category of western thought identified in this chapter claims that experience is more significant than theory. Learning involves either 'doing' or being 'done to'.

This category is split into two philosophical strands: empiricism and romanticism. Empiricists claim that the learner is the passive recipient of experience. What

12 APPROACHES TO LEARNING: A GUIDE FOR TEACHERS

matters is the way this experience is organized. This perspective leads to a technical conception of education, in which teachers and curriculum developers are important arrangers of appropriate experiences.

Diametrically opposed is the romanticist claim that formal education is unnecessary and restrictive. Children learn naturally from their experiences and from contact with key influences.

Empiricism

The view that all knowledge is gained from the senses came to prominence in the seventeenth century, when the English philosopher John Locke in his *Essay Concerning Human Understanding* argued that ‘there is nothing in the mind which was not first in the senses’ (Smith et al. 2004). In this view, the mind is a blank slate on which experiences are imprinted. According to Locke, all primary and secondary ideas, including abstract ideas, come either from the senses or the mind’s reflections on sensory experience.

The eighteenth-century empiricist David Hume in his *Enquiry Concerning Human Understanding* (Hume 1739/2007) developed Locke’s argument. In establishing a science of human nature, Hume attempted to rely solely on the evidence of the senses and experience. He denied the existence of any ideas which did not come from experience, including those of God, the self, causation and inductive knowledge. Concerning causation, he said that all we perceive from our experience is a regular association between two events. We cannot prove that one event is the cause of another. Using the same argument, Hume attacked the principle of induction – the process of inferring from particular cases to general rules, the basis of the scientific experimental method.

According to the empiricists, for a statement to be valid it must either be true by definition or it must be open to verification by experience. A.J. Ayer, a twentieth-century empiricist, endorsed this view. He classified valid statements as either analytic or synthetic.

Analytic: Verifiable by analysing the meaning of the words: ‘A bachelor is an unmarried man.’

Synthetic: Verifiable by empirical observation: ‘The heart contains four chambers.’

He dismissed statements on ethics, aesthetics, and theology as mere value judgements (Ayer 1952).

A compromise between idealism and empiricism is found in the theory of knowledge proposed by the eighteenth-century German philosopher Immanuel Kant. According to this theory, the world consists of:

- *Noumena* – representing ultimate reality and unknowable, but giving rise to mental organizing structures or categories;
- *Phenomena* – things as they appear to us, structured by the mental categories that organize our perceptions.

(Körner 1955: 91)

This solution avoids both mind–body dualism and the problem of causality. Kant’s intermediate view suggests that the mind structures experience, as spectacles structure sight. Twentieth-century thinkers such as Noam Chomsky (1975) show their debt to Kantian theory when they claim that the grammatical structures of language are innate, but vocabulary and word usage are learned from experience.

Educational implications of empiricism: the technical-rational model

Empiricism leads to the commonplace view of education as the ‘filling of empty vessels’ – that is, imparting knowledge to those who lack it. It requires nothing from the learner but passivity and a willingness to learn.

This view emerges in the work of nineteenth-century experimental psychologists such as Pavlov, whose behaviourist argument is presented in Chapter 2, ‘Behaviourism’. The emphasis on the careful structuring of stimuli and the observation of learners’ responses led to the behaviourist concept of a ‘technology of education’. Behaviourism was highly influential in education in the first part of the twentieth century, especially in the area of training and competencies. Its curricular approach was ‘technical–rational’ or ‘means–end’ because it prioritized technical questions about the correct approach to methods over a consideration of the ends of education. Behaviourist learning theory was most strongly endorsed in the former USSR and the US– countries with strong traditions of experimental psychology.

The American educationalist Benjamin Bloom expanded on the technical–rational model (Bloom and Krathwohl 1956). His Cognitive Taxonomy of Learning specifies different levels of knowledge (from knowledge, the lowest, to evaluation, the highest) and shows how they can be demonstrated in observable and verifiable behaviours, rather than in mental acts:

1. knowledge – demonstrated in outlining, recounting, defining and enumerating ideas;
2. comprehension – demonstrated in paraphrasing, recognizing, illustrating and explaining ideas;
3. application – demonstrated in transferring, employing and organizing ideas;
4. analysis – demonstrated in breaking down, categorizing, comparing and contrasting ideas;
5. synthesis – demonstrated in summarizing, generalizing about, integrating and constructing ideas and arguments;
6. evaluation – demonstrated in appraising, discriminating between and assessing ideas or resolving problems and arguments.

Educational implications of the technical–rational model

- Learning is a science and has general principles.
- The teacher or designer determines what is learned and how, according to scientific principles.

14 APPROACHES TO LEARNING: A GUIDE FOR TEACHERS

- The purposes or ends of education are not discussed; values are taken for granted.
- The learner will respond to learning stimuli in a predictable way.
- The technical–rational model works best in the training of skills and competencies, where behaviour can be observed.

Romanticism

Romanticism emerged in the eighteenth century to provide an alternative perspective on the role of experience in learning. Jean-Jacques Rousseau was romanticism's strongest proponent in what is often called its first didactic text. *Émile*, published in 1762(2007) deals with the proper education for a boy. For Rousseau gender was biologically determined, and he thought that a different education process was necessary for girls, as shown in *Émile et Sophie ou les Solitaires* (1780/1994), the sequel to *Émile*.

According to Rousseau, humans are naturally good but corrupted by civilization. Therefore, the child should be kept away from society and learn through exposure to natural influences – for example, if the child breaks a window, they should suffer the consequences of the cold wind that will rush through. Rousseau thought that formal learning, such as that acquired through reading or mathematics, should be delayed until the moral and psychological foundations of personality had been laid down through interaction with the natural world. Girls should learn to be the primary educators of children in the private and moral sphere, whereas boys should learn to carry out their public responsibilities in the wider world.

Romanticism also attached importance to the emotions and therefore to the education of the whole person. This included the cultivation of feeling and an emphasis on the individual, as opposed to the group. It encouraged self-expression and self-actualization. 'Senses and feeling were primary; thought and abstraction were to be at their service' (Noddings 2007: 15).

Educational implications of romanticism: child-centred education

Unlike the technical–rational model, which places the teacher at the centre of the educational process, romanticism is child-centred. Rousseau's text *Émile* was the foundation for many current theories of child-centred education. For example:

- Steiner teaching methods emphasize an education that balances head, heart and hands (Easton 1997).
- Montessori methods of infant teaching emphasize learning through natural materials and natural environments (Montessori 1912).
- A. S. Neill's experiment with progressive education in his famous school, Summerhill, emphasized the natural goodness of the child and the rejection of all compulsory tuition in favour of the child's right to choose what and what not to learn (Neill 1992).

The modern western emphasis on recognizing and encouraging differences in individuals can be seen as originating in Rousseau's theory.

Educational implications of child-centred education

- The purpose of education is the development of the whole person.
- The child's experiences are the central elements of education.
- Children should be free to choose what to learn and how to learn.
- Individual experiences, expression and creativity are encouraged as part of the curriculum.
- Individual learning plans can be used to recognize the unique characteristics of every child.
- All learners are different, and their individuality is unconditionally prized.
- Teachers exert minimal control but act as facilitators of learning experiences.
- The teacher provides an appropriate and rich environment.

Development

Before the twentieth century, development, the third category of western thought, was attached to philosophy rather than psychology, the discipline with which it is more commonly associated. Development is shaped by the idea that human growth involves the unfolding of some innate human, cognitive or biological potential towards a final destination. Education consists of providing the conditions favourable to the full expression of this development.

To understand the relationship between development and education, think of the metaphor of the seed, which will grow to its full potential in an enriched environment or fail to thrive because of a lack of proper nutrients. This idea is common to many school mission statements, which often state 'We will help every child to achieve his or her potential'. How that potential is identified is another matter.

Teleology

The philosophical strand that emerges from the development category is teleology, the study of purposes, which has its origins in Aristotelian thinking. Aristotle was the first major thinker to consider the development of natural organisms. He was a materialist, interested in studying natural and biological processes. In particular, he wanted to know what things were for and their function or 'goodness' – he was interested in their teleology.

16 APPROACHES TO LEARNING: A GUIDE FOR TEACHERS

Aristotle was conscious of the development of living things as a process, characterized by stages from seed or embryo to plant or animal. He identified three types of animating principles, or ‘souls’, in living things. These are cumulative, with higher souls incorporating the characteristics of lower ones (see Figure 1.2).

Living things develop according to their animating principles and natures. For example, Aristotle saw human nature as made up of:

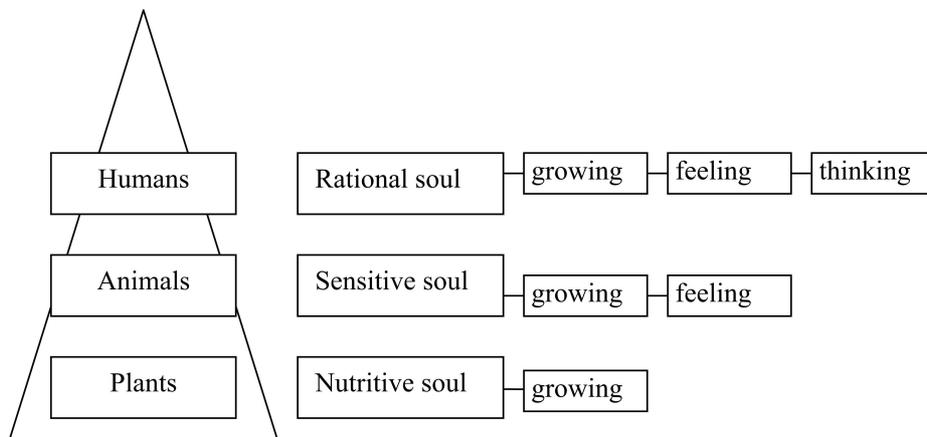


Figure 1.2 Aristotle’s animating principles.

- an ‘irrational’ element, shared with the animal kingdom and concerned with bodily appetites and passions;
- a rational, cognitive element, unique to humans and capable of governing the irrational elements.

In humanity, the highest and most fulfilling form of human activity is directed towards the acquisition of knowledge and rationality: ‘All human beings by nature desire to know’ (Aristotle 1995). There is another aspect of rationality, however – moral goodness. Humans seek happiness as their ultimate goal, and happiness is achieved only through the rational pursuit of the virtuous life. For Aristotle, the acquisition of knowledge and the achievement of happiness are two sides of the same coin.

The ends or purposes of human development are determined, but the methods of achieving these purposes are not. Rather, they involve activities that need to be controlled and learned. Nature, habit and reason are three equally important forces that need to be cultivated through education, according to Aristotle (*Politics*). One of the primary tasks of the educator is to train the young to control the irrational part of their natures and achieve self-discipline. Aristotle considered repetition very important as part of this aspect of learning. For example, the essence of moral behaviour is in following the right rule, and the ability to do so depends on forming the right habit. Similarly, intellectual qualities such as rationality are produced through

teaching that develops the facility to recognize the right scientific or ethical principle in any given situation. Aristotle also thought it was important to balance the theoretical, practical and imaginative parts of nature so, unlike Plato, he endorsed play and leisure as part of liberal education: ‘There are branches of learning and education which we must study merely with a view to leisure spent in intellectual activity, and these are to be valued for their own sake’ (*Politics*).

Educational implications of teleological thinking: curriculum design

Aristotelian thinking has been influential in curriculum design. Because people are driven by the desire to achieve various ends, it is important for the curriculum (in Latin, the course for a chariot race) to set clear aims and objectives. The technical–rational model of curriculum planning focuses on teaching objectives or outcomes and on appropriate instructional techniques to achieve them. This is in accord with Aristotle’s interest in aims or ends and their achievement.

Implications for curriculum design

- Students need to know why they are learning a topic.
- Students are motivated by goals.
- Goals or learning outcomes should be used to indicate what students will be able to do on completion of the learning.
- Goals may need to be manufactured through assessment.
- Goal-matching, where student goals are aligned to teaching goals, is an efficient motivator.

Educational implications of teleological thinking: development theory

In the modern era, developmental theories have become attached to the modern discipline of psychology. One of the most significant thinkers in this area was the Swiss developmental theorist Jean Piaget who, like Aristotle, was highly influenced by biology. According to his theory of cognitive development discussed in Chapter 4, ‘Constructivism’ and Chapter 8, ‘Life course development’, children progress through several identifiable, pre-determined stages in their intellectual growth. Piaget’s contemporary, the Russian psychologist Lev Vygotsky, while agreeing that there are identifiable stages, disagreed about their determined nature. This is discussed in Chapter 8, ‘Life course development’.

Key ideas

- The philosophy of education studies the purposes, processes, nature and ideals of education.
- The philosophy of education explains how educational theories arise, and how they complement or oppose each other.

18 APPROACHES TO LEARNING: A GUIDE FOR TEACHERS

- Idealism holds that ideas represent ultimate reality so theory precedes practice and conceptual organization is paramount
- Empiricism and romanticism stress the significance of experience so learning is natural – but requiring the provision of experiences.
- Development philosophies emphasize the purpose of human activity and the nature of such development.
- The purposes of education are articulated and expressed at a practical level through the curriculum.

Conclusions

In considering the value of the philosophy of education, you might find it helpful to consider the benefits that educational philosophy offers to the field of education generally, as well as to the educational profession and the individual educator.

In the educational field, the philosophy of education:

- shows that opposing positions such as idealism and empiricism are defensible;
- enables us to consider the origin and provenance of educational practices;
- provides a language for educational discourse and debate;
- presents well thought-out arguments for different theoretical stances;
- challenges faulty argument, superficial debate and educational fads;
- provides a source of alternative ideas to challenge prevailing orthodoxies;
- analyses education's aims, roles and methods.

For the education profession, the philosophy of education:

- justifies educational practices;
- contributes to the scholarship of teaching;
- provides education with deep intellectual roots;
- links educators with a tradition of educational discourse;
- facilitates argument and debate;
- helps develop evaluative and critical thinking.

For the individual educator, the philosophy of education:

- enriches and deepens personal experience;
- gives intellectual credence to instinctive or intuitive practice;
- provides pleasure in the exploration of educational ideas;
- provides intellectual backing for educational views;
- facilitates open-mindedness by presenting alternative perspectives.

Therefore, philosophy forms an important part of every educator's education.

References

- Aristotle (1981) *The Politics* (Rev ed. T.J. Saunders), London: Penguin Classics.
- Aristotle (1995) *Selections* (trans. T. Irwin and G. Fine 1955). Indianapolis: Hackett Publishing Company, Inc.
- Ayer, A. J. (1952) *Language, Truth and Logic*. New York: Dover Publications.
- Bloom, B. and Krathwohl, D. (1956) *Taxonomy of Educational Objectives: The Classification of Educational Goals By a Committee of College and University Examiners. Handbooks 1 to 3*. New York: Longmans Green.
- Chomsky, N. (1975) *The Logic Structure of Linguistic Theory*. New York: Plenum.
- Dawes, L., Mercer, N. and Wegerif, R. (2000) *Thinking Together: A Programme of Activities for Developing Thinking Skills at KS2*. Birmingham: The Questions Publishing Company Ltd.
- Easton, F. (1997) Educating the whole child, 'head, heart and hands': Learning from the Waldorf Experience, *Theory into Practice*, 36(2): 87–94.
- Heath, D. (1959) Liberal education: John Henry Newman's conception, *Educational Theory*, 9(3): 152–5.
- Hirst, P. (1965) Liberal education and the nature of knowledge, in R.D. Archambault (ed.) *Philosophical Analysis and Education*. London: Routledge.
- Hume, D. (1739/2007) *A Treatise of Human Nature*. Sioux Falls: NuVision Publications.
- Kant, I. (1803/1960) *Education* (trans. A. Churston). Arbor, MA: The University of Michigan Press.
- Körner, S. (1955) *Kant*. London: Penguin Books.
- Lipman, M., Sharp, A. and Oscanyan, F. (1980) *Philosophy in the Classroom*. Princeton, NJ: Temple University Press.
- Miller, J. (1984) *Rousseau: Dreamer of Democracy*. London: Yale University Press.
- Montessori, M. (1912) The Montessori Method, *Scientific Pedagogy as Applied to Child Education in 'the Children's Houses'* trans. Anne E. George New York: Frederick Stokes Company MCMXII.
- Mulcahy, D. (1972) Cardinal Newman's Concept of a Liberal Education, *Educational Theory*, 22(1): 87–98.
- Neill, A.S. (1992) *Summerhill School: A New View of Childhood*, A. Lamb (ed.). New York: St Martin's Press.
- Noddings, N. (2007) *Philosophy of Education* (2nd edn). Colorado, CA: Westview Press.
- Plato (1968) *The Republic* (trans. B. Jowett). Massachusetts: Airmont Publishing.
- Rousseau, J. (1762/1991), *Émile or On Education*. Allan Bloome ed. London: Penguin.

20 APPROACHES TO LEARNING: A GUIDE FOR TEACHERS

Rousseau, J. J. (1780/1994) *Émile et Sophie ou Les Solitaires*. Paris: Rivages.

Russell, B. (1912/1959) *The Problems of Philosophy*. Home University Library: Oxford University Press.

Smith, J., Clark, K., and Lints, R. (2004) *101 Key Terms in Philosophy and their Importance for Theology*. Westminster: John Knox Press.

Stewart, D. (1993) Teaching or facilitating: a false dichotomy, *Canadian Journal of Education*, 18(1): 1–13.

Weiss, R. (2001) Virtue in the Cave, Moral Inquiry in Plato's Meno. Oxford: Oxford University Press.