

Learning and Teaching in the Chinese Classroom

Responding to Individual Needs

Shane N. Phillipson
and
Bick-har Lam



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Foreword

Chinese teachers and learners have become an increasingly fruitful focus for educational research, not least because Asia, especially China, has been drawing worldwide attention on account of the unprecedented economic and technological development. Beyond the classical Confucian Heritage Culture, there is a curious 'paradox' that, on the one hand, learners from East Asia are frequently seen as rote and passive learners but, on the other hand, international assessment studies, such as PISA and the TIMSS, show students from many of the countries within East Asia achieving consistently outstanding results. Hong Kong is a particularly interesting place within contemporary China and East Asia since it is where, distinctively, East meets West. Here, in what is one of Asia's major world cities, there are obvious legacies of both the Confucian Heritage Culture and British colonialism. What actually happens in the context of learning and teaching in Hong Kong classrooms is an area that invites scholarly enquiry and ongoing critical reflection on successful practice.

This book *Learning and Teaching in the Chinese Classroom* has been written by two experienced scholars, Dr. Lam Bick-har, a specialist in curriculum studies, at the Hong Kong Institute of Education, and Dr. Shane Phillipson, a specialist in educational psychology at Monash University (Australia). A very readable and informative book, it provides a useful starting point for understanding the essence of learning and teaching in Chinese classrooms, including a range of thoughtful and insightful chapters on the following areas: the contexts of teaching in the twenty-first century; constructivist and behaviourist perspectives on learning; the role of intelligence in learning; creativity and learners; the development of the self in learners; motivation and effective learning; language development and the Chinese learner; the teacher as researcher and teacher development; lesson planning, assessment and learning; and the Chinese context of learning. Some of these chapters echo pertinent issues in curriculum, teaching and teacher development in the context of Hong Kong where the Curriculum Development Council promotes 'learning to learn' and the Advisory Committee on Teacher Education and Qualifications (ACTEQ) (2003) has published *Towards a Learning Profession*, highlighting the role of teachers as continuous and lifelong learners

with ‘the responsibility for promoting professional development within the education sector’ and being ‘change-agents of educational reform (p. 16).

In this book, each chapter guides the reader from an initial statement of personal learning objectives or outcomes through the substantive content and concludes with a glossary and suggested activities, which provide vital and stimulating issues or questions for discussion and reflection. The reader is encouraged to read actively and to engage in an interactive way with the substance of each chapter.

In the first chapter on the contexts of teaching in the twenty-first century, Bickhar Lam writes, ‘... should we justify that the new active approach to teaching is suitable for learners—the answer is “yes”... However, learning from the example of Confucian educational thought, we may wonder if this new approach, and the need to educate future generations to adopt a global perspective, can be implemented effectively in our schools.’ We seem to encounter a dilemma over whether adopting the active approach to teaching is feasible and desirable. However, regarding the Hong Kong context of teaching and learning, Chan’s (2009, 204) study on two expert teachers concluded that ‘... Chinese learners used seemingly contradictory approaches to make meanings that transcended polarized distinctions of learning approaches, given task demands and contextual dynamics. Similarly, the Chinese teachers developed a transformed pedagogy that took into account student cognition and social infrastructure, integrating Chinese and Western approaches in scaffolding student inquiry, collaboration and understanding’.

Duffy (2010, 357), in his recent discussion of direct instruction and constructivist perspectives, comments that ‘we all agree that we learn from lectures and reading books as well as through active, situated participation, and that, at times, drill and practice is necessary’. It has also been found that a high level of teacher support and involvement are salient features of Hong Kong classroom environments and, in contrast to the Western findings, it was teachers rather than students who exert more influence on students’ self-regulated learning (Lee, Yin, and Zhang 2009). It is thus possible and, perhaps, practical to explore critically and creatively different forms of effective Chinese pedagogy that assimilate certain features of the Western teaching approaches and enhance student learning in Hong Kong classrooms and elsewhere. There is encouragement here for teachers to engage in action research and reflective practice to resolve these dilemmas in teaching and learning.

In Chapters 6 and 9, both authors refer to Bronfenbrenner’s bioecological systems theory in which different systems and contexts interact with each other and with individuals who grow and develop in complicated but fascinating ways. From an ecological perspective, perhaps we could consider placing greater emphasis and attention on the differentiated needs of students. Students are whole persons with a full range of needs and capacities (Sterling 2001).

It is pleasing to note that, while addressing the importance influence of Confucian culture on Chinese schoolchildren's learning, Shane Phillipson concludes in Chapter 9 that 'other important influences on a child's learning include gender, parents, peers and teachers, some of which contribute positively to academic achievement, while others inhibit it. However, the picture is far from complete.' Teaching is a learning and knowledge-based profession and, as you read this book, you will be helped to reflect on your own values and approaches towards learning and teaching and to think hard about different pathways to improve learning and teaching in your own classroom.

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Shane N. Phillipson is an associate professor at Monash University and previously at the Hong Kong Institute of Education. After obtaining a B.Sc. (Hons) and a graduate diploma in secondary education, he worked for many years as a mathematics and science teacher in New South Wales and South Australia. Shane Phillipson then obtained a graduate certificate in gifted education and a PhD from Flinders University (Australia). His PhD thesis was awarded the International Award (1999–2000) for best PhD thesis by the National Association for Gifted Children (NAGC) in the UK, and the 2001 Flinders University nomination for the Australian Association for Research in Education (AARE) Doctoral Thesis Award. Currently, Shane Phillipson teaches educational psychology, research methods and gifted education, and his research interests include cultural conceptions of giftedness and models of achievement. He has been awarded a number of research grants, resulting in publications in many international peer-reviewed journals, including *High Ability Studies* and *Educational Psychology*, and he is also a reviewer of research articles for these two journals. His edited books include *Learning diversity in the Chinese classroom: Contexts and practice for students with special needs* (2007), and *Conceptions of giftedness: Socio-cultural perspectives* (with M. McCann, 2007). Shane is a member of the American Psychological Association (APA), the Association for Psychological Science (APS), the World Council for Gifted and Talented Children, and the European Council for High Ability.

Bick-har Lam is an associate professor in the Department of Curriculum and Instruction and in the Centre for Learning, Teaching and Technology at the Hong Kong Institute of Education. She obtained her degrees of bachelor in education and master in education from the University of East Anglia in the UK, and her PhD from the Hong Kong Polytechnic University. Bick-har Lam was a secondary school teacher before joining the Hong Kong Polytechnic University as an educational developer. She is currently involved in a number of research studies, which include a local study on ethnic minority students supported by the General Research Fund of the University Grants Committee, a series of studies on learner-oriented learning funded by the Teaching Development Grant, and an international project

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1

The Contexts of Teaching in the Twenty-First Century

Bick-har Lam

This chapter discusses: (a) the philosophical foundations of teaching in the East and West and their relevance to contemporary education; (b) the advantages and degeneration of Confucian education; and (c) the reform of classroom teaching in the twenty-first century in the context of Chinese culture. It aims to develop a solid grounding in the philosophical and cultural basis of education for teachers so that they can become fully functional professionals and make it more likely that the current reform initiatives will be successful.

After completing this chapter, readers will be able to:

- comprehend the major philosophies that guide teaching;
- recognize the values behind various teaching philosophies;
- develop a conceptual scheme for organizing various approaches to teaching;
- situate teaching in the context of Hong Kong's Chinese classrooms;
- explain the influence of Confucian education on Hong Kong people; and
- reflect on the historical degeneration of Confucian educational thought and develop a positive attitude to improving teaching in their cultural situation.

This introductory chapter provides a foundation for understanding the teaching profession.

The chapter first introduces the background to the present educational reform in Hong Kong, to set the context of teaching for teachers in general and specifically in a Chinese society. It then moves on to study various terminologies for understanding teacher thinking and action, including the philosophical foundations and beliefs about teaching, with reference to Confucian educational thought. It portrays how teachers' thinking is guided by an array of values and preferences, and discusses educational ideas common across the East and West. The origins, development and degeneration in Chinese traditional educational thinking and ideas, and their current impact on Chinese societies, are examined. In the conclusion, readers are encouraged to think broadly about their practice in the classroom and contextualize themselves in their cultural environment and world trends, so that they can be professionals who play a crucial role in reforming and improving education.

Educational Reform in the Twenty-First Century

In Hong Kong, Singapore, Taiwan and China, drilling became the predominant method of teaching because of their elitist and examination-based form of education. In Taiwan, China and Hong Kong, rote learning and drilling were cultural traditions (Biggs 1990), but a visionary set of educational reforms proposed in the late 1990s brought very significant changes to the focus of learning and teaching, with education being recast to address the development of human talent and ensure effective education for the betterment of students' lives and the country's future. Educational reform is a global phenomenon in this century, as can be seen in reform statements from several parts of Asia (Table 1.1).

Table 1.1 Excerpts from educational reform statements from several parts of Asia

Hong Kong	<p>To prepare our younger generation to meet the challenges of an ever advancing knowledge-based society and the dynamically changing environment, it is not enough to impart them with mere "knowledge". Instead, we have to help them develop a global outlook, equip them with a repertoire of skills and the positive attitudes to respect knowledge and to learn how to learn' (Curriculum Development Council 2001).</p> <p>'In the tide of changes, everyone has to meet new challenges. <i>Adaptability, creativity and abilities for communication, self-learning, and cooperation</i> are now the prerequisites for anyone to succeed, while a person's character, emotional qualities, horizons and learning are important factors in achieving excellence. "Lifelong learning and all-round development" is our expectation from everyone in this era. Education is infinitely important for everyone' (Education Commission 2000; emphasis added).</p>
Singapore	<p>'The Singapore Ministry of Education aims to help our students discover their own talents, to make the best of these talents and realize their full potentials, and to develop a passion for learning through life' (Singapore Ministry of Education 2006).</p>
Taiwan	<p>'Innovative changes have been initiated to ensure equal access to education for all students, to relieve their pressure from examinations, to offer more room for school-based management, and to improve teaching quality. Many education-related regulations were overhauled to create a more liberal education environment ... While the educational reform continues, the MOE (Ministry of Education) has been promoting a new four-year program for educational development since 2004 to accommodate new developments in society. With a vision for a 'Creative Taiwan with a Global Perspective,' educational policies in the next four years will be formulated in accordance with four directives: cultivating modern citizens, promoting Taiwan identity, fostering global perspectives, and increasing concern for society. Actions will be taken to encourage students to appreciate cultural diversity and to respect universal values as the government attempts to expand their knowledge about Taiwan's unique traits, to increase their opportunities for interaction with international students, and to strengthen their character. An education system that better meets the needs brought forth by social, economic, and global trends is the key to upgrading Taiwan's national competitiveness' (Government Information Office 2005).</p>

The reforms in this century have been triggered largely by the effects of globalization. Globalization is a complex concept, which may be easiest to understand in terms of its economic aspects: the integration of national economies into the international economy through trade, foreign direct investment, capital flows, migration and the spread of technology. With globalization, there is increasing contact across borders and faster communication between countries. To survive in this new economy, countries have to become more productive to remain competitive; and with the development of worldwide market networks, business firms need to upgrade their products and apply technological solutions. In this context, many governments have made significant changes in their educational systems aimed at developing a workforce that meets global requirements. This idea was captured in the 1997 policy address of the Hong Kong Chief Executive:

I said on 1 July that education is the key to the future of Hong Kong. It provides a level playing field for all and the human resources for further economic development. Our education system must be firmly rooted in the needs of Hong Kong; it must enable us to contribute to the development of our country; it must give us an international outlook. It should be diverse, drawing on the strengths of East and West. It must inspire commitment to excellence. I will now set out our plans to achieve that. (HKSAR Government Secretariat 1997)

In 2000 the Hong Kong Education Commission commented that the qualities of a 'global outlook' include adaptability, creativity and abilities for communication, self-learning and co-operation. In the same year, curriculum reform was initiated, with curricular documents which promoted 'learning to learn' being publicized in schools, teacher education institutions and the media. The catchphrase 'learning to learn' signifies clearly an educational philosophy identified with the 'constructivist' model of teaching and learning (see Chapter 2) which, in brief, places the learners at the centre of the educational process, with teachers involving them as active agents in learning instead of rote learners.

Understanding Teaching and Learning

To get a full understanding of the teaching-learning process, we recommend that you first consider questions such as:

- What does teaching mean to you?
- What do you expect students to learn when you teach?
- What is the primary concern of teachers when they play a role in the community?

In addressing these questions, you should try to develop perspectives and concepts for explaining the process to justify your views and develop a philosophy that guides your classroom practice. If teaching is an ‘art’, then teachers should be creative in utilizing all the knowledge, methods and skills that can benefit learning.

The questions above are important whether you are preparing to teach or are already a teacher or other practitioner in the field of education.

The Philosophical Foundations of Teaching

There are many diverse viewpoints about teaching, which reflect the personal beliefs of individuals. Philosophical orientations to teaching refer to the nature of teaching, which includes its meaning, the content to be taught, the expected student behaviour and the role that teachers and students play. Holding particular teaching philosophies can make a difference to the lives of students.

A summary of the prevalent philosophical orientations to teaching is given below.

Existentialism

Existentialism developed from a philosophy that focuses on the subjectivity of individuals. Teachers who adopt an existentialist approach encourage students to develop their creativity and independence of mind in a context in which teaching is less directive and students are given freedom to make their own decisions. This philosophy stresses that students should take responsibility for their own actions and experience life in their own way, instead of allowing other people to decide what is best for them. This approach was championed by Alexander Sutherland Neill (1883–1973) (Neill 1995).

Marxism

Based on a belief in the ever-changing nature of reality, Marxist teaching focuses on long-standing conflicts that exist in society, especially those that relate to economic and social inequality. Marxism seeks to create a better, more harmonious society in which people can relate to their work and to each other in a more humane way. Reflection and active engagement rather than passive reception of knowledge is encouraged; and students are urged to acquire knowledge and skills which will enable them to contribute positively to the transformation of society. Marxism aims to change the material conditions of society to produce a classless society. Jürgen Habermas (Habermas 1987) is an exponent of this orientation to education.

Behaviourism

Behaviourism contends that student behaviour can be managed effectively by careful control of the learning environment and manipulation of the kinds of reward and punishment used. Behaviourists assert that learning can be optimized by presenting the right stimuli to students. This philosophy, which is associated most often with Burrhus Frederic Skinner (1904–90), was the dominant research framework in psychology in the USA during the first half of the twentieth century (Epstein 1982). The effects of behaviourism are still felt today, with behavioural approaches such as conditioning, shaping and social learning being employed in designing teaching methods (see Chapter 3). Other behaviourist influences include giving timely feedback and using behavioural contracts. The behaviourist aims to maximize learning efficiency by engineering the environment.

Cognitivism

Formed mainly in response to the limitations of behaviourism, cognitivism was influential in the latter half of the twentieth century. Cognitivism holds that recognizing unobservable cognitive elements, such as intent, motivation and cognitive complexity, is important for learning. Teachers who advocate this philosophy focus on trying to stimulate cognitive development by, for example, presenting to students concepts that are challenging but not too difficult for their level of cognitive development. Apart from subject knowledge, thinking and study skills are taught to students, enabling them to become independent, lifelong learners. One of the best-known cognitive psychologists is Jerome Bruner (1915–) who had a very significant influence on educational theory and practice in the 1960s and 1970s.

Perennialism

Perennialism focuses on the unchanging nature of truth. Perennialists believe that the teaching and learning of great classical works enables students to acquire timeless principles and knowledge. The use of textbooks is discouraged, and students are instructed to use canonical works. The proponents of this philosophy argue that learning directly from the greatest minds and works in different areas is the best way for students to achieve holistic development. As perennialism aims at the acquisition of timeless principles of reality, truth and value, learning is essentially for its own sake. Robert Maynard Hutchins (1899–1977) wrote important treatises on perennialist education (e.g. Hutchins 1947) which, by promoting this philosophy,

contributed significantly to the structure of undergraduate degrees in the University of Chicago from the late 1920s to the mid-1940s.

Essentialism

Essentialism stresses the teaching of basic and essential knowledge, as well as moral values, and maintains that ‘traditional’ ways of teaching through direct instruction, repeated practice and testing are effective. Teachers who espouse this philosophy believe that it is their duty to transmit knowledge and values that are important for students to become responsible, contributing members of society. William Bagley (1874–1946) was a renowned essentialist educator in the earlier part of the twentieth century.

Progressivism

Progressivism proposes that knowledge should be constructed through experience, and that the main purpose of education is to develop individuals’ potential to the full. Viewing traditional subject knowledge as alienating, progressive teachers urge students to adopt an active, ‘hands-on’ approach to learning in handling real-life activities with others. Schools are regarded as a co-operative community in which students develop their capacities, satisfy their needs and prepare for their roles as active citizens in a democratic society. Progressivism is aligned with pragmatism, which focuses on practical knowledge and a democratic society. The writings of John Dewey (1859–1952) in the early twentieth century formed the bedrock of this teaching orientation.

Social reconstructionism

Social reconstructionism aims to create a better world through education. Students are educated to see the problems that beset society (e.g. inequality, poverty and pollution), think critically about them and find creative solutions. Social reconstructionists believe that, to institute systemic changes and create a better society, the status quo must be broken. To solve society’s problems, the next generation is therefore urged to champion social movements. Theodore Brameld (1904–87), an important advocate of social reconstructionism in education, contributed to the development of this orientation throughout his working life.

Teachers’ Beliefs about Teaching

Table 1.2 shows the contrasting orientations to teaching of two teachers—one a behaviourist and the other an existentialist. As noted earlier, behaviourist teachers guide learners towards appropriate behaviours by conditioning them to learn in a preset, prescribed and programmed sequence; the teachers present a world that is determined greatly by externally defined outcomes. In contrast, existentialist teachers emphasize self-development and provide opportunities for self-exploration, helping students to realize their potential for making choices. Clearly, teachers with such differing orientations plan their lessons, interact with students and judge student performance according to their own views of knowledge, which depend heavily on their idealized conceptions of teachers’ roles. Nevertheless, such different philosophical orientations should be seen as inclinations rather than rigid, neat definitions for explaining one’s thinking and action.

Table 1.2 Comparison between existentialist and behaviourist teachers

The existentialist teacher	The behaviourist teacher
<p>Jessica is an experienced art teacher in a secondary school. To an outsider, her classes may seem a bit chaotic. One moment you may find a student standing on his/her chair and next all the students cheerfully tearing up newspapers. She often sits with one group of students, listening and sharing ideas with them. Other students also discuss with one another in different groups.</p> <p>Instead of instilling norms and knowledge into the students, Jessica prefers her students to explore and make sense of things themselves.</p> <p>Existentialist teachers stress the individuality and responsibility of students for their own lives. They believe that students should learn to think for themselves and should exercise freedom of choice with responsibility. Existentialist teachers tend to use less direct instruction and prefer to discuss with students. They allow students to experiment with different ideas.</p> <p>In the words of Jessica, ‘Direct transmission of knowledge to students has a negative effect on them. They become indifferent to things and problems around them. In teaching, I want to develop their own understanding and also their thinking and feeling related to their self and realization of their existence. These are fundamental for any person living in the society.’</p>	<p>Leslie is an experienced art teacher in a secondary school. He starts the lesson by introducing the topic. Leslie usually goes on to give a well-planned lecture on the topic, focusing on the specific skills he intends to develop among his students. He attaches much importance to the clear demonstration of the skills. To facilitate learning, he breaks the movements involved down into smaller units.</p> <p>In class activities, Leslie makes sure to praise those who perform well and promptly corrects wrong behaviour, leading students to achieve the right outcomes in their work. He gives his students numerous exercises, believing that repeated practice helps them to retain what they have learned.</p> <p>Behaviourist teachers maintain that effective learning can be achieved by conscious manipulation of the learning environment, paying particular attention to the kind of reinforcements and punishments that are present or absent in the environment, and by measuring learning outcomes from student performance, which are often identified as observable.</p> <p>In the words of Leslie, ‘I make it as clear as possible to my students what behaviours are expected of them and what are not. I then focus my attention on providing them with timely feedback—rewarding good behaviours and punishing bad ones. This is very important.’</p>

Table 1.3 summarizes the research findings on the teaching beliefs of primary and secondary school teachers. These findings, which illustrate a range of conceptions about teaching, reflect various educational philosophies which have resulted in three typical approaches to classroom teaching. The first approach emphasizes the learning of subject knowledge; the second focuses on student development and recognizes that students are responsible for increasing their knowledge; and the final approach, which sees teaching as a means of training students for the benefit of society, stresses the acquisition of knowledge and skills essential for building the economy, for improving society and for other society-oriented reasons (e.g. respect for ecology for the survival of the society and its people).

Subject-centred teachers are strongly attached to essentialism and perennialism, which view knowledge as unchanging, and therefore prescribe the content of learning. They may define learning simply as making learners achieve something that is believed to be important and right, such as learning the classics to become responsible, contributing members of the society. On the other hand, student-centred teachers are influenced mainly by cognitivism, progressivism and existentialism, which stress human development in terms of cognitive development, self-realization, life goals and values. Such teachers strive to support students in becoming independent learners with high intellectual ability who realize their full potential by being given opportunities to grow, achieve and excel. Learners are placed at the centre of the educational process as the aim of education is no longer simply the delivery of knowledge but the total development of individuals.

Student- and society-centred teachers display a belief in the ideas of Marxism or social reconstruction. They view learners as participants in reconstructing society and involve them in critical thinking, debate, discussion and investigation to address social issues, such as the class struggle, racism, poverty, pollution and social inequality. These teachers argue that, through education, the younger generation can contribute to a better world.

The above analysis underlines the important message that teachers teach in very different ways which have a different impact on the lives of students. For students, learning can be a very mechanical, controlled and boring task if teachers just focus on subject knowledge and limit their delivery methods to manipulation, drilling and mechanistic and impersonal programmed instruction. However, learning can be a challenging task for learners if teachers care about their students' growth and development and allow them to explore authentic tasks that are meaningful to them. In addition, student-teacher interactions can add valuable support to learners, both academically and emotionally. Learning can also be related to the wider society, with students identifying themselves as responsible citizens who contribute to society by helping to solve societal problems.

Table 1.3 Alignment of the categories of teaching beliefs

Orientations									
Authors	Subject-centred			Student-centred				Student-society	
	Realistic	Experimentalistic	Idealistic	Experimentalistic	Idealistic	An anchor for children	Nurturer of things that grow	Personalistic	Social
Chapman (1979)									
Provenzo et al. (1989)	Trainer					An anchor for children	Nurturer of things that grow		
Freire and Sanches (1992)	Traditional	Constructivist							Social
Steven and Palincsar (1992)	Mechanistic						Contextualistic (provision of environment for intellectual interaction)		
Bennet and Spalding (1991)	Inculator	Facilitator of thinking and lifelong learning	Empowerer				Nurturer	Friendly pedagogy	
Gurney (1995)	Delivery change (effect radical transformation with teacher-centred manipulation)		Change (assist growth)			Enlightenment		Humanistic	
Christensen et al. (1995)	Authoritarian and disciplinarian Presenter of information	Facilitator of thinking and learning					The nurturing helper		
Ennis et al. (1997)	Mastery of the discipline	Learning process (realize knowledge through guided and instructive activities)	Self-actualization						Social responsibility
Bibik (1997)	Performer (performing in the class to show clear instruction and guidance)	Group leader (acting as coach or guide)	Change agent			Sources of learning/ inspiration	Parent and protector		
Lam (2000)	Instructional	Social interaction						Personal	
Boulton-Lewis et al. (2001)	Transmission of content skills	Facilitation of understanding	Transformation						

What should teachers note about these different teaching beliefs? They should be aware that certain teaching approaches limit the realization of some aspects of human potential. For example, overemphasizing subject knowledge and overlooking the cultivation of cognitive development may constrain student achievement. In the worst case, students may be conditioned to carry out extremely low-level cognitive activities, such as memorization and recitation, and may become passive, uncritical, uncreative and unintelligent.

Student-centred approaches to teaching may also be harmful if there are no learning expectations to promote students' intellectual growth. Also, while education can help to develop a generation with a bright academic future, we still need to be mindful of their character-building and personal development. Students should regard themselves as contributing members of the society, consider the meaning of life and develop their social skills for living and interacting with others in society and the world at large.

Finally, it should be noted that while beliefs about teaching are shaped by a variety of factors, including previous learning experiences and the influence of significant persons and events (Mok 1994), the methods teachers actually employ may differ from their beliefs and conceptions about teaching due to contextual factors, such as school syllabi, assessment methods and student aptitudes (Lam and Kember 2006).

Branches of Thought that Guide Teaching

Having introduced various philosophical orientations to teaching, this section aims to deepen your understanding of teachers' thinking about teaching by exploring several branches of thought in the discipline of philosophy that govern how people think about the world. The section covers six areas that are relevant to classroom teaching, with each branch addressing key questions for everyone, such as: 'What is the nature of reality?'; 'What is the nature of knowledge?'; 'Is there truth?'; 'What should be the value of living?'; 'What is good, and what is evil?'; 'What is the nature of beauty?' and 'What kind of reasoning produces valid and consistent results?'

Metaphysics

When growing up, you may have asked questions such as: 'What is life?', 'What is the purpose of living?' and 'What is real?' Metaphysics is concerned with the nature of being, and seeks to understand and explain the nature of reality, not only how it appears but also what it is, why it exists and how human beings value it. Teachers

may think that metaphysics is not their concern, but it is an important foundation for contextualizing teaching. The school curriculum is influenced by our understanding of reality—for example, if reality is seen as serving the divine, religious studies would dominate the school life of children. In fact, the inclusion of any item in the curriculum reflects how we construct reality for children, and so it is fundamental for teachers to enquire into metaphysics in justifying the teaching curriculum and the school life of students: What is the purpose of delivering this curriculum? What do I want to achieve?

Epistemology

Epistemology is a branch of philosophy which is concerned with the nature and scope of knowledge. It seeks to answer the following basic questions:

- What is knowledge?
- How is knowledge acquired?
- What do people know?
- How do we know what we know?
- What distinguishes true (adequate) knowledge from false (inadequate) knowledge?
- Is there a constant truth?
- What kind of knowledge is most important?

Teachers may need to answer such questions in deciding how to teach, and their responses will affect the content and teaching methods they consider to be appropriate. According to Parkay and Stanford (2007), there are five ways of knowing that are of interest to teachers when they decide on their curricula and teaching plans:

1. knowing based on authority (e.g. knowledge from sages, such as Confucius, poets, experts, rulers, textbooks or teachers);
2. knowing based on divine revelation (e.g. knowledge in the form of supernatural revelations from the Sun god of early peoples or from the gods of ancient Greece);
3. knowing based on empiricism (experience) (i.e. knowledge acquired through the senses, informally gathered empirical data that direct most of our daily behaviour);
4. knowing based on reason and logical analysis (i.e. knowledge inferred from the process of logical thinking); and
5. knowing based on intuition (i.e. knowledge arrived at without the use of rational thought).

Axiology

Axiology is concerned with values. A teacher should develop values related to the school, the curriculum and other school activities. What values should be held in teaching? What values should students be encouraged to adopt in lessons? Such axiological questions highlight the very important idea that the knowledge students acquire should improve the quality of their lives—knowledge is useful when it is applied in daily life. Hence, asking such questions provides support to teachers in developing their missions and career aspirations: teaching becomes meaningful as teachers are not merely completing routine tasks but are recounting the importance of what they have done in their students' lives and are justifying the quality of life they have promoted in the school curriculum. There are three branches of values within the spectrum of axiology:

1. *Ethics*: Teachers may need to justify what is good and what is evil, what is right and what is wrong, and what is fair and what is unfair. Ethical values or knowledge of ethics can help teachers to overcome difficult classroom situations, especially when dilemmas arise. The choice of streaming or mixed-class policies is also an issue in which teachers should exercise ethical judgement to arrive at an acceptable solution.
2. *Aesthetics*: Although teachers may not be teaching art, music, literature or dance, teaching is itself an art. Aesthetics, which refers to judgement of the artistic standards of beauty and quality, can help teachers perform well in the classroom and other interactions with students. For example, teachers may present classroom rules as instructions, or they may describe them in a conversational tone close to the students: speaking in class is already an art.
3. *Logic*: Teachers constantly work with students on problem solving and often introduce them to the process of reasoning in finding answers or reaching valid conclusions. They frequently use two approaches to logical reasoning: deductive thinking and inductive reasoning. The former requires the thinker to move from a general principle or proposition to a specific conclusion, whereas the latter involves working on specific examples to discover generally accepted rules. The Socratic method of questioning is representative of inductive reasoning and is widely adopted in teaching.

How Knowledge Is Defined Makes a Difference to Teaching

Epistemology is concerned with how people think about knowledge and how changes in thinking about knowledge affect teachers. This philosophical lens is

concerned mainly with people's views on knowledge (i.e. what is knowledge?), and this section tries to bring together what has been discussed so far by referring to the changing conceptions of knowledge. It also makes clear why people behave differently by examining their different perspectives on understanding knowledge. In the past, knowledge was conceptualized as both absolute and static, and the role of learners was described as passive. However, knowledge is now considered as situation-dependent, constructed by interactions between people and the world—and, over time, these conceptions continue to change.

In the fourth century BC, Plato defined knowledge as 'absolute, universal ideas or forms, existing independently of any subject trying to apprehend to them' (Rorty 1991). Later, empiricism moved away from absolutism, considering knowledge as the product of sensory perceptions instead of an objective existence. In the eighteenth century, Kant denied the possibility of arriving at absolute knowledge and, by synthesizing rationalism and empiricism, he saw knowledge as the product of rational reflection, an idea which had a strong influence on thinking methodologies. According to Kant, knowledge comes from the organization of perceptual data based on inborn cognitive structures called 'categories' (Kneller 1971), which refer to space, time, objects and causality. This epistemology accepts the subjectivity of basic concepts, such as space and time, but rejects the idea of a purely objective representation of things in themselves.

Another significant advance in considering knowledge was the emergence of pragmatism in the twentieth century, which influenced both cognitive science and artificial intelligence. In pragmatic epistemology, knowledge consists of models that attempt to represent the environment in a way that 'maximally simplifies problem solving' (Heylighen 1993). While it is believed that no model can ever capture all relevant information, the parallel existence of different models is acceptable despite contradictions between them, as any model that can solve problems can be regarded as a model for interpretation. The basic criterion is that the model should be precise and simple, and can produce correct (or approximate) predictions (which may be tested) or problem-solutions (ibid.). Pragmatic epistemology does not give clear answers to the question about where knowledge comes from: pragmatic knowledge can be built up by trial-and-error, by intuition and by testing empirical data.

Constructivism has provided a radical answer to the challenge of the objectivity of knowledge. As implied by the term, constructivist epistemology assumes that all knowledge is constructed from scratch by individuals and so does not accept any 'givens', including objective empirical data or facts and inborn categories or cognitive structures (ibid.). In constructivism, it is argued that the only reality we can know is what is represented by human thoughts. It disapproves of knowledge from authority and from divine revelation; and it therefore is critical of objectivism and absolutism, and suggests that meaning or knowledge is always produced by

human construction (Watzlawick 1984). Even the representations of physical and biological reality, such as species, cars, chairs and tables, are socially constructed knowledge (O'Neill 1981).

Constructivism flourished in the history of philosophy and has developed into several streams which have been widely applied in psychology and education. Constructivists attempt to attain coherence among different pieces of knowledge and reject inconsistent pieces. In its radical form, 'individual constructivism', it is assumed that 'concepts, models, theories, and so on are viable if they prove adequate in the contexts in which they were created' by individuals (von Glasersfeld 1995, 7). In addition, this form of constructivism holds that knowledge is characterized by 'viability', which can be highly personal.

On the other hand, in social constructivism, categories of knowledge and reality are seen as being created through social relationships and interactions, in which semiotic resources come to inhabit a shared form of life (Searle 1995). These interactions also alter the organization of scientific epistemology.

Constructivist psychologists consider that human beings create systems that provide a meaningful understanding of their worlds and experiences. For instance, in psychotherapy, psychologists try to understand the worldview of their patients in an effort to expand the meaning of their patients' lives. In education, constructivism supports a way of teaching that overcomes the limitations of the behaviourist teaching model, and of the positivist and rationalist models for organizing teaching that focus on external knowledge and scientific experiments. The constructivist approach to teaching stimulates educators to reflect on the different needs, cognitions and experiences of learning. It rejects a subject-centred approach to teaching and focuses on the learner who plays an active role in the construction of knowledge. Prominent among educators who favour the constructivist philosophy are John Dewey (1859–1952), Lev Vygotsky (1896–1934) and Jean Piaget (1896–1980). Today, constructivism still influences cognitive science, linguistics, anthropology, neurophysiology and computer science. Constructivist approaches to teaching are discussed in Chapter 2.

Another influential branch of epistemology is 'evolutionary epistemology', with Karl Popper (1902–94) as the representative figure. It applies the concepts of biological evolution to understand the growth of human knowledge and proposes that 'knowledge is construed by the subject or group of subjects in order to adapt to their environment in the broad sense' (Heylighen 1993). The construction is an ongoing process at different levels: biological, psychological and social. Evolutionary epistemologists argue that knowledge, especially scientific theories, evolve according to selection. In this case, a theory—such as the germ theory of diseases—varies in its credibility as the body of knowledge surrounding it changes (Popper 1972). Knowledge is not static; it evolves over time.

The major epistemologies above have created disparate views on the nature of knowledge and of the world, mainly centred on the argument about whether there is an ontological world that exists independently (or there are objective principles and rules or inborn cognitive structures) or whether reality is independent of human thoughts and environmental changes. These two contrasting views result in significant differences in the conception of knowledge or learning. The absolutists and objectivists:

... believe in the existence of reliable knowledge about the world. As learners, the goal is to gain this knowledge; as educators, to transmit it. Objectivism further assumes that learners gain the same understanding from what is transmitted. Learning therefore consists of assimilating that objective reality. The role of education is to help students learn about the real world. The goal of designers or teachers is to interpret events for them. Learners are told about the world and are expected to replicate its content and structure in their thinking. (Jonassen 1991, 28)

However, absolutism and objectivism have been criticized for dictating a technocratic management model in which learners remain passive recipients of a prescribed curriculum, without necessarily developing ownership of learning based on their interests, abilities and needs. One may also wonder if students actually learn if they acquire knowledge without understanding it, such as when memorization and recitation are overemphasized.

In contrast, constructivists believe that:

... people construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences. When we encounter something new, we have to reconcile it with our previous ideas and experience, maybe changing what we believe, or maybe discarding the new information as irrelevant. In any case, we are active creators of our own knowledge. To do this, we must ask questions, explore, and assess what we know. (Educational Broadcasting Corporation 2004)

Constructivism defines learning as the 'active construction of knowledge' (Siegler 2000), contending that a person's cognitive development is a vital process in acquiring knowledge. In the last few decades, it has had a major influence on education, with teaching departing considerably from the previous behaviourist theories of learning that focused solely on the quantity of knowledge students gained. Constructivist pedagogies were developed to enhance human cognition and a constructivist classroom offers a very different scenario of learning. The spirit of the constructivist approach to teaching is highlighted in the following quotation (Educational Broadcasting Corporation 2004):

In a constructivist classroom, teachers encourage students to constantly address how the activity is helping students gain understanding. By questioning themselves and their strategies, students in the constructivist classroom ideally become 'expert learners.' This gives them ever broader tools to keep learning. With a well-planned classroom environment, the students learn HOW TO LEARN. (emphasis in original)

Synthesizing the Different Views of Teaching

Different values and beliefs have created a diverse range of ideas about teaching. For example, as indicated above, adherents of absolutism or objectivism may put a heavy emphasis on subject-matter knowledge and concentrate on arranging and delivering content in accordance with schedules to ensure that students gain knowledge. On the other hand, constructivists place learners at the centre of the educational process, arrange meaningful activities and promote the active participation of students.

In fact, these philosophical orientations can be found in the history of education in the East and West. For instance, in ancient Greece, young people memorized great works such as Homer's *Iliad* and *Odyssey* which teachers recited to them, and teachers and pupils also discussed the feats of the Greek heroes described by Homer. Also, in ancient China, the Four Books and Five Classics (四書五經) were central to education. During the Song Dynasty (960–1279), as literacy skills became more important, a stronger emphasis was placed on recording the number of characters or essays a child learned each day (Lee 2000). Both these examples illustrate respect for great works, which were believed to be authoritative sources of knowledge.

In Hong Kong, some pieces written by famous scholars in China from the Spring and Autumn (770–467 BC) and Warring States (Disunity) (475–221 BC) Periods until the Sui and Tang Dynasties were included in the secondary school syllabus and in the previous Certificate Examination¹ in the subject of Chinese Language. It seemed that everyone who studied in Hong Kong during that time memorized those pieces by heart. The idea of learning the great works was somehow considered to have a cultivating effect on young people, but whether these pieces were actually understood by learners is another matter. I attended secondary school in Hong Kong, during which I was frequently asked to memorize some Chinese poems. Often, I did not know the meaning and background of the pieces, but I was urged to memorize them by heart to avoid the shame of being unable to recite them when asked by my teacher.

Towards the eighteenth century, more enlightened educational beliefs emerged. In the ancient Greek and Chinese civilizations, personal development

was already acknowledged as an important value for teachers to hold while educating the youth. Athenian education placed value on educating individuals to perform their civic duties and for their own personal development; and in Confucian educational thought, education is for personal fulfilment and for developing the 'ideal person'.

Table 1.3 presents empirical studies on the educational philosophies mentioned above. In such studies, which characterize rigid teachers as applying instructional approaches that demand high control over students, absolutist or objectivist teachers are presented as 'authoritarian and disciplinarian', 'presenters of information' (Christensen et al. 1995), and 'trainers' (Proventzo et al. 1989) and as 'mechanistic' (Steven and Palincsar 1992). On the other hand, some constructivist teachers are perceived as 'facilitators of thinking and lifelong learning', 'empowerers' (Bennet and Spalding 1991) and sources of 'enlightenment' (Gurney 1995), suggesting the image of a friendly teacher who provides opportunities for student development. There are also types of teachers who promote 'ecological integration' and 'social responsibility' (Ennis, Cothrs and Loftus 1997), and who view teaching the next generation as a way of supporting society. The various epistemologies or educational philosophies seem to have come together to influence teachers across time and culture, and they remind us that, regardless of their career stages, teachers should reflect on their own beliefs about teaching and should assess whether their teaching approaches are appropriate for learners.

The philosophical orientations introduced early in this chapter as guides to reflection on teaching beliefs also reflect the common epistemologies. Notably, perennialists, essentialists and behaviourists tend to agree with the authoritarian and objective nature of knowledge, while cognitivism, existentialism and pragmatism can be considered as, in varying degrees, to have developed from the orientation towards the personal development of learners. The social reconstruction orientation can be viewed as a society-oriented philosophy, which differs from the two previous groups of influential epistemologies. The mapping of these teaching philosophies can be conceptualized as a continuum (Figure 1.1) which ranges from the belief that knowledge is absolute and objective (and, hence, must be delivered to students) to concerns about learner development. Society-oriented conceptions are located at the middle because this type may or may not have a connection to either end.

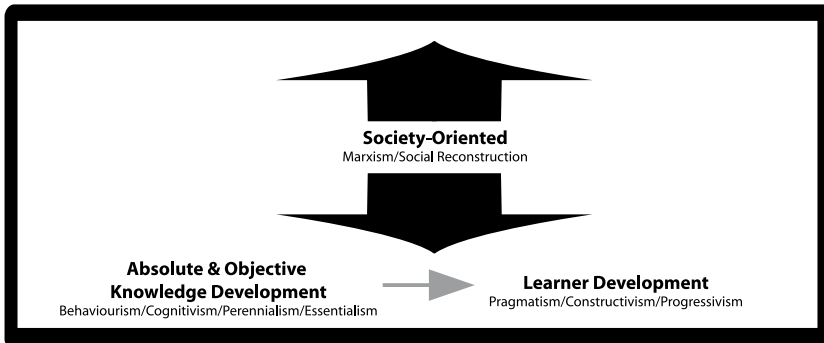


Figure 1.1 Conceptualization of different teaching beliefs

The teaching philosophies can be conceptualized as a continuum, ranging from a belief in knowledge as absolute and objective and to be delivered to students, to concern about learner's development and learning. The society-oriented dimension is located in the middle, indicating that this orientation may or may not have a connection to either ends.

Confucian Educational Thought

Teaching is also culturally situated. It is natural that our decision making and beliefs about teaching are, to varying degrees, influenced by our culture. However, this does not mean that Chinese teachers have to conform to the Chinese style of teaching. On the contrary, it is crucial for teachers to examine the strengths and possible weaknesses of their own personal teaching orientations. A critical mind can guide us in exercising our professional roles in the classroom and, by improving education in our own countries, we can refine our cultures, given that improving education is an important step towards positive cultural change.

With a recorded history of nearly 4,000 years, China is characterized by a unique culture. It is one of the world's most ancient civilizations where economic activity developed the earliest. The Chinese people are well known for their determination and diligence, and China is recognized for its outstanding achievements in economic production. Over the long history of Chinese civilization, China has shaped its own culture by undergoing a long process of 'making and finding'. During the Spring and Autumn and Warring States (Disunity) Periods, philosophy and other branches of knowledge flourished, with various schools differing in their opinions about politics and society. The situation where a 'hundred schools of thought contended' (百家爭鳴) highlights the glory of this golden age in China, which included famous philosophers such Lao Zi (老子), Confucius (孔夫子), Mencius (孟子) and Xun Zi (荀子).

Among the various branches of philosophy, Confucianism, which was founded by Confucius (551–479 BC), served as a paramount and respected philosophy

that governed the behaviour of the Chinese. As the product of 2,000 years of development, Confucianism has unceasingly influenced education in China; and it continues to influence teachers in places such as Hong Kong, Taiwan and Singapore. In making an overall analysis of educational thought in China in this chapter, reference is made primarily to the central ideas of Confucianism, supplemented by the ideas of other scholars that complement Confucian views.

Confucius was the first person in Chinese history to devote most of his life to teaching, and was called ‘the First Teacher’ (先師), ‘the Sage’ (聖人), and ‘the Model Teacher of a Myriad Ages’ (萬世師表). The way Chinese students learn and how Chinese teachers teach have been heavily criticized (Biggs and Watkins 2001; Chan 2007; Ross 1991). However, in the essence of Confucian educational thought, there are several remarkable educational concepts that present the enlightened features of Chinese education, and are comparable to the most liberal educational ideas found in history.

First is the notion of education as a form of personal enjoyment, which resembles the contemporary ‘personal development orientation’. This idea is reflected in the teachings of Mencius (372–289 BC), one of the most important of those who expounded the teachings of Confucius:

... a gentleman steeps himself in the Way because he wishes to find it in himself. When he finds it in himself, he will find joy in it; when he finds joy in it, he can draw deeply upon it; when he can draw deeply upon it, he finds its source wherever he turns. That is why a gentleman wishes to find the Way in himself. (Mencius, as cited in Lee 2000, 3)

Another famous dictum from Confucius reveals the personal significance of education: ‘In ancient times one studied for one’s self; nowadays one studies for the sake of others. The gentleman’s learning (today) is meant to serve as a bribe to win attention from others’ (*Hsun Tzu chien-shih*, *ibid.*). This reflection, written thousands of years ago, recognizes personal moral perfection and the joy experienced from study as the primary purpose and goal of education. It suggests the deeper meaning of study that emphasizes moral rather than utilitarian goals. The intrinsic value of education for personal development—which is also reflected in the beliefs of modern teachers (e.g. Christensen et al. 1995; Proventzo et al. 1989)—remains the most important educational idea that has its roots in traditional Chinese education.

Second, Confucian education implies the significance of education for society. Confucian educational thought is centred on personal enrichment rather than on vocation or securing recognition and benefit for oneself. However, in Confucian thought, the idea of personal fulfilment is inseparable from the society (i.e. carries social implications). According to Confucius, the ‘ideal person’ (君子) is the

human being who is committed to a search for personal moral perfection, without forgetting that his/her personal moral growth has social implications. The social implications can be understood by the element of ‘community’ in a person’s education. As suggested in the *Analects* (論語), ‘the gentleman by his culture (*wen*, education) collects friends about him, and through these friends promotes humanity’ (the *Analects*, as cited in Lee 2000, 10). This adage means that the educated will attract friends, and being able to attract friends enables them to promote humanity. Promoting humanity is considered the social dimension of Confucian education; humanity is regarded as the completion of culture. The social implications of education are clearly illustrated in the *Great Learning* (大學):

When things are investigated, knowledge is extended; when knowledge is extended, the will becomes sincere; when the will is sincere, the mind is rectified; when the mind is rectified, the personal life is cultivated; when the personal life is cultivated, the family will be regulated; when the family is regulated, the state will be in order, there will be peace throughout the world.
(*The Great Learning*, as cited in Lee 2000, 11)

The above eight steps of moral cultivation show how Confucian thinkers view the connection between personal learning and peace in the world. The ultimate goal of a person’s educational accomplishment lies in his/her contribution to a harmonious political order, which shows the inseparable relationship between a person’s moral uprightness and socio-political harmony. The ability to regulate family relationships is identified as the essential qualification for governing the world. In providing an accurate view of Confucian traditional educational values, one should not simplify the subtle ideas that illustrate the complexities of the social purpose of education, which is integrated into the personal moral accomplishments of learners. It is important to highlight a most easily mistaken point: in Confucian thinking, education makes a man’s place in the society meaningful—by being educated, man contributes to the social and political order of a country.

In terms of social implications, Confucian educational ideas also encourage studying with friends because the presence of friends allows for intellectual exchange: ‘Studying alone without friends, he will be solitary and uninformed’ (Liu Hsiang, as cited in Lee 2000, 10). By learning from others, a man will develop and improve. In addition, the social implications of education for the family play a very significant role, and family support for education has evolved into an important aspect, just like the patriarchal family life of the Chinese (Lee 2000; Wu and Singh 2004).

The third significant Confucian idea, which has been widely adopted in our educational system, is universal education. Confucius mentioned that education should be for everyone. Every normal individual should be included and have access

to education because he/she can bring perfection to the socio-political order of the society through education. This idea was developed not out of the interests of society but of the individuals who build society. The curriculum Confucius proposed was one that can help man to live up to the 'ideal of humanity', by reaching which man can be called 'superior', and can be seen as 'a gentleman'. Although both these terms have essentially the same meaning, 'superior man' carried an additional feature called 'sagehood', with a sage having the status of having achieved the 'ideal of humanity'.

Fourth, with regard to reaching 'sagehood', the curriculum proposed by Confucius was not predominantly composed of 'book learning' but of the Six Arts, namely, rites, music, archery, charioteering, writing and mathematics, including rituals and martial arts (Lee 2000). In addition to proposing a regular revision of the curriculum to ensure its appropriateness, Confucius was attached to the hermeneutic tradition in delivering the curriculum. For example, he mentioned that arithmetic is learned with the purpose of mastering the knowledge needed to manage issues of calculation confronting educated people and should, therefore, be taught by applying it to the study of heavenly phenomena. Learning to write could merely mean literacy, but in the Confucian curriculum writing should be learned from books, from book-like readings, or from reading for personal pleasure. Confucius also stressed the importance of studying with understanding. Based on the Confucian model, the purpose of learning the Six Arts is not to learn specific knowledge and skills, such as how to steer a chariot and memorize a poem, but to 'tirelessly seek to comprehend knowledge, and use it to help integrate with the highest ideal of humanity' (Lee 2000, 19). This helps students to handle human affairs and 'participate in the moral exercise of seeking unity with the cosmic Tao (way)' (Lee 2000). In fact, all these ideas are promoted in contemporary education where learning is now recognized as a set of meaningful activities for learners. Confucius also regarded learning as a form of personal pleasure and saw it as helping to connect learners to their lives and existence, which is related to 'humanity (ibid.).

As can be seen above, the Confucian model of education carries many insightful ideas. Education is oriented towards personal development, assuming that the development of each individual serves to support society, which has the advantage of producing harmony in family relationships, stability in the country and world peace. Also, equal access to education, as stressed in Confucian education, establishes a strong belief that everyone's potential can be developed to serve society. In terms of pedagogy, as outlined above, Confucian education encourages the interpretation of written texts; learning is organized through authentic and contextualized activities, which cultivate higher-level intellectual abilities; learning is close to learners' life experiences; and learning provides numerous opportunities for exchange, dialogue and reflection. The curriculum covers not only book knowledge but also disciplines

related to languages, mathematics, music and other skills that can be generally applied to living. The stress on moral advancement and humanity establishes strong moral values, which help to produce a harmonious world. In fact, Confucian education offers remarkable ideas for global education: they are well established based on people and society, and they address the cognitive, spiritual, social, moral and aesthetic aspects of human development.

Historical Degeneration of Confucian Educational Thought

However, despite all these very positive aspects, there are some specific features of Confucian educational thought that are unfavourable for the development of Chinese education. These features have been integrated into the Chinese examination system, and they continue to serve as barriers to educational improvement in Chinese communities, such as Hong Kong.

For over a thousand years, Chinese education was dominated by the civil examination system, which was used to select officials to staff every level of the imperial bureaucracy. Confucius and most Confucian scholars approached education from the viewpoint of a person's moral cultivation, but the government did not always subscribe to this approach. To Confucius, government education should be directed to an ethical end. However, since the establishment of the civil service examination system, the evolution of Chinese education has become complex in a variety of ways and has been compounded with certain traditional Confucian values.

First, there were conflicts between the educational aims of the state and of individuals. The government usually had a narrower educational purpose because of its interest in staffing the bureaucracy. Over the history of China, the content of the civil service examination was criticized as being restricted to the memorization and recitation of texts (Lee 2000). The syllabus focused on reciting classical books, mainly the Four Books and the Five Classics; and candidates wrote essays in prescribed forms, in strict accordance with the ideas of the classics.

Since the examinations became influential, this world no longer knows that there are books ... The million of people over the hundreds of years are lured only to how to copy each other, and to figure out what the examination content could be like. These people are empty shells and rotten leather. They are no talents at all. (*Hsuan-shih chih-tu*, as cited in Lee 2000, 169)

It was often quoted, especially during the Ming Dynasty (1368–1644), that examinations used largely the same kind of questions. While studying the Four Books and the Five Classics as the basic texts for the examination, candidates could actually focus on only one of them, and they could concentrate on only one style and

form. If argument was required in the examination, it should be in absolute accord with the interpretations accepted in the classics concerned, and imagination was not required. The examination thus reinforced a non-intellectual routine rather than genuine learning and ability testing.

The topics were literally taken from the classics, especially the Four Books, and so there were many passages, sentences or phrases that could be used. Most candidates resorted to memorizing 'ready-made' essays and '... some candidates might not know who Emperor Han Kao-tsu or Tang Tai-tsung were and yet might pass the examinations with outstanding essays, which they had memorized beforehand' (Jih-chih lu, as cited in Lee 2000, 160).

Second, as the government took control of education 'under the heavens', examinations gradually became a mechanism for legitimizing and reproducing the monarch-subject power relationship. The self-interest of monarchs, as 'sons of God', was preserved because loyalty was expected from officials selected through the civil service examination (Smith 1991).

Intellectuals believed that going to the halls and walls (the seat of official examinations) of Confucius would guarantee them a shortcut to financial gain. According to Wang Fu-chih (Sung-lun, as cited in Lee 2000, 168), 'the stricter the government examines them; the more cunning they are in cheating in the examinations. The more successful candidates the government recruits, the more impostors there are ... This is why the people of self-dignity do not wish to consider studying for the examinations a kind of serious learning. However, how else could one acquire genuine learning? Could they not pursue the position in the government as an erudite scholar, and place themselves in the service of the sons of heaven, in the hope that they assist him in the work of straightening the world?'

The examination system created a privileged elite, who shared a uniform tradition and sense of belongingness. Confucian traditional values gave way, and Chinese education became a perennial struggle between the state's wish to manipulate the educational process for its own good and the resistance of intellectuals who sought liberation from this manipulation.

Third, the education of individuals was intertwined with the fortune of their families, resulting in the degeneration of personal educational goals, which became utilitarian. Given that a government career could bring glory, splendour, wealth and rank to the whole family, the examination system led students to think that education was about the search for wealth. Even the Qianlong Emperor, in reflecting on the system, admitted this problem:

The pursuit for a degree in the examinations creates a kind of person who is only interested in name and profit. The desire is deeply planted in their thinking. It is very difficult to lure them back [to the right way]. (Jin 2001, cited in Wu and Singh 2004)

It is ironic that the excellent Confucian educational dictum of studying for personal enrichment was overridden by the purpose of gaining personal wealth. This was mainly caused by the social implications of education embedded in Confucian educational thought. In a patriarchal state, education serves to reinforce hierarchical power relations. Moral behaviour is governed by family relations and respect, and hierarchical power relationships are also exercised between families and the state, between families and sons, and between citizens and government leaders. People develop a strong attachment to their families, and a subservient relationship is also legitimized between subjects and monarchs (Ball 1990). As regards education, parents may develop a very strong desire for their children to succeed because families are beneficiaries of the purposes of education (Jin 2001). In ancient China, families relied on the success of their members in passing the examination.

To conclude, because of state control over examinations and the features of a patriarchal society in China, education became a political means to reproduce the relations of knowledge and power between the elite members of society and their subjects. Due to its purpose of fulfilling the self-interest of monarchs, examinations were relegated to reproducing the works of sages, and memorization and recitation became the major methods of study in ancient China. Unfortunately, these themes still influence contemporary education in Chinese societies in China and other Asian countries. Chinese education is commonly seen as relying solely on rote learning with little understanding (Chan 2007; Chen, Lee and Stevenson 1996; Lau and Yeung 1996). This can be seen as a result of the overemphasis on studying for examinations and the high level of compliance to authorities demanded by the Chinese culture. Furthermore, for many, education is still viewed as a means for attaining security and material benefits (Lee, Wong and Chow 2006). Teachers often 'teach for the test' and concentrate on drilling students to attain the best results for entry to universities. Many of these considerations contradict Confucian thought, which emphasizes the enjoyment of learning and the higher-order aims of education.

Practitioners are responsible for instituting change, and should deliver quality education and reflect critically on the important aspects of our culture. Teachers should help students to make learning a means for their own advancement and development.

This section has attempted to develop an understanding of cultural influences on teaching beliefs, particularly Confucian educational thought, which is summarized in Table 1.4.

Table 1.4 Summary of Confucian educational thought

Aims	Curriculum	Pedagogies
<ul style="list-style-type: none"> • Personal moral perfection and joy • To become a sage (i.e. an ideal person) • To reach the 'ideal of humanity' (i.e. the perfect mankind) and the ideal world • Glory to the family • Moral uprightness, and the social and political harmony of the world 	<ul style="list-style-type: none"> • Catering for everyone and accessible to everyone in the society; hence, it brings perfection to the nation in terms of social and political order • Supports the development of a person to reach the 'ideal of humanity' • Includes book knowledge and skills, focused on application • An integrated approach that stresses living, connecting learners to their lives and to their existence 	<ul style="list-style-type: none"> • Promote learning with peers, not learning alone • Encourage intellectual exchange • Promote humanity and cultivate personal lives by studying with friends • Authentic learning materials

Contextualizing Teaching in an Era of Educational Reform

As introduced in the early sections of this chapter, in the intellectual world there are philosophical debates and movements that focus on particular educational ideologies. As demonstrated in recent education reforms, as a result of advances in cognitive science, psychology, educational psychology and neurophysiology, the importance of learners' cognitive development is acknowledged. Education must develop peoples' cognitive abilities to allow them to understand and discover knowledge and the world; and teachers should provide learning situations for students to explore and construct meaning. As individuals, learners are at the centre of the educational process and their motivation, self-concepts, and development in different domains should be considered. The aim of education is to help individuals to develop their thinking abilities, potentials and interests for living and enjoyment. To become true professionals, teachers should contextualize themselves in the philosophical dialogue of great thinkers and note that this is the direction we should take.

In contemporary education, the student-centred teaching approach is believed to benefit learners because it considers them as active agents of learning. As argued earlier in this chapter, overemphasizing subject knowledge may overlook cognitive development. In this century, schools should no longer get students used to low-level cognitive activities, such as memorization and rote learning, and they should not serve as training centres for examinations.

For a long time, education in Hong Kong has been criticized for using a didactic approach to teaching, and an overemphasis on the selection function

of examinations. The educational process was dominated by preparation for examinations, and competition was rife (Cheng and Yip 2006). Evidence shows that this system has a detrimental effect on students' interest in learning (Wong et al. 2001). As discussed earlier, such a system, with its heavy reliance on examinations and rote-learning has its roots in the Chinese tradition and has been influential in many Asian countries (Biggs and Watkins 2001). The current educational reforms aim to change this culture radically and move education to a student-centred approach—which is certainly not a straightforward task.

Chinese parents, including those in Hong Kong, expect their children to have a positive attitude to their studies and fulfil their responsibility for performing well (Chen and Stevenson 1989; Lau and Yeung 1996; Phillipson and Phillipson 2007). Parental expectations are, therefore, a key factor influencing educational policies and practices. The Chinese proverb 'wishing my son to be a dragon' is still a strongly held sentiment among Hong Kong parents; and the current economic and social conditions in Hong Kong have reinforced the traditional Chinese belief in the importance of education and the concomitant role of examinations as a means for raising the socioeconomic status of individuals and their families (Lau, Chan and Lau 1999; Lau and Yeung 1996).

While the reforms aim at reducing the level of competitiveness in the educational system, several factors impede progress in this direction. The declining birth-rate in Hong Kong has been accompanied by school closures, with, for example, a 14.1% reduction in the number of primary schools from 1994 to 2004 (Census and Statistics Department 2005). To ensure their survival, all schools are encouraged by the Hong Kong government to compete for students, and the academic achievement of their current students is their strongest selling-point. In addition, particularly in senior primary levels, the demand for high academic achievement remains very strong as this ensures that students have the widest possible choice for further education. Consequently, the primary responsibility of teachers is to enhance the academic achievement of their students by providing 'remedial' classes to low-achieving students and also extra tutoring to a substantial number of high-achieving ones, in addition to the regular curriculum. Table 1.5 lists some further criticisms of Hong Kong's educational system.

Recent research has discovered that a substantial proportion of students are underachieving relative to their intellectual potential (Lam 2008; Phillipson 2008; Phillipson and Tse 2007). However, the findings from several studies on the cognitive strategies of Chinese learners suggest that the previous criticisms of their passivity and rote-learning model should be reconsidered. For example, Grimshawa (2007), after reviewing the related literature over the past ten to twenty years, argues that Chinese learners' cognitive-centred, listening-based approach can lead to as active engagement in learning as the more verbal approaches of Western

students. Also, Leung, Ginns and Kember’s (2008) study showed that viewing Chinese students as rote and superficial learners is a misconception. Based on the revised Study Process Questionnaire, they found that Chinese students did not use a dichotomous ‘surface’ versus ‘deep’ learning style but displayed a range of intermediate approaches that combined surface and deep learning—that is, they used both memorization *and* understanding—in a similar way to the Australian learners in their sample.

Dahlin and Watkins (2000) found that repetition in the process of memorizing can play an important role in improving understanding. Nevertheless, teaching may be dominated by passive and rote learning if teachers want to ‘fast track’ in an examination-oriented culture that encourages memorization without allowing the expression of diverse viewpoints and creative thinking. Only if there is a fundamental change in the school curriculum and examination system can the possibility of change in classroom practice be guaranteed.

Table 1.5 Criticisms of Hong Kong education

<p>‘The lessons we observed tended to be teacher-centered, with little use of aids beyond chalk and blackboard. In “non-exam” years, the atmosphere seemed fairly relaxed, but in the examination preparatory forms, all was deadly earnest and students were seen taking notes, laboriously completing model answers, and learning texts by rote (incidentally, this was equally evident at the college of education we visited) (Llewellyn Committee 1982).</p> <p>‘Students spend too little time in critical or analytical thinking. A library is a symbol of a “learning-to-learn” system, but use and provisioning of libraries seem to reflect a lack of understanding of their potential and importance’ (Llewellyn Committee 1982).</p>
<p>‘The main characteristics of most lessons were very similar. The relationship between teachers and pupils was one which emphasized the transmission of information. Teachers spent most of the time lecturing and the pupils busied themselves recording the information presented’ (Morris 1984).</p>
<p>‘Education system in Hong Kong used to be highly academic and selective, focused mainly on inculcating knowledge in selected disciplines and selection of students with high academic abilities to go into the university. It is exam-and content-oriented’ (Lam 2004).</p> <p>‘Tests and examinations have dominated student learning in Hong Kong for a long time. Examinations are norm-referenced and competitive’ (Lam 2004).</p>
<p>‘In Hong Kong at school level conceptions of teaching and assessment are separate, both conceptually and functionally. The role of teaching is to convey content, the role of assessment is to determine who learns better than who... This split between teaching and assessment is represented by the fact that two independent bodies look after each function: the Government Education Department is responsible for curriculum and teaching, while the autonomous and financially independent Hong Kong Examinations Authority is in charge of all public examinations’ (Biggs and Watkins 2001).</p>

If you intend to become a teacher, will you just stick to the old models of teaching or will you persevere in using another method that you think can benefit students, although it may be more challenging? How will you survive in the classroom? This is another perspective that must be considered at the conclusion of this chapter.

Teachers are agents of change. If a different method is implemented to reform schools, they should reflect on whether it is useful and the best approach for learners, and whether it is feasible given the current cultural constraints. They should persist in experimenting, participating in professional dialogue and conducting action research. Educational reform has become a major task for all schools and teachers in Hong Kong, given that at the outset Hong Kong's educational culture was examination-oriented, there was keen competition among schools, and parents 'wished their children to become dragons' (Wu and Singh 2004).

There are two ways of viewing reforms in schools. First, should we justify that the new active approach to teaching is suitable for learners—the answer is 'yes'. As has been shown, the study of educational philosophies offers considerable support for this active approach to teaching advocated in the reforms (and Chapter 2 introduces further support for the direction proposed). However, learning from the example of Confucian educational thought, we may wonder if this new approach, and the need to educate future generations to adopt a global perspective, can be implemented effectively in our schools. Will schools take a short-cut to convince the public that they are instituting the educational reforms? Will schools, parents and teachers 'repack' the elitist educational model in schools and develop a new kind of elitism for the demands of the twenty-first century? Will the mission of schools to develop individuals for fulfilment in life, as enshrined in our educational reform policy, be forgotten? Teachers need to examine closely their beliefs about education for the next generation as they think about and decide on many issues they confront in educational reform. Although teachers cannot change government policies, the curriculum guidelines set for schools and the public examinations, they should exercise their independent professional judgement within the classroom and carry out reform at the right pace, on the right track and with appropriate action that support learners.

Conclusion

By examining the different philosophical perspectives this chapter provides a comprehensive review of major theories that can be conceptualized as a continuum ranging from a belief in knowledge as absolute and objective and to be delivered to students, to concern about learner's development. The introduction of society-oriented teaching has also emerged as a major theme that has or has no connections to the above ends. The Confucius values of teaching are also discussed; they reflect how meaningful values of teaching that support personal development are

degenerated to more economic-oriented ends when a society places more emphasis on efficiency, productivity and achievement in monetary terms. The discussion in the chapter suggests the importance of teachers in developing an orientation to teaching that benefits student learning. The other chapters in this book examine further the knowledge and skills involved in teaching which, if analysed critically, will help teacher teach more effectively.

Note

1. The Certificate Examination was an external examination in secondary schools (at Secondary 5 level), based on the results of which students competed for entry into matriculation study. In the education reform in the early twenty-first century, this examination was replaced by the Diploma in Secondary Education in which more authentic assessment methods are used.

Learning Activities

1. As a prospective or in-service teacher, share your personal teaching beliefs. From your perspective, what is the aim of teaching? What assumptions about learners, knowledge and teachers does this involve? Given your assumptions and aims, how will you teach in classrooms? Compare your answers with one of your peers.

	Your beliefs	Your peer's beliefs
Learners		
Knowledge		
Teachers		
Teaching methods		

2. Itemize the differences between existentialist and behaviourist teachers in terms of the curriculum, learners and teaching methods (refer to Table 1.3). Which of the teachers holds beliefs closer to yours? Critically examine the beliefs these two teachers hold.
3. Having familiarized yourself with the primary educational ideas, how do you view them? To what extent do you agree with them? Use the table below to summarize your understanding of Confucian ideas about the curriculum, learning and teaching, and the purposes of teaching/learning.

Summary of Confucian educational thought	
<i>Concepts</i>	<i>Confucian educational thought</i>
Curriculum	
Learning/Teaching	
Teacher-student relationships	
Purpose of teaching/learning	

4. When you were a student, did you ever experience any educational reforms? What were they, and what were their causes?

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