Jerome Bruner, who died in June this year aged 100, is widely regarded as a key thinker in the field of cognitive psychology. He remains highly influential in educational circles, described by Howard Gardner as ‘one of the foremost educational thinkers of the era... an inspired learner and teacher’.

Gardner further claims that foremost educationalists around the world have been drawn into education by Bruner’s writing, in particular a book entitled The Process of Education.

BACKGROUND
Bruner was born in New York in 1915, the son of Polish immigrants. During the Second World War, he served in the American army exploring the impact of propaganda and social attitudes. After the war, he entered Harvard University and set up a Center for Cognitive Psychology. His interest in learning led him to become particularly interested in the development of children’s learning and in their ways of representing ideas.

Continuing to teach and write well into his nineties, it is little wonder that Bruner is described by Gardner as having an ‘indefatigable mouth and pen’. In addition to Gardner, Bruner worked with and nurtured highly influential figures including Kathy Sylva and Margaret Donaldson. He led the Oxford Pre-School Research Project in the 1980s and, in the 1990s, he took a great interest in the pre-schools of Reggio Emilia.

WHAT DID HE ACHIEVE?
Throughout his long life Bruner responded to and built on the theories of others. His interest in cognitive psychology arose from his rejection of Skinner’s theory of behaviourism, which he felt paid too little attention to intangible aspects of learning such as motivation and intuition.

He refuted Skinner’s ideas about the development of language, but when Noam Chomsky developed an alternative theory of language, Bruner also rejected that. While Skinner argued that language is entirely a product of nurture – learnt through praise and reward – Chomsky put forward a theory that language is innate, learnt through our inbuilt Language Acquisition Device (LAD). Bruner humorously countered this by suggesting that language learning comes about through LASS – a Language Acquisition Support System, better known as a mother.

In addition to developmental psychology and cognitive psychology, Bruner had a particular interest in social constructivism, which in later life he termed ‘cultural psychology’.

In the 1980s, in Actual Minds, Possible Worlds, Bruner examined the work of Sigmund Freud, Jean Piaget and Lev Vygotsky. From Freud, he took an emphasis on relatively neglected areas such as motivation and intuition.

From Vygotsky, Bruner took theories of scaffolding and tools for thinking, writing that, ‘culture shapes the mind... It provides us with the toolkit by which we construct not only our worlds but our very conception of ourselves and our powers’.

From Piaget, he developed the notion of a staged theory of development. While Piaget emphasised development as moving in one direction from sensorimotor towards formal operations, Bruner proposed a horizontal model, with three modes of thinking linked not to age but instead to experience. These are:

- the enactive
- the iconic; and
- the symbolic.

Whenever learners, whether children or adult, come across something new they are, according to Bruner, likely to revert to physical or enactive ways of understanding it. As we become more experienced in a particular field of interest, we are able to work first with images or other representations and then in the abstract or symbolic mode.

This view of modes of thinking influenced Gardner’s Multiple Intelligence Theory (MIT). In addition, Bruner drew educators’ attention to a range of other important aspects of learning. He argued that children need to have an overview or an understanding of the structure of what they are learning or being taught.

He suggested that this involves practical activities and that ‘if earlier learning is to render later learning easier, it must do so by providing a general picture in terms of which the relations between things encountered earlier and later are made as clear as possible’. This big picture, linked to discovery methods, is achieved by helping children to make connections between what they already know and what is new.

This, in turn, is linked to Bruner’s spiral curriculum. Bruner rejected Piaget’s notion of readiness for learning, arguing that ‘any subject can be taught effectively in some intellectually honest form to any child at any stage of development’. For Bruner, conceptual development and understanding grow as children are able to meet new ideas regularly – each time gaining a little more understanding.

In the last decade or so of his life, Bruner became focused on the role of narrative in learning, linking it to creative thinking. In an article in The Guardian newspaper he stated, ‘Storytelling performs the dual cultural functions of making the strange familiar and ourselves private and distinctive.’
CRITICAL CONSIDERATIONS OF BRUNER’S APPROACH

‘My critics have always accused me of ignoring potentially interesting areas of research,’ he said. ‘And they’ve got a point. The whole field of cognitive development was just so new, so exciting, and so open when we started that you could only do so much at any one time, and you just headed off in the directions that seemed most interesting. So, undoubtedly, there are bits I would like to go back and look at more thoroughly.’

His critics have included John Holt — famous for writing How Children Learn and How Children Fail. He suggested that Bruner’s writing is that of a ‘spurious intellectual’ and that in not making it accessible to teachers he has failed. In particular, he argued that Bruner’s work on what prevents children learning has not been sufficiently disseminated – oddly adding that the research methods probably render the research findings invalid!

Bruner was critical of his own attempts to create a comprehensive spiral curriculum (Man: A Course of Study) claiming that it placed too much emphasis on the individual and insufficient on the role of culture or society. At the time, some Americans criticised it for being too un-American – with too much emphasis on other cultures. His emphasis on discovery learning was also criticised as being inefficient.

When it was published in the 1980s, the Oxford Pre-School research was criticised. Practitioners felt that Bruner had insufficient understanding of its aims. Whether true or not, Bruner’s comment at the time remains as true today as it was more than 30 years ago: ‘We are going through hard times economically... Yet... this may be the seed time for working out ways to give children a better start and their families more heart in the future... The return in kindling human hope for the future would be great.’

IN PRACTICE

Language Acquisition Support System highlights the role of adults in the early development of language. Bruner focused on games such as peek-a-boo, which enable babies to rehearse the turn-taking necessary in interactions with others. In using this phrase, he underlines the social context in which learning occurs.

Ways or modes of thinking enable us to see the role of experience in promoting learning. Piaget’s stages do not make human sense to us because they fail to take account of the many situations where we are unable to operate symbolically because we have insufficient experience. This means that children need to be able to operate physically, in images and in words.

Tools for thinking — Bruner builds on Vygotsky’s theories and supports practitioners in providing plenty of expressive media to allow children to represent ideas in a variety of ways. These allow for iconic and symbolic thought.

A spiral curriculum means that practitioners cannot afford to assume that something can be ‘delivered’ or ‘covered’ and then forgotten about. Children need time to come back to things, to see them in a number of ways and to explore and discuss.

Scaffolding learning requires adults to seek out what Bruner terms ‘incipient intentions’ and to be prepared to support children in achieving those intentions. This fits in well with aspects of EYFS where practitioners are required to work from children’s intentions. It may not work if adults are prescribing what is to be learnt.

The role of narrative in learning — as a social constructivist, much of Bruner’s work is about the way in which children make sense of the world around them. For him, storytelling is central to that process. We therefore need to offer children a broad range of stories with which they can identify and from which they can create their own stories and ideas.