

Discuss the nature-nurture debate in relation to research into cognitive development and education. (15 marks)

The nature debate suggest that behaviour is innate and predisposed by biology, whereas the nurture debate suggest that behaviour is the result of external influences in our environment, such as upbringing. The nature debate in cognitive development and education argues that behaviour stems from biological influences such as genetics. This provides a useful explanation when exploring similarities within families. This would help our understanding of the natural influences over cognitive development and could show how some children are born with more skills than others. In the Woods et al (1976) study, they wanted to see if children responded to 'tutoring' when they had a problem to solve, and to look at how this changed with different age groups. However, they also wanted to examine a 'natural' tutorial method in the hope of gaining more knowledge about natural as well as automated teaching tasks. The idea of natural ability in cognitive development was suggested by Piaget who believed that children are born with certain innate abilities. This supports the nature view. Nevertheless, most of the research in this area argues that the external influences in a child's environment such as a teacher or tutor have more impact on their education. A weakness of taking the nature view of cognitive development is the research assumes it is invariant and universal for all children. This is too rigid and does not explain why there is such variation in children's development and performance in education. The nurture debate would be a more appropriate explanation for cognitive development and differences an educational experience. This is a more holistic view as it takes into consideration the influence of upbringing and environmental factors, such as good teachers or tutors in education. In the Woods et al (1976) study, they created a task where children were asked to design a pyramid using a series of blocks and in doing so had the support of a tutor. The intervention by the tutor was either as direct assistance, verbal error prompts or straightforward verbal prompts. It was seen that the older children were more prepared to accept and act on the advice from the tutor than younger children. This shows that external influences such as the help from the tutor encouraged the children to be more successful on the task. As the older children paid more attention this supports the nurture debate as they are making more informed cognitive decisions than the younger children. This supports the research by Vygotsky (1978) on his idea about the usefulness of a more knowledgeable other (MKO). Adopting the nurture debate as a more appropriate view of cognitive development and education, results in useful practical applications. As demonstrated by Woods et al (1976), children improve their problem solving skills with the support of a tutor. The tutor should act as guidance but should not dictate the outcome in the problem solving process. Tutors are beneficial to learning and can help students manage the direction in the problem solving process, help control any frustration and demonstrate solutions when the learner can recognise them. This would help improve a child's cognitive development skills and benefit their educational experiences. This idea was also outlined by Bruner (1976) who believed that when children start to learn new concepts, they need help from teachers and other adults in the form of active support. This advice can be used to train teachers in schools and perhaps be given to parents in order to help explain how to harness the best from children in terms of cognitive development.

