"Describe and assess one theory of cognitive development."

Cognitive development (CD) refers to way in which a person's style of thinking changes with age.
Piaget argued that CD is based on the development of schemas. This refers to a psychological structure representing all of a person's knowledge of actions or objects, e.g. gripping or driving. To perform a new skill which the person has no schema they have to work from previous skills that they have. This is called assimilation, where they have pulled previous schemas together then adapted and changed them to fit their task through accommodation. For example when a person is learning to juggle a person can already grasp, throw and catch so they use the schemas that they have for these skills to perform the skill of juggling. When a person feels confident and comfortable with the task that they are performing they are said to be in a state of equilibrium.

Piaget believed that children go through 4 stages of CD; Sensori-motor (0-2yrs)- in this stage children have no object permanence. So if they were playing with a toy and it fell out of sight they would not realise it had even existed. Piaget said that the skill of object permanence came at about 9 months. The second stage of CD is the pre-operational stage (2-7yrs), at this stage language is developing but children are unable to conserve (understand that shapes can change without the mass or size having to change) or decentre (can't understand things from another persons point of view). This is also known as the theory of mind. In the concrete operational stage (7-11yrs) children have developed the theory of mind and are also able to conserve if the problem is 'concrete'/visual. The final stage is Formal operational stage (11yrs- onwards). In this stage children are able to work things out abstractly so this is the stage in which children start to be taught algebra.

The above ideas about CD were based on Piaget's own research. Most of the studies were carried out solely on his own three children. The studies were carried out in the form of clinical interviews and tasks and all the results and observation were recorded in a diary.

One strength of Piaget's theory comes in the detailed supporting evidence, which he himself provided. One of his tasks investigated object permanence. He gave a baby a toy and they played happily with it. But then he covered the toy with some cloth. Even though the baby had seen the toy hidden it failed to look for it and it appeared he didn't even remember it had been there. This suggests that ideas are underpinned by detailed empirical research, which provides a sound foundation for the theory.

A further strength is that Piaget's theory has been applied to education and has lead to improvements in the quality of teaching and learning. Discovery learning is where children learn through play and interaction. They handle and perform what they are learning so that it sticks in their mind. For example to learn how plants grow a class will be split in to thirds; one group

taking home some cress placing it on the windowsill and watering it daily. Another group takes home some cress, which they place in a cupboard and water daily and then the final group who place their cress on the windowsill but don't water. From this they will visually see the importance that water and light play in survival of plants. This is important, as they can't think abstractly. This suggests that Piaget theory has had a great impact on primary school teaching methods and he showed children don't just think like li ttle adults.

However later researchers have been critical of Piaget's methodology. He carried out his research on his three children; for starters this number is too small and means that results can't generalised. The children were born from a "genius" so it is likely that they aren't 'typical examples' of children in society. As his research was high on ecological validity it meant that it was low on reliability. This suggests that if the tasks were repeated its unlikely that the researchers could repeat them exactly as Piaget did them.

A further weakness is that more recent research has thrown doubt on the ages that Piaget suggested. For example Bower carried out a study in to object permanence where he put a mother and baby in a room with a toy. After the child had been playing happily he turned the light off. Due to infrared lights Bower could see how the child behaved and it reached out to find the toy even though it was out of sight. This suggests that we need to rethink the age of stage shifts due to up-to-date/ recent findings.

In conclusion, although Piaget's theory has some weaknesses it remains one of the key theories of CD. However in contrast to Piaget's view, Vigotsky took quite a different view. He laid much more emphasis on social interactio n and cultural factors and on interaction with adults shaping CD. Perhaps a combination of their ideas is the way forward.