

# TOPIC 3: Development

LI: Can children understand conservation in the preoperational stage?

## Starter – Retrieval Quiz

1. What word means that you can only see from your point of view?

2. Who ran the policeman doll study?

3. What did we learn from the policeman doll study?

4. What word means that children don't realise something is the same even though it may look different?

5. Look at your answers to Q1 and Q4. In which stage do children master these things according to Piaget?

# TOPIC 3: Development

LI: Can children understand conservation in the preoperational stage?

## Starter – Retrieval Quiz

1. What word means that you can only see from your point of view?	Egocentric
2. Who ran the policeman doll study?	Hughes
3. What did we learn from the policeman doll study?	That children master egocentrism earlier than Piaget thought
4. What word means that children don't realise something is the same even though it may look different?	Conservation
5. Look at your answers to Q1 and Q4. In which stage do children master these things according to Piaget?	Concrete operation stage

Exam Question:

**Outline Hughes study into egocentrism. (Method, results & conclusion). (3)**

**MODEL SHORT ANSWER**

Have a go at answering this question. 5 minutes.

Check your answer on the next page.

## Exam Question:

**Outline Hughes study into egocentrism. (Method, results & conclusion). (3)**

### **MODEL SHORT ANSWER**

The **method** was that children had to place a doll in a location where two policeman dolls couldn't see it. The **results** were that 90% of children between the ages of 3-5 were able to place the doll where the police dolls couldn't see it. The **conclusion** is that children between 3-5 can view things from someone else's perspective, which is younger than Piaget thought.

# TOPIC 3: Development

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## Some Thinking Points First

What does conservation mean?

What stage is a child supposed to lack an understanding of conservation?

How could you test if a child understands conservation? How did Piaget test it?

Watch this video again. Focus on the experiment with the coins. Notice how when the adult spreads them out, the children fail to conserve the information and think that one row has more coins! <https://www.youtube.com/watch?v=YtLEWVu815o>

# Learning Intentions

4/5 (All) – Outline a study into conservation.

6/7 (Most) – Compare research into conservation and Piaget's theory of conservation.

8/9 (Some) – Evaluate and apply research into conservation.

Low

High

What is your initial confidence towards the LIs?

# Recap – Piaget and Conservation

Conservation – the ability to understand that quantity stays the same even when the appearance changes.

Piaget said that children in the preoperational stage (2-7) lack understanding of conservation



Time to test Piaget's theory on  
conservation...

So if you just bear with me, I'll tell you about  
the 'Naughty Teddy' study...





# McGarrigle & Donaldson (1974)

## Aim

To see if children understood conservation if the change was accidental.

## Method

80 children (4-6) from Edinburgh were shown two identical rows of counters and asked 'which row has more?'

Then, an adult or a 'naughty teddy' appeared and accidentally messed up one row of counters to make the row look longer. The child was again asked 'which row has more?'

## Results

62% of children (4-6) were able to identify that the rows were the same when the teddy messed it up.

(Only 16% of children could do this in Piaget's original test when an adult messed it up).

## Conclusion

Children younger than 7 can conserve information if the changes are accidental.

# Understanding Naughty Teddy (1974)

- 1) Draw a picture of a teddy and annotate your picture with the key method points and results.
- 2) Why do you think that these children were able to complete this task but not the original task by Piaget and adults?
- 3) How would you start to evaluate this study?



## Challenge

What do the Policeman Doll and Naughty Teddy study suggest about Piaget's Theory of Cognitive Development? (3)

# Answers

- 1) Send me a photo of your work if you want to share it!
- 2) This task is much more child-friendly than anything that Piaget did in his original research. This means that the children are finding it easier to understand what is going on. This means that children can conserve information younger than Piaget thought if it is done in a child-friendly way.

## Challenge

They both suggest that Piaget underestimated the ability of young children. Children can conserve information and see from other people's points of view much younger than Piaget thought.



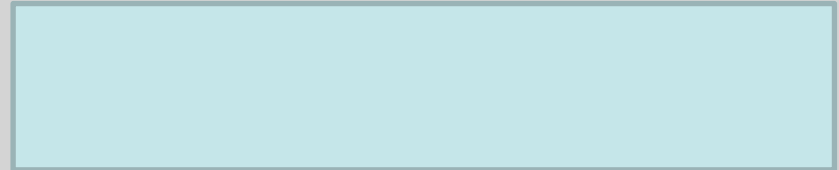
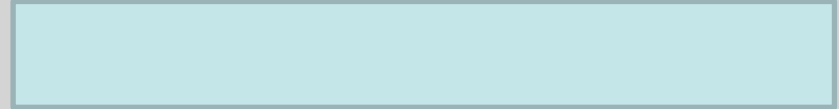
# Evaluation

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Draw your evaluation grid and first think of how you would evaluate the study.

Then look at the answers on the next page.

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# Evaluation

+

The task was more child-friendly than Piaget's original ideas and this might explain why children could understand it. *If an adult changed something, the child might have thought that something must have been different.*

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You can't generalise the results as every child came from the same school in Scotland. Therefore, perhaps their education was different to everyone else.

A high number of children still got the study wrong meaning not all children can do it.

The task is still very unnatural as it is not normal to mix things up and count them again. Low ecological validity and unnatural behaviour.

# Exam Questions

1. Explain how 5-year-old children and 7-year-old children understand conservation differently according to Piaget. Give an example. (3)
2. Explain what the Naughty Teddy study shows about the development of conservation. (3)
3. Describe and evaluate one study into conservation. In your answer, include the method used, the results obtained and conclusion drawn. (9)

Challenge – Why do you think it is sometimes frowned upon to do research on young children?  
How else could you test conservation in a child-friendly way?

# Learning Intentions

4/5 (All) – Outline a study into conservation.

6/7 (Most) – Compare research into conservation and Piaget's theory of conservation.

8/9 (Some) – Evaluate and apply research into conservation.

Low

High

What is your new confidence towards the LIs?

# TOPIC 3: Development

LI: Can children understand conservation before the preoperational stage?

## Consolidation

1. What is meant by conservation?
2. How did Piaget test conservation? How is this different to the Naughty Teddy study?
3. (Recap question) What does research into egocentrism suggest about Piaget's theory?
4. What was wrong with the samples used in the egocentrism and conservation studies that tested Piaget's theory?



# Top Trumps – We will do these when we return!

Create two top trumps for the two studies that have been used to test Piaget's original theory.

- 1) Policeman doll study
- 2) Naughty teddy study



Summarise the method and results in as few words as you can.

E.g. Children (3-5) had to place a doll where the policeman dolls couldn't see it. 90% of them could do this suggesting...

**Challenge – Evaluate Piaget's original theory. (How could you use our recent learning to help you evaluate?)**