

# Piaget's theory: observation and reflection



**ASSIGN  
BUSTER**

## Piagetian Task

For this task, I used blue play-dough and shaped it into 2 balls of the same size. I conducted this task with a boy who is 7 years old and in first grade. I asked him if he would help me with something and he said, " Sure", but seemed nervous. I presented him with the two balls of play-dough and he got excited, as if we were about to do something fun.

I began by asking him if the two balls of play dough were the same size. He looked at them closely and then picked up each ball before stating that they were not the same size. I asked him to make them the same size and let him know he could use the extra play-dough I had set aside if needed. He added the extra play-dough to one of the balls, melding it into the ball, and then looked at both balls again. He took some of the dough from the now larger ball and added it to the other, looked at the balls again, then added a little more, making sure both balls were smooth and round again. This entire time, he was very focused on what he was doing. Once he finished, one of the balls was clearly a still a little larger than the other, but he was satisfied that they were now the same. To be fair, the difference was very small.

I then smashed the larger ball down so that it was flat and round. I asked him if one of them had more play-dough than the other or if they had the same amount. He replied with, " Of course they're the same!", with what seemed to be a bit of an exasperated tone. I asked him to tell me how he knew they had the same amount. He said that he knew this because he himself had made sure each ball had the same amount before. He kind of rolled his eyes

and let me know that just because one was squished down doesn't change the amount of play-dough it had.

I was quite impressed with his abilities in response to my questions during this task. I don't know what to make of the fact that he felt the balls were not equal to begin with. However, during the process of adding and removing play-dough from the balls to make them even, he exhibited great focus and concentration. Holding the balls, eyeing one and then the other, he made changes until he felt satisfied that they were the same. I had expected just a quick answer either way, so this was surprising to me.

I believe that this did confirm Piaget's observations, at least in regard to the characteristics of the Concrete Operations stage, which this 7 year old boy clearly fell into. After he finished modifying the balls until he saw them as being equal, he recognized that nothing had changed when I smashed one of them down. Seeing one large round ball, and one seemingly smaller flat disc did not cause him to hesitate when asked if they contained the same amount of play-dough. If anything, he seemed to think it was absurd to even ask that question.

I happen to know that this particular boy loves to build things. His favorite thing is taking boxes of different sizes and cutting them into various shapes to make whatever he's imagining at the time. houses, " furniture", rockets, etc. His parents have always made sure that he has plenty of random material he can use for his building activities, including a " mud pit" in the back yard, similar to a small sandbox. I believe that his prior background in utilizing a variety of materials helped to enable him in this task as well. He

has learned, on his own, how things fit together and how to form materials like mud into various shapes for different uses. While I don't believe he spent time thinking about the way his brain and eyes processed the information in front of him, he did spend time thinking about the task at hand through the lens of the information processes he had gained through prior experience. He was able to evaluate the balls, and then spend time modifying them to complete the task of making them be the same size. He then had no doubts about the different shapes containing the same amount of play-dough and reasoned that since he had made them the same, they continued to be the same no matter what shape they took on. I believe that all of these factors contributed to his reasoning and performance in carrying out this task.