

“Creativity & Ownership” Interpretation Guide

HOW CHILDREN VALUE ‘IDEAS’ AND ‘WORK’ IN THE CREATIVE PROCESS

Background:

Throughout life, and across disciplines, people want credit for their own creations, concepts and ideas, and giving credit to people who deserve it is an important value in our society. A person’s own ideas, and the creations that come from an idea hold a lot of value for that person. However, the labor/work that a person expends to execute someone else’s ideas is also of value. Ideas and labor then must come together in order to create a final product. This then raises the question of what holds more value – ideas or labor? Since neither ideas nor labor are tangible objects and may not be readily apparent in a final creation, the concept of assigning value to either may be difficult for young children. A study conducted by Yale University investigated at what age an understanding of the difference between the value of ideas and the value of work emerges, and whether children value one over the other. The activities in this guide are based on one experiment that explored children’s conceptions of ownership in relation to the value children place on own their ideas or their own labor.



Researchers recruited 4 year olds and 6 year olds to participate in the study, which consisted of three experiments. In **Experiment One**, children were asked to create two pictures with the researcher. One of the pictures they were asked to make contained the researcher’s ideas but the child’s labor (i.e. the researcher would tell the child where to glue the shapes on the paper), and the other picture they were asked to make contained the child’s ideas but the researcher’s labor (i.e. the child would tell the researcher where to glue shapes). The children were then asked which picture they would like to take home in order to determine whether they valued the picture with their ideas or the picture with their labor more. In **Experiment Two**, researchers deceived the participants into thinking the picture with their idea was actually the one containing their labor (and vice versa). Again, the children were then asked which picture they would like to take home. In **Experiment Three**, children were shown a piece of artwork and then asked who should own the piece of art: the person who had the idea for it or the person who made it. The goal of this last experiment was to determine whether children still value ideas over labor when considering someone else’s ideas and labor.

Researchers Found:

- In Experiment One: on average, both 4 year olds and 6 year olds more often chose the picture that represented their idea.
- In Experiment Two: 6 year olds more consistently chose the picture that they were *told* contained their ideas, despite the fact that this was not their original picture. This indicated to the researchers that the physical properties of the pictures didn’t matter to the 6 year olds;

rather, it was the concept of the *idea* that they were placing value on. However, the 4 year olds more consistently chose their original picture from Experiment One, despite being told it contained their labor. This indicated to the researchers that 4 year olds may have made their choice due to the physical properties of the picture rather than because they valued their ideas *or* their labor.

- In Experiment Three: almost all of the 6 year olds chose the person who had the idea for the picture as the owner of the picture; the 4 year olds did not show any significant pattern of valuing ideas *or* labor more than the other in this experiment.

These findings indicate that young children value their ideas over their work when making decisions about ownership.

Why is this important?

The concept of placing value on one's idea or labor is important in our society – a person's ideas and labor may bring them not only praise, but even social, legal, or monetary recognition.

Previous research has shown that adults place high value on their ideas. For example, people may be credited for their ideas or findings in published articles, and there are even copyright laws that exist that can make an idea solely owned by that person or group. On the other hand, many people also feel very strongly about their labor. Ownership is often assigned based on the person that put labor into something, and external value may be placed on a person's labor.

When both ideas and labor are combined to contribute to a creation, the question may arise of where to give credit. Because these concepts hold such consequence, it is important to understand how children develop a sense of value for ideas and labor, both for themselves and when considering the ideas and labor of others.

Method:

Recruiting Methods:

1. Introduce yourself to parents and explain that you are demonstrating a study originally conducted by Yale University that looked at how children value their own ideas and labor when creating a piece of art.
2. Ask children if they would like to make a picture with you using some of the shapes. Bring over some of the colored shapes to increase their interest.

Important Modifications:

- For the museum activity, we focused on **Experiment One** because it conveys the overall concept of the research findings; this also keeps the activity short. During piloting we found visitors of all ages enjoyed participating.
- The original study used a variety of art supplies; to keep the maintenance of art supplies simple, we only use colored construction paper shapes and glue (we generally use glue sticks; it may be easier for younger children to use glue dots).

Materials (for each participant):

- 2 pieces of plain white paper (we cut 8.5 x11 sheets in half)
- 2 identical sets of colored shapes (a “set” might be: 1 yellow triangle, 1 purple circle, 1 blue square, 1 red star, 1 green rectangle)
- Glue stick (it may be helpful to demonstrate proper glue stick use to younger children)

Activity Instructions (the “study method”):

1. Ask children, “Would you like to make a picture using some of these shapes with me?” and then show them the two sheets of paper and the sets of shapes.
2. Explain to the child, “Today we will be making two pictures. For the first picture, I will tell you where to put the shapes. For the second picture, you tell me where to put the shapes and you can tell me to put them wherever you would like. Does that sound okay?”
3. Hand a set of shapes to the child and say, “Now I will point to where I want you to put these shapes”. When asking the child to put the shapes on the paper, make sure to identify the color and the shape and very clearly point and/or say where you want the shape placed. (e.g. Can you put the yellow triangle in the middle? Can you put the blue square above the yellow triangle?). Allow the child to glue the shapes onto the paper.
4. Say to the child, “Now you can tell me where to put these shapes on the paper. Point to where you want me to put each shape.” Listen to the child’s instructions and place/glue the shapes according to their directions.
5. Once the two pictures are created, show both pictures and ask the child which one they would want to take home. Then ask them why they chose that picture.

Activity Tips:

Keeping Kids Interested:

- Sometimes children may get confused with where you are asking them to place the shapes. Try to make sure you are very clear with the directions, and point to the spot on the paper where you want them to place the shape.
- Ask the child which part of this activity they enjoyed more; the part where they placed the shapes down, or the part when they were giving directions.

Help Parents Observe:

- Which picture did your child choose?
- Do you think your child invested more time creating one picture over the other?
- What was your child’s explanation as to why they chose one picture to take home?

Talking with Parents:

The ability to place value on one’s own original ideas is an important concept that children are able to express at an early age. This study examined how children value their own ideas versus their own labor when creating artwork. In adulthood, ideas are very important, and unique or original ideas are considered very valuable. This study found that children as young as six years

think similarly to adults, and believe that the credit for a creation should go to the person whose idea is represented.

Results of the Original Study:

In Experiment One, both 4 and 6 year olds most often chose the picture that contained their own ideas (see Figure 1). The data supports the hypothesis that children value ideas over labor.

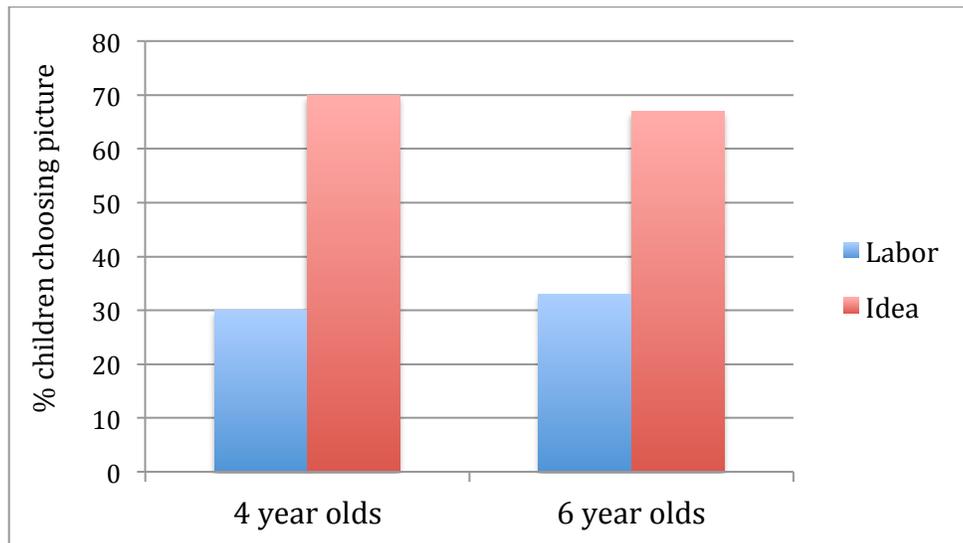


Figure 1: Results of Experiment 1

In Experiment Two, researchers set out to determine the factors that may have caused children to select the picture with their idea (e.g., was it because they placed value on the idea, or just because they liked the physical properties of that picture?). To do this, they first switched the pictures children created in Experiment One: researchers told children that the picture with their labor was actually the picture with their idea and vice versa. Not all children were deceived by the switch – these children were excluded from the data analysis. For the children who were successfully deceived, researchers found that 6 year olds chose the picture they were *told* contained their ideas, though it *actually* contained their labor. However, the 4 year olds still chose the original picture, despite being told it contained their labor (see Figure 2). Because 6 year olds chose the picture that contained their ideas (or perceived to contain their ideas) in both Experiment One and Two, regardless of what the actual picture was, researchers believe that the 6 year olds were finding value in the idea itself. Conversely, because the 4 year olds chose their original picture in both Experiment One and Two regardless of whether it was attributed to their ideas or their (perceived) labor, the researchers believed they did not value either ideas or labor when making their decision of what picture to choose - rather, they chose the picture based off its physical appearance.

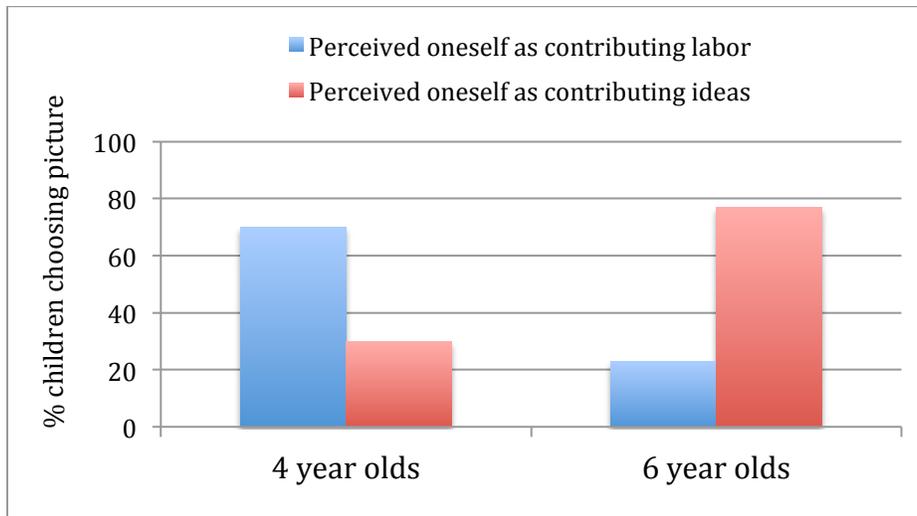


Figure 2: Results of Experiment 2

In Experiment Three, researchers found that when showing children a painting created by fictional characters, six year olds believed the person who had the idea for the painting should get to take it home over the person who put the labor into the painting. Four year olds did not show any preference for ideas or for labor when asked who should take the painting home (see Figure 3).

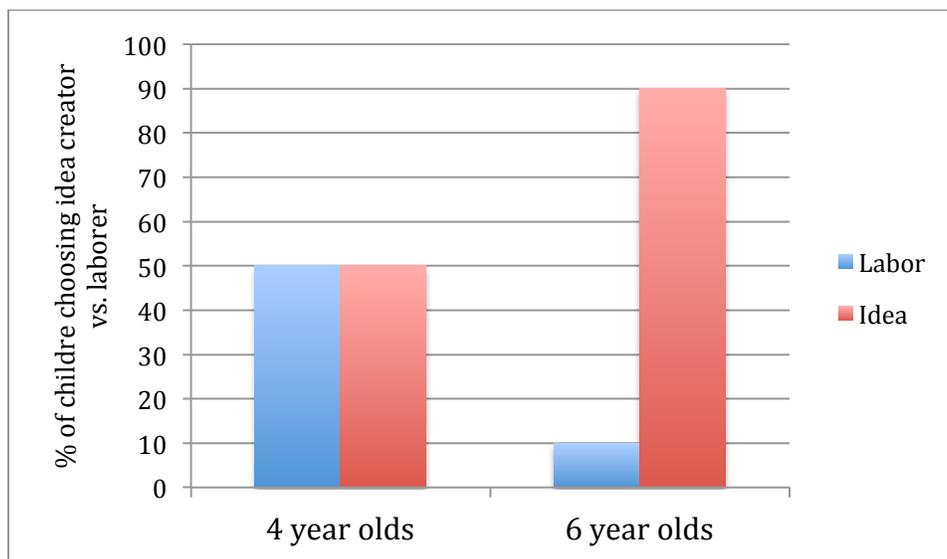


Figure 3: Results of Experiment 3

Together, the three experiments show that by age six children appear to value ideas over labor. Children younger than six years do not appear to place a higher value on either ideas *or* labor. Because of this, the researchers believe that concepts of ownership related to the value of ideas and labor develop later in childhood.

Questions Parents May Ask:

What age does my child have to be in order to participate?

The original study looked at 4 and 6 year olds; however, since this is just a demonstration of the research study, children of any age are welcome to participate.

What if my child did not seem to value his/her ideas?

Every child is unique and there is nothing wrong with choosing the picture that contains their labor over their ideas. There may be a lot of other things that factor into their choice (e.g. aesthetics), which is why in the original study there were several other experiments to rule out those other factors. We do not do the other experiments here in the Discovery Center, so there could still be other factors coming into play.

Did my child “pass”?

There is no right or wrong answer for this study. This activity was made to take a closer look into how children value their ideas versus their labor, there is no way to pass or fail this study.

Where can I learn more about this?

A copy of the original research study may be found in the interpretation box. The study may also be found online, at <https://depts.washington.edu/uwkids/Li.Shaw.Olson.2013.pdf>

Activities for Parents to Try at the Museum:

Use a set of blocks. Try taking turns building something with your child. Let them tell you where to put the blocks, then tell them where to place them. Which structure does s/he prefer?

Challenge your child to create something with the natural materials (e.g. rocks, shells, bones, feathers) you may find in the museum and ask them about their creation. Where did they get their idea? Why did they choose those materials? What was their favorite part about it? Were any parts of their creation challenging to make?

Activities for Parents to Try at Home:

Create pictures with your child/children at home. Take turns creating pictures with one person's labor and another person's ideas. Ask your child questions about who the pictures should belong to and why.

Read a picture book with your child. Ask them if the person who wrote the story or the person who made the illustrations should get credit for making the book. Ask why s/he thinks this.

Sources and Resources:

Li, V., Shaw, A., & Olson, K. R. (2013). Ideas versus labor: What do children value in artistic creation? *Cognition*, 127(1), 38–45.

Acknowledgements:

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