Learning through verbalization (1): Understanding the concept of probability

What is the effect of immediate verbalization (self-explanation) on abstraction of hands-on experiences?

Beginning of the unit: Original question

Class 1 (n=64)
Teacher categorized the student answers into three types of summaries below, and after students’ vote explained why alternative III was right.

I. “You get the pip ONE once per six rolls.”
II. “The pip ONE occurs 1/6 of the time because it is one of six equally possible events.”
III. “If you roll the die many times, the ratio of getting the pip ONE is 1/6 in average.”

Class 2 (n=39)
Teacher picked out five students’ answers as five alternatives (all like I or II), and after students’ vote went on to the next activity without any explanation.

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