

Recognize the Superiority of Games Over Worksheets

Kamii, C. (2000). *Young Children Invent Arithmetic* (2nd ed.): New York: Teachers College Press.

It is necessary for children to repeat adding the same numbers if they are to remember sums and build a network of numerical relationships (refer to Figure 5.2). Repetition in games is much better than with worksheets for many reasons. The fact that children are intrinsically motivated in games was discussed earlier in this chapter. Seven other reasons are given below.

First, feedback is immediate in games because children supervise each other. By contrast, worksheets are usually returned the next day, and children cannot remember and do not care about what they did yesterday.

Second, when worksheets are used; truth is decided by the teacher, and children get the message that truth can come only from the teacher. In a game, by contrast, the players decide whether an answer is correct. If one child says that $2 + 2$ is more than $2 + 3$, for example, children try to convince each other and arrive at truth by themselves. In logico-mathematical knowledge, children are bound to arrive at truth if they argue long enough because there is absolutely nothing arbitrary in logico-mathematical knowledge.

Third, games can be played at many levels in a variety of ways, but worksheets encourage children to crank answers out mechanically. In playing Put and Take (see Chapter 11), for example, some children can make 6 only with 6 chips that are each worth one point. Others say that they can make 6 either with 3 2-point chips or with 1 5-point chip and a 1-point chip.

Fourth, having to write answers interferes with the possibility of remembering sums. Children are much more likely to remember sums when they are free to think "2, 3, and 5," for example, without stopping to write "5." Some first graders have to think to make a "5" look different from an "S."

Fifth, children are more likely in a game to construct a network of numerical relationships (refer to Figure 5.2). If a player rolls a 3 and a 3, and the next roll is a 3 and a 4, for example, there is a high probability that the answer will be deduced from $3 + 3 = 6$. When children fill out worksheets, by contrast, they approach each problem mechanically as a separate and independent problem.

Sixth, children choose the specific games they want to play, but they can seldom choose the worksheets they get. If children can choose an activity that appeals to them, they are likely to work harder. In life outside school, adults constantly make choices, and children need to learn to make wise choices within limits.

Our seventh and last point is that children do not develop sociomorally by sitting alone filling out worksheets. They are well behaved when they are filling out worksheets, but working alone precludes the possibility of sociomoral development. In games, by contrast, children have to interact with others, make decisions together, and learn to resolve conflicts. As stated in Chapter 4, sociomoral education takes place every minute of the school, whether or educators are aware of it. By giving countless worksheets, we unwittingly reinforce children's heteronomy. Thereby, preventing the development of their autonomy.