Guided play can provide children with conceptual knowledge and experimentation skills.\(^1\)\(^2\)

Prior to the age of 8, most children do not correctly balance asymmetrical objects.\(^3\)

In prior research, 4- and 5-year-olds did not learn how to balance objects from exploratory play.\(^4\)

Six- and 7-year-old with incorrect theories about how to balance objects did learn from exploratory play.\(^4\)

 retirements

Guided Play

Exploratory Play

Pre-test

Post-test

Test Phase Explanation Scores (Total of 8)

2 Answers referencing distance from the middle as the variable affecting balance.

1 Answers only referencing weight as the variable affecting balance.

0 Answers referencing an irrelevant variable (e.g. colour), or irrelevant explanations (e.g. I like it there).

Mean Explanations by Test Phase and Condition (SE)

Mean Explanation Score (Out of 8)

Exploratory Play

Guided Play

Pretest

Posttest

A mixed ANOVA showed a main effect of test phase \((p = .003)\) and significant interaction between test phase and condition \((p = .02)\).

Children in the Guided Play Condition scored higher at post-test than at pre-test \((p < .001)\). In contrast, children in the Exploratory Play condition showed no improvement from pre- to post-test \((p = .57)\).