abacus. Afterwards, the children were told these three ways; they did a
the children were given practice, using either the wooden or the simulated
abacus. From a virtual, simulated, Chinese abacus. Following their
treatment randomly assigned to learn either from a physical, wooden Chinese
SD = 9.5, or from 32 girls and 28 were boys. The children were
We worked with 60 third-grade children (mean age = 8.95 years,

Method

Simulation of a Chinese abacus.

specifically, we hypothesized that children would learn to use the Chinese
according to the environmental context of those actions. This study examined
directly related to the consequences of those actions. The study examined
the children, computer, environment, in which the learner's actions are
the computer, children, environment, in which the learner's actions are
experience introduces the computer, physical environment, what the
experience introduces the computer, physical environment, what the
learner is an integral part, and the mediated learning experience, which the
learner is an integral part, and the mediated learning experience, which the
regardless of the computer of the experience, the mediated learning
regardless of the computer of the experience, the mediated learning
on-line courses. Any educational experience that is mediated by a video
of educational television, educational video, educational software, and
increasingly, educational experiences are being mediated through the use
increasingly, educational experiences are being mediated through the use
environmental consequences with their learning occurs when physical organisms
environmental consequences with their learning occurs when physical organisms
probably the most important finding from the ecological

Columbia University, USA
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Robin Pagnan, & John Black

Effects of Learning From Interaction With Physical or

† 2001 Lawrence Erlbaum Associates, Inc.
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A new paradigm? (1996) Learning through direct interaction. Children who learn and remember the material more effectively (72% vs. 38%) perform better on the physical version of the game. The use of physical objects and gestures enhances memory and understanding more than traditional methods. The integration of physical and digital elements provides a more engaging and effective learning experience.

Results

The data supported the hypothesis that children learn better from physical interactions with physical objects.

Discussion

The data supported the hypothesis that children learn better from physical interactions with physical objects.

References

The table below summarizes the experimental results:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Memory Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td>72%</td>
</tr>
<tr>
<td>Digital</td>
<td>38%</td>
</tr>
</tbody>
</table>

The results indicate that physical interactions with physical objects significantly improve memory performance compared to digital interactions.