Games teach students 21st century life skills. Teachers whose students primarily play together were more likely to report improvements in student social skills than teachers whose students play alone.¹

Teachers whose students use digital game scenarios will outperform students in non-game scenarios in learning outcomes.³

Specifically, games help students learn how to work together. Teachers whose students play together, instead of alone, have found that students using digital game scenarios will outperform students in non-game scenarios in learning outcomes.³

**COMMON BARRIERS TO GAMIFICATION**

At your school, what are the greatest barriers game-using teachers face in using digital games in the classroom?¹

- **Insufficient Time**
- **Cost**
- **Lack of Resources**
- **Lack of Tech Resources**
- **Lack of Game Resources**
- **Lack of Teacher Resources**

**BUILDING 21ST CENTURY SKILLS WITH DIGITAL GAMES**

Schools around the world are implementing gamification to help learners develop the life skills they need to be successful.

Gamification: the application of game elements to learning.

4 **TIPS FOR IMPLEMENTING GAMIFICATION**

1. Think collaboratively: The positive effects of game scenarios are strongest when students play together, instead of alone. Organize activities in pairs, groups, or with the whole class.
2. Set up instruction: Students learn best when they're given clear instruction, even when they're playing games.
3. Use groups to encourage learning: Students are more engaged when learning together. Use or not use technology to your advantage.

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**IMPACT OF GAMES USED FOR EDUCATION**

**57 STUDIES** have found that students using digital game scenarios will outperform students in non-game scenarios in learning outcomes.³

**46% 44% 35% 34% 31%**

**BUILDING 21ST CENTURY 4Cs Impact**

<table>
<thead>
<tr>
<th><strong>Better for 21st Century Life Skill Development</strong></th>
<th><strong>Worse for 21st Century Life Skill Development</strong></th>
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<td>Integrated Learning Environment</td>
<td>Minimal Use of and/or Distracting Environment</td>
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<td>immersed, long form</td>
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<td><strong>Multiplayer</strong></td>
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<td><strong>Prosocial Content</strong></td>
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<td><strong>Assessment</strong></td>
<td><strong>Minimally Use of and/or Distracting Environment</strong></td>
</tr>
</tbody>
</table>

**21ST CENTURY SKILLS**

- **Calibration**
- **Communication**
- **Creativity**
- **Critical Thinking**

**57 STUDIES** have found that students using digital game scenarios will outperform students in non-game scenarios in learning outcomes.³

**62% of game savvy teachers agree games foster collaboration**

**Games improve student performance.**

**79% of teachers** and **83% of parents** agree games foster collaboration.

**46% 44% 35% 34% 31%**

**57 STUDIES** have found that students using digital game scenarios will outperform students in non-game scenarios in learning outcomes.³

**THREE SOURCES**

2. Growing Up Digital: Adults Rate the Educational Potential of New Media and 21st Century Skills May 8, 2008, Common Sense Media & the Joan Ganz Cooney Center; Conducted by Insight Research