AI-Enhanced GBL

K12 Students As Game-Based Learning Designers

Game creation has traditionally been reserved for those with advanced technical skills, but AI has changed this landscape dramatically. Students can now design educational games that teach their peers, strengthening their own understanding while creating engaging learning experiences for others. While specialized tools like Rosebud AI offer the most streamlined experience with features specifically designed for educational game creation, students can also use familiar AI chatbots like ChatGPT to assist with game design, story development, and basic mechanics. This approach not only deepens subject mastery through the act of teaching others but also develops critical thinking, creativity, and digital literacy skills – all while maintaining high engagement through authentic purpose and audience.

Implementation Process for Students

1) Design Phase

- Use AI for brainstorming game concepts
- Identify key concepts game should teach

2) Prototype & Test

- Create quick mockups on paper when possible
- Test with other students

3) Build & Share

- Use AI tools for content generation and coding
- Document and distribute

Tips for Success

- **Model first:** Create several sample games yourself in different genres
- **Build scaffolds:** Provide templates and clear checkpoints, borrow ideas from PBL
- **Cross-connect:** Link game creation to existing curriculum objectives and other subjects
- **Celebrate progress:** Plan showcase opportunities for student work

Essential Considerations

1. How might creating games deepen student understanding compared to traditional assignments?
2. What subject in your curriculum could benefit most from student-created learning games?
3. How could you integrate game design projects with other classroom activities or subjects?
4. What support would your students need to succeed with this approach?