

Pedagogical Innovation via Instructional Technology: Palestinian Teachers' Mod Video Games for Instruction

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Innovation Via Instructional Technology: Video Games as Learning Activities



- Back-story and story line (plot)
- Game mechanics
- Fantasy
- Rules/goals
- Challenge
- Mystery
- Control

How Educators Could Integrate Video Games



- Collaborating
- Adopting
- Writing
- Creating
- **Adapting**

The Game Maker Workshop



- 3 days long workshop
- Open to Technology Education Program students
- A grant from the Palestinian Faculty Development PFDP program was received
- 20 students participated
- Create serious video games using *Neverwinter Nights 2* toolset

The workshop



- Group discussion (***60 minutes***)
- Initial trial of *Neverwinter Nights 2* game (***60 minutes***)
- Initial trial of the *Neverwinter Nights 2* toolset (***10 hours***)
- Plot planning (***4 hours***)
- Game authoring using *Neverwinter Nights 2* toolset (***4-6 hours***)

Workshop Results: Quantitative Data



Two rubrics were used to collect the quantitative data

- The students average score on the Educational Games Rubric (70/100).
- The students average score on the GMNP model rubric= (65/100)

Workshop Results: Quantitative Data



- The correlation between the time the participants usually expend playing video games per week and their performance on the educational games rubric was significant and high with Pearson correlation = .93 at $\alpha=.05$

Workshop Results: Qualitative Data



At the end of the workshop the participants answered open ended questions

- 90% of the participants believe that Palestinian teachers are able to integrate this technology in their classroom activities.
- They see receiving adequate technical support and training is critical in serious games adoption at the classroom level.

Workshop Results Qualitative Data



- Most of the participants (70%) believe that teachers must be video games players to adopt this technology effectively.
- Feelings about the toolset were positive overall. All of the participants found the toolset easy to use once they became familiar with it.

Workshop Results Qualitative Data



- (80%) of the participants see video games suitable to teach their educational subject
- Feelings about the toolset were positive overall. All of the participants found the toolset easy to use once they became familiar with it.

Discussion



- The strong motivational effect this workshop had on the students who took part.
- The Game Maker study answered some open questions about the feasibility of computer game authoring for teachers
- More research is required to identify how the game-making process could be integrated within the Palestinian curriculum in a classroom context

Neverwinter Nights Toolset



The screenshot shows the Obsidian Neverwinter Nights 2 Toolset interface. The main window displays a 3D environment with a green field, a brown barn, and several trees. The interface includes a menu bar (File, Edit, View, Plugins, Help), a toolbar with various tools like 'Go to Start', 'Show North', and 'Rotate Object', and several panels:

- Areas:** Lists 'area1' and 'area2'.
- Area Contents:** Lists categories like Items, Creatures, Doors, Stores, Placeables, Triggers, Encounters, Sounds, Waypoints, Static Cameras, Lights, Trees, Placed Effects, and Environment Objects.
- area2 Properties:** Shows options like 'None', 'Overwrite', 'Merge', 'Pristine', and 'Preview'. It also has tabs for 'Properties', 'Inventory', and 'Store'.
- Blueprints:** Lists various object types such as Items, Creatures, Doors, Stores, Placeables, Triggers, Encounters, Sounds, Waypoints, Static Cameras, Lights, Trees, Placed Effects, and Environment Objects. It includes a search filter and radio buttons for 'Name', 'Tag', and 'Resref'.
- Verify:** A panel at the bottom with 'Save...' and 'Clear' buttons.

The Windows taskbar at the bottom shows the Start button, Internet Explorer, and other applications. The system tray on the right displays the time as 7:55 PM on 6/8/2011.

Serious Game Demo



The End