

# Games in School ??!!

by

Mary Hammontree

Action Research

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## **Games in School ???!**

Games in schools! That phrase generally seems to be followed by exclamations!! ! There is a technology revolution happening. If we consider the new technologies in our schools, from computers to Internet to cell phones to personal digital assistants to Smartboards and iPods, we find that most of these new technologies are no older than most of our students. But the information, communication and utilities they represent can be matched to tried and true methods of teaching and learning. Games are no exception. The difference with games in libraries and classrooms is that with the introduction of the technology aspect, critics may find reasons to ban them based on security, safety or finances.

Skeptics will also note that time for teaching and learning is vital and limited in the school day. The optimists and the innovators, however, will point out that before students learn, first they must be engaged. They must be interested. Teaching should match learning styles. Teaching methods should also match learning standards for the most benefit to students. We should also remember that lifelong learning should be fun. That it may produce tangential learning is one of the additional benefits. Did you know that gaming is now being studied and taught at the academic level? At Syracuse University, IST 600 *Gaming in Libraries* is being taught this June via YouTube. (Nicholson, Free) This surely shows the potential of pursuing such endeavors, and the necessity of considering games as a curriculum tool.

Collaboration between teacher-librarians and classroom teachers is well documented and many studies link results that show broad ranging benefits which carry over into the total school performance. (Dzikowski, *Facts*) In support of games in public and school libraries, many aficionados and supporters are joined by librarians and other educators who are stepping forward with observations such as:

“Video games...teach important skills like spelling, math, pattern recognition, and more.” (Czarnecki)

“The complexity of modern games prepares young people for their futures. (Games, 59)

“If you’re interested, then you pursue literacy...Once the interest is there, the academics follow” (Games, 59)

“Essentially, educational games are designed to teach a topic, reinforce skills, or promote critical thinking and problem solving. (Koester, 5))

“In the first-ever national survey of American teens and gaming, the Pew Internet & American Life Project last year (2008) found that 97 percent of kids between the ages of 12 and 17 reported playing some sort of digital games, with half of them playing “yesterday.” (Koester, 5) This does not mean that games are new to libraries or classrooms. A San Francisco library had an established chess room as early as 1855. (Nicholson, 3) Surely, we can all recall our own experiences with role-playing in elementary school classrooms. Recess in colonial times elicits visions of hoops and crack-the-whip games. Local schools have begun using the *Wii Fit and Wii Sports* in physical education classes. (Nabinger, *Game*) Interested folks should check out the many projects receiving grants on the School Library System web page. (SLS, Web)

Often the term “gaming” may mean board games or card games, but more and more, the games are found online or in a school’s Intranet of downloaded programs. My focus this year was an effort to introduce a number of Nintendo Wii games to our high school program. Some of the benefits we hoped to encounter included aspects such as the following: “helping student connect and build social skills, working as part of a team, negotiating....explore a host of life skills not inherent in the curriculum....micro-managing resources and options, actively re-evaluating, re-prioritizing and re-adjusting goals....determining acceptable losses....employing analytical and critical skills to more authentic social experiences.” (Gaming).

The impetus for this project came from our local BOCES School Library System which purchased and allowed a number of schools to pilot the use of the Nintendo Wii system and programs such as *Wii Sports*; *Wii Fit* (for PE, adaptive PE, Health); *Trauma Center: New Blood*; (for science, Health, Bio-med) and *Lego Indiana Jones* and *BoomBlox* (for physics simulation) and *Blast Works* (for Technology/CAD.) All of these programs have been tested and matched to NY State Learning Standards and the American Association of School Librarians Standards for the 21<sup>st</sup> Century Learner. (Dzikowski, *You*)

The Marcellus High School part in this project resulted in a small “game testing” area in the side room of the library, and the Nintendo *Wii* console and gaming programs available to faculty and staff on a TV cart which was taken to the nurse’s office for a week, and set up in several teachers’ classrooms. The biggest use turned out to be in the library during student study hall, lunch or after school times. We had the students sign in, use the various programs and fill out one of two forms: a *Recommendation Sheet* or a *Feedback Sheet*. Teacher and student preferences were quickly made, but we required the volunteer students to “test” all the available programs on different days. The library staff observed a number of trends. One was that, when left to discover or share the Wii availability, the guys outnumbered the girls by a good margin. When the nurse was promoting the *Wii Fit*, the girls were the majority of users. Both genders were equally good at learning the procedures and tricks to completing a task. Both liked the sharing of hints and games and strategies. Both brought friends in to share the fun. Collaboration and goal-setting and strategy-sharing were all noticeable, even when only one or two players were actually actively engaged.

Known games, such as the sports simulations, were the highest requested; however, the *Trauma Center* (operating in an emergency room simulation) was a surprising hit with many of the volunteer users. When the programs were more juvenile, often the high school students did not want to continue,

unless they discovered the more challenging parts of the process. Laughter was a noticeable result in all the tests that students did.

As a pilot project leader, I was asked to present the Wii system and demonstrate it to other teacher-librarians during a School Library System training day. It should be noted that these adults, myself included, had a much more difficult time getting used to the concepts of the specific programs, and were less likely to take risks and try new things. The students, who grew up using technologies of all sorts, were much quicker to see the possibilities, the expectations, and the options and to proceed on to using the games. We older “gamers” did laugh and learn just as much, however. You don’t have to be a “nerd,” as last summer’s Newsweek article stated. (Croal, p. 66)

Would I recommend the use of the Wii system in an educational setting? Yes and No. “Yes,” because it does add a certain newness and curiosity, as well as current technology to the classroom curriculum. “No,” because, unless it is targeted to a specific learning standard, it has the possibility to be just another “toy” or “tool,” which will require that teachers learn yet another thing to add to their repertoire without significantly adding a great learning opportunity.

Would I try it again? Definitely yes, I would. There is so much potential there, and once the high school teachers, and the nurse, who chose to participate found the time to use the Wii, they were enthusiastic. Several lesson plans were generated and will be available this summer to other teachers and librarians on the OCM BOCES School Library System Web site (<http://sls.ocmboces.org/>). Right now, June of 2009, you can read about the pilot project and see other information and even a video clip. (A short Marcellus High School clip is about 24:30 minutes into the program, if you’d like to check it out.)

The comments from students, their suggestions, the feedback from teachers and some statistical notes are attached. Anyone interested in my reactions or Wii experience can contact me at

[mhammontree@mcs.cnyric.org](mailto:mhammontree@mcs.cnyric.org) . The works cited list has just a “tip of the iceberg” feel for all the online links, magazine and newspaper articles, books, YouTube guides, academic courses and interest currently being generated on the topic of gaming in libraries and games in the classroom curriculum. To paraphrase a current advertising maxim, this is not your father’s or mother’s classroom anymore. The statistics and results from the Wii programs we tested follow this article. I tried to include all the student comments on programs we tested, and their recommendations. I arranged the feedback in order of preference and popularity for games that work with our high school population. My advice to you: give it a try, it’s good for a laugh or two, and you might learn something new, and your students will definitely be engaged.

## Wii Statistics from 2 months High School Library Use, March and April, 2009

**Background:** Students who were in the library from their study hall or lunch or after-school used the Wii programs available. The Wii users were required to fill out a feedback form with comments on the program they used. These students were also given a chance to suggest other programs. Other students could watch and also fill out a suggestion form.

Number of Wii Users in the Library or Nurse's Office from March 5 to April 30, 2009:

110 official library users-- 21 were female (12 girls worked the Nurse, and 3 classroom teachers used it)

10 Teachers tested it during our March Superintendent's Conference Day.

5 high school classroom teachers and the nurse asked to be included in the Grant, which provided funding for 4 hours of non-school prep time. Time to integrate into the classroom seems to be a big issue. Teachers were requested to write one lesson plan. These will be on the SLS web page soon.

One teacher used the Wii unit and my copy of a humorous but informative YouTube download called *Brain Training: Video Games and Tangential Learning* in the game design computer class.

One student in that class requested my research to continue his research.

Several interested gaming students read parts of the 3 books on loan from SLS on gaming in libraries. (see Neiburger and Prensky in Works Cited list.)

The Wii Unit, games and profiles, including connections to the NY State Standards were provided by SLS.

### Results of Wii programs set up in library and health office:

Students tested and liked, in this order. [Note \*= student comments ( )= Possible Classroom use]

**Wii Sports: Tennis, Bowling, Baseball, Golf and Boxing** [Simulations, individual and team possibilities; connection to real world, manipulative, motor and non-locomotor skills]

\*Fun - easy(PE) (Science) X10

\*Amazing, relieves stress; (should have available for study halls) X2

\*Fun, moving rather than sitting all day; could be demo to class (PE)

\*Golf was fun and intuitive – Much like Tiger Woods game, not quite as good (Physics)

\*Bowling, awesomely radical (PE)

\*Bowling, sweet idea, wakes you up (PE or Study hall)

\*Thought it was football, wanted to throw it

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**Wii Fit with Balance Board** [Monitoring, Information tools, Exercise techniques, Routines, Strength training--40 activities from yoga to aerobics, Calculates BMI, Fitness Age, uses a personal trainer; users may develop a personal goal and healthy lifestyle]

- \*Fun ☺ (PE, Health) X3
- \*Balance and skiing focused, but fun x2
- \*Exciting (PE, Health)
- \*Good Workout, legs, etc. (PE, practice time)
- \*Exercise (PE or Study hall)

**Trauma Center: New Blood** [A surgery simulation; manipulate and select instruments and tools and operate on a virtual patient -- cooperative mode: demonstrate teamwork, solve problems, make decisions, exchange and develop strategies, all within a time limit.]

- \*Awesome, keep this one (Health)
- \*Interesting, Dramatic (Science)
- \*Easy and Hard (BioMed)
- \*Fun, confusing at first(Health)

**Lego Indiana Jones: Original Adventures** [In a Lego World, solve puzzles, explore the globe, role-playing with light combat -- Encourages teamwork, respond to situations, use multiple resources, various formats and building situations.] \*\*Note: a surprising hit for 9-12 grade, though it was rated lower.

- \*Somewhat difficult; strategic skills (Math/ reasoning skills) X2
- \*Variety and problem solving (Math and History)
- \*Good, Interactive (Math, Problem-solving)
- \*Fun
- \*Awesome
- \*Confusing

**Blast Works: Build, Trade, Destroy** [3D graphics, polygonal blocks and propellers -- Ability to create, share and review custom designs -- Collaboration with others; understand 2D and 3D shapes add mass and firepower and use editing tools.]

- \*Impressive, exciting, suggest players step up to more difficult levels (Physics)
- \*The most fun game here (Physics)
- \*Childish and pointless; get rid of it
- \*Bad and boring

**Big Brain Academy: Wii Degree** [Games and Puzzles to solve in 5 categories: identify, memorize, analyze, compute and visualize. Designed to improve thinking abilities in logic, memory, math and analysis... various levels]

- \*Fun, Challenging (Any Class)
- \*Too young, too easy (KCH)

**Wild Earth: African Safari** [As a photojournalist, 40 different picture-taking objectives for 11 different missions -- Basic information for each animal, accurately presented flora and terrain from the Serengeti National Park at different times of day and in varied weather -- Geographic and animal behavioral and environmental inferences and conclusions through new understanding and teamwork.]

- \*Seems too juvenile

**Other Wii Programs we considered**, but did not test included:

*My Sims; Cooking Mama; Boom Blox; Legends of Rock; and Wii Ski.*

These were all rated either K-5 or 6-12, but did not seem to match our high school educational needs.

**Suggestions for additional Wii programs to consider: Student comments (and possible classroom use):**

World of Goo: Physics-based; very intellectual and original. (Physics)

Wii Surgery: It could help kids become doctors (Health)

Thrillville: Build your own roller coasters (Physics)

Guitar Hero: Good eye-hand coordination (Music) (Math) + 4

Guitar Hero: World Tour: non-violent, quick response, great songs new and older artists (Music)

Rock Band 2: Different hook-ups for different pieces of equipment.

Nintendo 64: Best gaming features (PE)

Mario World 3/Mario Kart: Classics (Driver's Ed) +2

Fifa 09: Teaches sports (PE)

Metroid (Prime) Corruption, Zelda: Problem Solving and multi-stepped tasks --Keep our minds working; not easy. (for any class)

Outdoor adventuring ?

More educational, Science, health, global, etc.

Equestrian?

**As the coordinator of the high school project, here are my reactions to the trial:**

Students loved to try out the Wii, but once they found one program they liked, they did not want to evaluate other programs. They soon learned they were expected to test other programs, and after trying new programs, they were usually excited, but still opinionated.

The ratio of male to female was more heavily male than I expected; almost 5 to 1,

Teachers were initially interested, but found it difficult to make time to try something new, even if they were somewhat familiar with the Wii. Classroom and prep time are always considerations.

There are a number of potential in-depth uses of some of these programs that would take more than a cursory introduction to implement in the classroom.

There has been some discussion of using the Wii in adapted or special needs areas. The sports program for example might be good for teaching basic rules and expectations for each sport. The Trauma Center program could be extra credit in a bio-med class. Cooperation and team work could be practiced with most of the programs.

I do plan to order a Wii for our school for next year. I am hesitant about using our limited equipment budget for purchase of more than one Wii unit. Even though it is not a huge expense, it is simply another technology tool that could support our curriculum. The School Library System has prepared an informational guide for each program it offers, including the ESRB ratings, potential course use, recommended age, and specific connections to the New York State Standards and the American Library

Association Standards for the 21<sup>st</sup> Century Learner. The SLS online catalog will have many additional programs available on a circulating system, like books or videos or other media.

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