**Provost’s Learning Innovations Grant for Faculty**  
**Request for Full Proposal**  
**2008-2009**  

Project Title:

Applicant(s):

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Media Ecology of Games Timeline Web Development

Summary:

The Media Ecology of Games Timeline is a web-based tool that allows students and faculty to explore the history and computer games as part of the larger media ecology that shapes society in particular and has shaped them and their peers in specific. It began as a paper-based assignment in the graduate course 4004-731, *History and Critical of Computer Games and Interactive Entertainment* in the IT Department. This year the graduate students in the course built a prototype of a digital timeline tool in 3 weeks. It was used in their course in the fall and in the undergraduate course 4002-380, *Game Design and Development* this past winter quarter.

When using the timeline, students go to a web address and create an account. They are presented with a stock timeline of significant historical events in the evolution of electronic technology and entertainment, computer games, electronic media and media analysis. They then create their own significant dates of events that were of particular importance in their development (when they played given games, which films or music were important to shaping their tastes and preferences, etc) against the stock timeline for comparison. They can elect to create a group of friends or classmates also in the system to compare personal timelines for a greater understanding of how they and their peer group were shaped by media and computer games.

The tool, and the courses it is used in, demonstrate innovation in the field in that courses on history and analysis of computer games generally focus on games specifically, while courses in media theory and analysis generally exclude games entirely, or merely mention them in passing.

The funds requested in this proposal would be to improve the software tool from prototype to finished product. This would allow us to make the tool available to other classes at RIT (in Liberal Arts and in Film and Animation) and to other universities with similar programs.

Impacted Population:

Initially a fully developed tool would impact the population of the graduate and undergraduate game students taking the current two courses listed above, roughly 150/year. Should the film and/or liberal arts colleges care to make use of the tool that number could increase by several times. Should the tool be developed to the quality we intend with this proposal, we would publicize it to the game education community at large, impacting hundreds if not thousands of students nation-wide and promoting RIT’s strength and leadership in the game education field.

Student Learning and Success:

Having the prototype version of the tool has already proven a boon to the lessons and assignment for which it was devised. When it was a paper-based assignment in a small graduate class, students would present their papers timelines to each other and hang them up in the lab. While this did allow for some interaction between students and some comparison, it was far from ideal.

The digital version made it possible for a larger number of undergraduate students to create compelling displays and easily compare experiences student to student and even across large subsets of the entire class. It helped students really understand the impact this type of analysis can have and drew them deeper into the content and the analytical process.

Findings and Dissemination:

After the next wave of development we hope to fund through this PLIG, the tool will be deployed in next year’s classes. Due to the growth in these programs, next year’s user base will show a growth of 300% or more. The student and faculty experience of the tool’s use during the 08-09 academic year will be documented and, if the next iteration is deemed successful, the results and access to the tool will be disseminated to the game education community. Professor Jacobs is an executive member of the International Game Developers Special Interest Group
and of the Association for Computing Machinery’s annual Sandbox Symposium on games and can publicize the tool’s existence at both of those venues. In addition, Professors Jacobs and Vick will prepare an academic paper for conference submission on the development, use and impact of the timeline tool in classes.

Project Rationale:

Why this is not part of regular college business.

It is the regular part of college business to have students build project prototypes, however, it is less college business to have them develop “industrial strength” curricular tools for use across departments and institutions.

Unfortunately, the prototypical nature of the time-line tool made it difficult to work with beyond that small group of students who built it. Like all prototypes it was buggy, and several times during the winter quarter we had to rely on the grad students who built it in the fall to go back and fix the bugs. Use of the prototype by a larger group of students who were not the initial creators of the software pointed the way to interface refinements that could enhance ad streamline the use of the timeline tool.

None of this means that the initial prototype was poorly developed, it is simply the nature of interactive software development that a “first shot” at developing software is no more a finished product than the first draft of a paper or novel. We are looking for funding to support the creation of the “final draft” of this software tool. Doing so takes the undivided attention of a student developer with a specialization in on-line database and web front-end work, supported part-time by technical and content faculty.

Relevance to required cluster, college, and/or department competencies.

As described above, this project emerges out of general pedagogy and specific lessons and assignments within the department. If redeveloped as described, it could be of interest and application to other faculty and students across RIT and programs of instruction at other universities.

Relevance to other faculty and transfer of success to other faculty.

Due to departments growth, other faculty will be required to teach the courses in which this tool is used, so at RIT alone their will be direct departmental transfer. Professors Jacobs and Vick look forward to reaching out to the other liberal arts and film faculty to educate them on the purpose and use of this tool. The original student developers wrote a manual that addresses both the pedagogical and technical use of the tool, which will be revised and distributed via the web along with the tool itself. Additionally, as mentioned above, the faculty intends to publicize the tool’s availability at conferences via both peer-reviewed publications/presentations and through the general publicity opportunities available at such gatherings.

Relevant credentials, experience of involved faculty/staff.

Professor Jacobs is an IT faculty member teaching courses in game design and development with academic degrees in media and media theory. He is responsible for the pedagogical design of the courses the tool is used in, the timeline tool and the tool’s content as well.

Professor Vick Professor Jacobs is an IT faculty member teaching courses in game design and development with a PhD in Computer Science and will provide the technical advising for the full-time student developer.

Describe how this represents innovation in your discipline

As mentioned above, the timeline, and the courses it is used in, demonstrate innovation in the field in that courses on history and analysis of computer games generally focus on computer and video games specifically. Courses in
media theory and analysis generally exclude games entirely, or merely mention them in passing. Both disciplines will use the traditional educational resources found in textbooks and journals, as well as the media analysis resources and communities emerging on the web. There are, however, few interactive tools that help professors illustrate, and students experience, the process of analysis in an interactive, persistent, personalizable manner as the timeline allows for.

**Project Schedule**

074: Software Development  
081: Graduate Student Use and Evaluation of Timeline Tool  
082: Undergraduate Student Use and Evaluation of Timeline Tool  
083: Initial results disseminated via on-campus faculty forum  
084-092 Conference dissemination