Final Report- NWACC- 07'

Project Title: *Social Media for Teachers*

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URLs

- **Project Web site**: http://www.web.pdx.edu/~wubbold/NWACC/
- **Developmental Web site**: http://www.research.pdx.edu/dev/artsplash/htdocs/index.php

Project Summary

Ever since ARTSplash (the prototype for the NWACC project) was funded by a U.S. Department of Education Innovation Grant in 2003, it has been clear that its design was flexible and simple enough that it could be adapted to serve other projects. Since its narrowly defined purpose is to enable teachers to create and upload curriculum to a public database, we have relied on teacher feedback to design the first few releases. After three releases the basic bugs were worked out in a regional model, but our dream was always to make the web application robust enough to support a community. Community in our case means the ability to serve multiple regions simultaneously. This meant a complete rethinking of the administrative interface and a dramatic expansion of the code base. With NWACC funding we were able to do this work and in the fourth release of the web application we have achieved our goal to create and manage multiple regions simultaneously.

In this report I have tried to illustrate the salient features of this release, because it is now on a testing server and not yet available to the general public. The screenshots in this report may not look impressive but the implications of what they illustrate are profound. NWACC funding has enabled us to take our regional model and retool it so it is capable of scaling up to support national and even international networks. The next step is to complete testing and fixing the inevitable browser compatibility issues before writing up the project and publicizing the web application's availability.
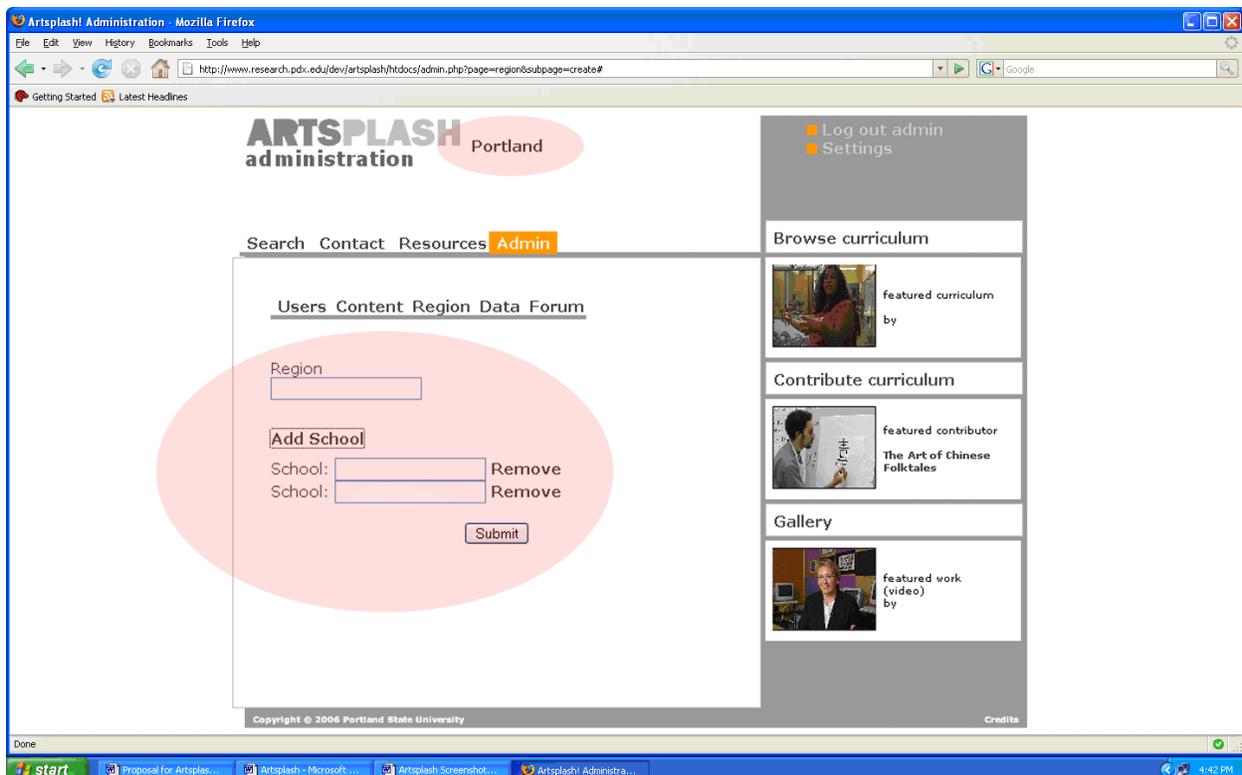
Project Goals

Social Media for Teachers, a collaboration between the Graduate School's of Education at Portland State University and the University of Oregon has the following goals:

1. Re-program an existing web application and curriculum development archive/database to support the development of a "YouTube" like online community for teachers who wish to create, assess and share their original curriculum.

2. Re-design the authentication process so the database/webtools can accommodate more than one group of institutional users at a time.

3. Make it possible for multiple users to "brand" their data so that a user can look at <u>all</u> the materials in the database as well as only those materials that are contributed by <u>their</u> institution.

4. Additionally, we would like the institutional users to have some latitude about how their "tributary" of the site looks.
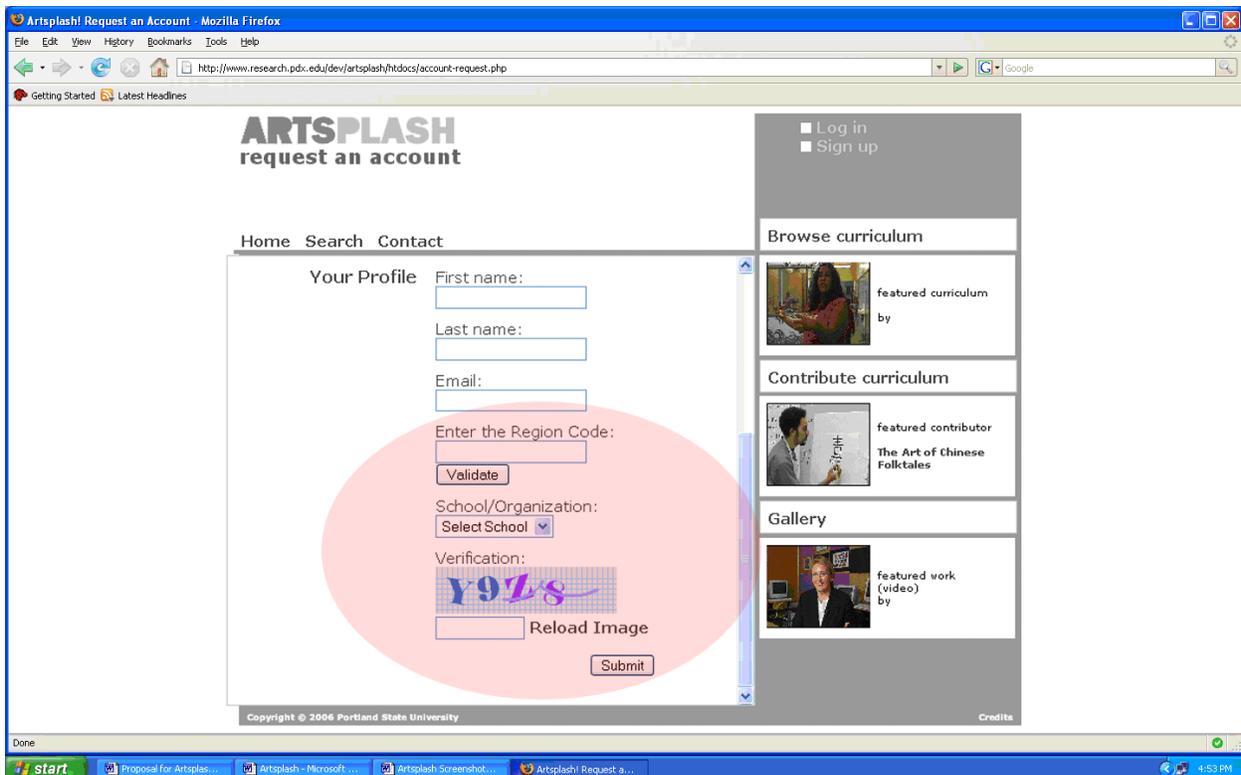
Project Outcomes

Goal #1- *Social Media for Teachers* is built on the existing code of a project called ARTSplash. In its current form, the ARTSsplash's authentication process limits its affective input/output to one group of institutional users at a time. Goal #1 was to re-design this web tool and database so it can differentiate between two or more groups drawing data from a shared database. We have successfully done this so now any number of regional versions of the database can be created by a single individual serving as a super administrator for the site. Once the super administrator has created a new region they can then designate a regional administrator who controls user accounts and the content of their local version of the database. With this re-design, regional uses throughout the world can create, assess and share their original curriculum with others. So…even though all content will flow to a common database, when it is displayed, the community can now view it by region or aggregated.

The screenshot above shows a new test region called "Portland" that has been created. This is a super administrator screen. To create additional regions, the super administrator names a region and adds schools to that region. Once this is done, they designate a regional administrator (this role is filled by the super administrator until another designee is assigned) who distributes a unique region code generated when the region is created to the users who can then sign up for user accounts and begin using the web tools to create and contribute their curriculum to the database.

Goal #2- In order to create regional versions of the web application while still using a shared database, it was necessary to implement an authentication system that allows the database to differentiate between regional users. With the re-design, when new users join the project, they can only do so by inputting a randomly generated code they are given by the regional administrator. This is the first step in creating a unique account within the regional version they will continue to be affiliated with. This ensures that when a user logs on to contribute their own work, they only have access to the curriculum template and resources that apply to their region.

In addition we have added the "captcha" human verification security feature to ensure only people (and not other computers) access the site.

Goal #3- On the output side of the project this goal was intended to make it possible for multiple users to "brand" their data so they can look at all the materials in the database as well as those materials contributed by their institution. We have done this so now when the user makes a contribution to the archive, the database sorts their work by region and displays their work in both by region and aggregated.

Goal #4- This goal was discarded; it turned out to be unnecessary. Since the over arching objective of this project is to create "a 'YouTube' like online community for teachers who wish to create, assess and share their original curriculum" the partners felt making it possible for the

regional versions of the community to have a different appearance was an unnecessary use of valuable programming time which added little to the project.

Enhancements- New goals emerged as the partners began to work with the application. For example, it was immediately clear that for the community we envisioned to be truly connected, we needed to provide some way for users to communicate with each other. We discussed the available options: blogs, chatrooms, vlogs, etc. and settled on a forum. Since the community we are trying to create is a community of practitioners, we felt a forum would be the best way for the community to share information pertaining to the use of the application…or…the creative process they were engaged in. We felt there was little likelihood users would want to chat or blog, using video or otherwise. The forum we have added to the web application is threaded and searchable. Users with a question will be able to quickly see if their question has been asked, and if asked- answered.

Another area of the application we felt needed enhancement was data collection. Web applications routinely gather user preference data; since our application serves a training process, we were also interested in gathering qualitative data on learning and that would help us improve both the training and the web application. We addressed this need by embedding a survey in the application. The survey is an instrument designed to gather both pre and post qualitative data related to the curriculum creation process. When a new user enters their region code to begin signing up for a new account; they are prompted to fill out the pre-training process survey; their involvement is voluntary. If they choose to fill out the survey, when they complete their curriculum and submit it for review they are prompted to complete the post training process survey. Results from the two surveys are stored in the database where they are accessible to the administrator.

Finally, a more sophisticated internal search function was added to the web application. Previously, the database was "key word" searchable only. This worked well enough but was slow and clunky. The new search interface allows users to "drill down" quickly to the specific information they are searching for. The potential size of the database makes this feature more and more important.

Future implications of this project - The Graduate School of Education at Portland State University has formed a taskforce to begin integrating the web application into their online programming. They will begin by making the application part of their Service Learning courses. Pre-service teachers who create exemplary service learning curriculum as a result of these courses will be encouraged to submit their units to members of the taskforce for adjudication; the best units will be uploaded to a new service learning archive using the *Social Media* web application. In addition, the partners will continue to explore opportunities for using the web application at the University of Oregon as well.

As a result of the NWACC project, it would take only minor changes to make the application serve other online courses and it could be used to archive curriculum from throughout the universities as well.

Work has begun on the next release of the web application. This release will add:

1. Automated features to speed the conversion of video into the Flash format (for faster upload at higher resolutions)

2. Enhanced web tools so that regional administrators can navigate quickly to the materials and users they want to work with. (as the size of the database and the number of regions increases, these features will become more and more important)
3. Training modules that reduce the need for so much "face to face" training on the use of the web application.

Fiscal Management

The NWACC funded portions of this project were completed on time and on budget and we thank you for your support!