

Faculty Innovator Grant 2011
Center for Learning Technologies

Final Report Form

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Project Title: (10 words or less)	VIGOR: Visuals and Imagery of Globalization Online Repository

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1. Describe the specific teaching and learning issues being addressed by the proposal.

This faculty-and-student collaborative project developed an online toolkit called VIGOR, or the Visuals and Imagery of Globalization Online Repository. The VIGOR project created an interactive informational website that allows students to find and share photographs, film, television, graphic arts, advertisements, fashion, and other exemplary visual imagery of “globalization” from a wide range of sources found outside the classroom. This teaching website enriches the learning environment by fostering students’ abilities to: (1) analyze and relate their discovered images to course readings and concepts discussed in the classroom; and (2) record and track course material in a relational database that allows other students to access their original data contributions through a blog-style webpage. This co-created teaching resource has established a rich data archive that also provides a model of dynamic pedagogy through the use of technology.

For the project, we identified four learning outcomes:

- I. To enhance students’ “metacognition” about globalization—that is, to improve students’ ability to think about the nature of our knowledge about globalization;
- II. To elicit latent knowledge from students about their personal experiences with globalization;
- III. To encourage active learning. By creating a user-friendly online repository to which students will contribute their own images and analyses, students assume a greater responsibility for their own learning by participating in virtual and in-class dialogues with their peers;
- IV. To enhance students’ identification of relationships between globalization scholars and among concepts from globalization theory.

2. Describe the revised specific teaching and learning issues being addressed by the proposal (if applicable):

The teaching and learning issues remained constant throughout the grant period.

3. Describe the development activities involved addressing the learning or teaching issue.

During the summer of 2011, the principal investigators used the grant to build a prototype website. To do so, we hired a web developer. At the time, Rakesh Maram was a graduate student in the Department of Computer Science. Mr. Maram developed the prototype site that allowed for storage of and presentation of photographs of globalization. Because the principal investigators previously had collected images that illustrated processes and concepts of globalization, we used these photographs to build the prototype.

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The development process demonstrated a number of technical challenges to building the website we had originally envisioned in our FIG proposal (see “5. Unexpected Outcomes” below).

The VIGOR website currently is active and in use at www.vigorproject.net/spring2012/.

4. Describe the learning outcomes attained by the project.

The relatively small sample of students who have used the VIGOR website (approximately 90) and the absence of valid measures of student learning make it difficult to assess quantitatively the learning outcomes of students who have used the VIGOR website. Nevertheless, we may offer some qualitative impressions based on our experience with students in our globalization seminars.

We are confident that the VIGOR website and associated assignment have improved the active learning of our students. Although student evaluation forms do not ask specifically about the VIGOR assignments, student comments on the assignment manifest evidence of active learning:

“The [VIGOR assignment was a] creative avenue for us to apply the abstract concepts we were learning to tangible daily events. The course would be a bit dry without this tool.”

“The assignments of weekly papers, OWITAI exercise (we select a news piece from the well-known news websites and send it to the professor) and VIGOR project (we bring an image/video of globalization to the class and discuss how it relates to the globalization) were very helpful to think critically about the topic. These assignments provided me to think about globalization in every news piece I read and in every image or video I watched.”

Another student described VIGOR as “fabulous,” stating, “I really enjoyed and it enriched my understanding about the subject matter.” These comments affirm our intuitive teaching sense that the web-based dimensions of this assignment “reach students where they are” in terms of their exposure to global media and their integration of on-line forms of response and discussion.

Of the 91 student contributions to the VIGOR website, nine of them are postings in addition to what the assignment required students to contribute. Such second postings indicate that students have taken an active interest in learning rather than simply satisfying the assignment’s requirements.

We also find evidence that the assignment and website have elicited students’ latent knowledge about globalization. Although the majority of images in the database are found images (i.e. an image created by another that a student identifies as

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demonstrating something relevant about globalization), sixteen entries show photographs that students themselves took. Two of these photographs illustrate scenes from New York City and Norfolk, VA, indicating proximate processes of globalization in our own community. Many more are photographs students captured while traveling overseas including scenes from Morocco, Poland, Rwanda, Mexico, Afghanistan, China and elsewhere. The variety of sites where students found images of globalization indicates that students connected their classroom learning with their previous experiences overseas. In this sense, students bring the global to the local and “globalize the university”.

We have fewer indicators of changes in students’ metacognition of globalization or improvements in their integration of concepts, scholars and theories. In conversations with colleagues at our professional association conferences, we have developed some ideas for a pre-/post-test study to measure changes in student learning. This is an avenue of future research for the project.

5. Describe unexpected outcomes, if any.

Our grant proposal specified that we would develop an interactive webpage that would allow for dynamic concept mapping and visualization of relationships among student-contributed content archived in a database. We intended the VIGOR website to build dynamically a network of related images based on (a) user contributed and edited content that grows as the number of site users grows; and (b) the user’s interests as specified in a query interface. Because students would provide information (“tags”) about an image’s source, location, date and time taken, and relevant globalization concepts, we hoped a visualization engine would use this information to render increasingly detailed networks among related globalization concepts. This would allow the student to browse thematic categories generated by the networking engine, and then identify interrelationships among themes, locations, dates, or authors.

Although technically feasible, our proposed approach proved too ambitious for the technical abilities of the principal investigators and the modest resources the grant afforded us. Accordingly, we abandoned the prototype website and opted instead to use WordPress, a free and user-friendly web content management system. WordPress achieved several of our technical goals. It permits the storage of multiple visual records as “posts”. It allows students to associate key words with the visual content they submit. Finally, WordPress permits the site visitor to query the database and retrieve visual content relevant to their interests. WordPress’s search functions thus permit some basic integration and synthesis across entries.

The current format of the website nevertheless creates pedagogical, technical and management challenges. The blog format of the WordPress tool does not dynamically map relationships between entries. Students must navigate through entries in a traditional, top-to-bottom of the page manner. For this reason, the efficacy of a student’s search of the site content depends upon her prior knowledge of globalization. The site

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does not yet actively aid the student's identification of relationships among concepts, arguments, theories and scholars. By using the WordPress blogging tool and content management system, the current website provides the tools for easy and efficient search of the contents, and allows a community of users to add new content. Although the blog format is ideal for a regular contributor, for the one-time or occasional user it requires contributors either to have some knowledge about creating web content, or to learn how to do so. For some students, this can be a substantial barrier to contributing to the site. For example, a number of students found it difficult to resize their images once they had added them to their blog entry. While this is a relatively trivial task in HTML, it does presume the student has some knowledge of basic HTML code. To manage such technical challenges, instructors either need to provide a basic familiarization tutorial for students or to assist students when they encounter technical difficulties. Obviously, both add to the instructor's investment of time in course preparation and management.

From a management perspective, ownership of an interactive website requires substantive management and content review in order to assure the appropriate usage of the material and interactive forum. For example, in the four and a half years since we configured the VIGOR Project in its current blog format, the site has received 4,332 "comments" from outside visitors that are not pertinent to the imagery presented on a given page—a rate of about three comments per day. Although that seems like a small number, each comment requires careful review from a human site administrator. Many of these spam comments appear to be automatically generated, and seek to direct site visitors to outside websites. These outside websites often contain content that some may find offensive. For this reason, the VIGOR Project requires a moderator who can evaluate whether a comment is relevant to the project's goals. From a pragmatic perspective, our current conversations focus on how we will manage this level of input with a website that is accessible to a wider audience.

We originally envisioned a collaborative tagging approach in order to assure the widest interactive features. As we practice and utilize our existing platform, however, concerns arise about the reliability of tagging accuracy, as well as the ability to develop the folksonomy we had envisioned. For example, a determined site visitor might be a "selfish" tagger who adds keywords designed to direct readers to his preferred globalization theorist. In other words, given the uncoordinated and possibly selfish motives of taggers, there is no a priori reason to expect that collaborative tagging will produce relationships among images that are theoretically meaningful. Collaborative tagging may not necessarily improve a user's browsing or search of content. These concerns notwithstanding, some recent research has found that shared "vocabularies" of keywords can emerge from collaborative tagging systems. These vocabularies tend to be richer and more intuitive than tag lists that many automated search engines generate.

As we gather images from student travels and direct experiences, central ethical and legal issues of representation emerge in terms of the appropriate use of photos in a public forum. We have found that students contribute both original content such as their personal photographs and "found" content such as magazine advertisements. Both kinds of contributions raise difficult ethical and legal questions for students, researchers and

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universities. Because we encourage students to draw images from their daily life, photos from their international travels have provided some of the richest content. Yet, students have not acquired authorization to use these photos in a public forum, nor are they able to identify individuals within the photographs. This presents distinct concerns in terms of exploitation and reifying notions of the “other,” particularly in a global setting where marginalization and access to resources are often sharply contrasted between the photographer and her subject. For “found” content, student contributions raise questions of fair use and the protection of intellectual property. While the research and education goals of the project seem to fall squarely within the doctrine of fair use, a preliminary evaluation of our project suggested that the fair-use exemption to intellectual property may not apply. For example, can a student use a photo found on Flickr.com that includes a Creative Commons license? If the photo includes an individual, that person may claim an invasion of privacy and defamation, particularly if the analysis of the photo disparages the individual. Complicating matters is that many found images, particularly on the internet, do not include licenses. Much of the fair use law concerning higher education tends to focus on copyrighted material, but contributions to the website may also infringe on trademarks. Several contributions to the site that explore the “McDonaldization” thesis clearly relate to this concern. For example, a student contributed a photograph she took of “Kabul Fried Chicken” in Afghanistan, a restaurant that uses the American firm’s iconic Colonel Sanders trademark. While the student owns the copyright to the photograph, its posting to the webpage may constitute trademark infringement by causing harm to the KFC brand. We are currently looking to larger guidelines in the field to establish a clear stance on fair use of photographs, taking into consideration the range of national legal systems and social norms. This is particularly salient to the project at hand, because someday it may be housed on a university server, which presents particular issues of ownership and appropriate use of intellectual property.

6. Describe the impact of the completed project on your colleagues, department, college, or community.

The principal investigators have incorporated a VIGOR-related assignment into their teaching about globalization. Since the creation of the website, Dr. Earnest has required students in his globalization seminar (IS 741/841: Globalization & Social Change in the World System) to contribute and analyze a visualization of globalization. He has used this assignment in the fall 2012, fall 2013, and fall 2014 offerings of the seminar. The VIGOR website now has 91 entries and more than 100 photographs, videos or other visual content (some entries offer more than one image).

7. Describe how the project can be a model, template, or prototype for use by other instructors.

Our project illustrates how faculty may utilize free-to-use web content management systems to facilitate students’ active learning and to elicit their latent knowledge about a

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subject. Although these web technologies do not yet facilitate dynamic concept mapping, students' written contributions to a website necessitate reflection, engagement, and integration. For subject matter which students cannot touch or manipulate—that is, when kinesthetic learning is not possible—websites may offer a constructive alternative.

Our project also illustrates to other faculty the importance of using existing web-based technologies. Technologically feasible but ambitious projects (such as our proposed dynamic concept mapping) may present both prohibitive programming challenges (at least for faculty not trained in programming) and/or financial barriers. Existing technologies lower the programming and financial obstacles to development and successful use in the classroom.

Finally, our project illustrates the necessity of integrating classroom presentations with student contributions to a website. The act of posting content to a website is not in itself sufficient to facilitate active learning or to elicit latent knowledge. Students must also explain in writing and verbally to their peers their visual content and their analysis. Such oral presentation encourages both active learning and group learning, as peers respond to an image or video, provide their own analysis, and share their own experiences. Classroom discussion helps avoid the unintended isolation of students that online assignments may create.

8. Describe the technology used to help address the issues described in the proposal.

As discussed above, we abandoned the prototype website and opted instead to use WordPress, a free and user-friendly content management system. WordPress met several of our technical goals. It permits the storage of multiple visual records as “posts”. It permits students to associate key words with the visual content they submit. Finally, WordPress permits the site visitor to query the database and retrieve visual content relevant to their interests.

9. Describe products, if any, that are a result of the project.

The principal investigators have shared the results of their research with the community of globalization scholars. At the 2012 annual convention of the International Studies Association, we presented a paper that described the project, learning objectives and outcomes:

David C. Earnest and Jennifer N. Fish. “The Visual Sociology of Globalization: An Interactive Resource and Pedagogical Model.” Prepared for the 2012 Annual Convention of the International Studies Association. San Diego, California: April 2, 2012.

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Based on a subsequent presentation of our project (in 2013), the editors of *Politics* invited us to submit our paper to the journal's section on pedagogy. The journal published the article in September 2014 (see attached):

Earnest, David C. and Jennifer N. Fish. "Visual Sociology in the Classroom: Using Imagery to Teach the Politics of Globalization." *Politics* 34, 3 (September 2014): 248-262.

10. Describe the future plans for this project, if any.

The principal investigators will continue to use the VIGOR website and assignment in their respective globalization seminars. Resources permitting, they will investigate the possibility of enhancing the site to include a dynamic concept-mapping capability.

We also have considered developing measures of students' integration, metacognition and learning about globalization. With validated measures, we would be able to conduct a pre-/post-test assessment of their learning to determine whether the VIGOR website and assignments meet the project's learning outcomes.

11. Attach a financial report with updated Budget Plan Matrix.

Final Budget Matrix

Budget Item (equipment, personnel, software, etc.)	Qty	Total Cost	Source of Funds	
			Amount from FIG	Amount from Other Source
Rakesh Maram, programmer	1	\$3,000.00	\$3,000.00	\$0
Web hosting, annual	3	\$324.00	\$0	\$324.00
Domain name registration, annual	3	\$45.00	\$0	\$45.00
Travel to San Diego for ISA annual convention to present paper	1	\$1,324.00	\$0	\$1,324.00