

**Scaffolding active programming instruction with theoretically grounded screencasts  
and annotated worked examples  
NWACC 2008 Proof of Concept Grant  
September Progress Report**

**Laurie Murphy and David Wolff  
Pacific Lutheran University**

**Work completed**

The project is well underway and on target to meet our goals for the year. The following table summarizes the goals accomplished so far:

<b>Goals for summer 2008</b>	<b>Work completed</b>
set up website	the project website has been set up ( <a href="http://www.cs.plu.edu/~nwacc">http://www.cs.plu.edu/~nwacc</a> )
evaluate options for screencast production software	screen capture software (Camtasia for PC and ScreenFlow for Mac) and a desktop microphone have been purchased and tested
make revisions to electronic classroom assessment system	the Lab CATs system has been updated to allow flexible numbers of questions, default question generation, and optional email address
create priming presentations	a set of multimedia learning theory based PowerPoint presentations has been developed for nearly all topics in the course; these will be adapted for screencast production and made available to students throughout the term
develop worked examples	a list of worked example topics has been compiled and several of these have been fully developed into screencasts
record and upload screencasts	the current presentations and worked example screencasts have been uploaded to PLU's course management system and tested; others will be created and viewed by students in CSCE 144 throughout the term
develop assessment survey	a survey to assess the screencasts has been developed and will be administered at the end of the fall and spring terms
	screencasts demonstrating software installation for JEdit and the JDK have also been created and will be used by students in setting up their personal machines at the start of fall and spring terms
	password protected RSS feed access to the screencasts has been enabled through PLU's course management system
	an IRB proposal to allow us to collect data for human subjects research has been drafted
	a bibliography of relevant related research papers has been compiled and posted to our project CiteULike group

## Expenditures as of 9/11/2008

Faculty summer stipends:	\$6,000
Student web developer:	\$400
Software:	
Camtasia (PC - 2 copies)	\$286
ScreenFlow (Mac)	\$110
Equipment:	
Microphone & Stand	<u>\$108</u>
Total:	<b>\$6,904</b>

## Schedule for remaining work

Fall 2008:

- submit IRB
- purchase Tablet PC
- develop additional screencasts
- use priming presentations and worked examples in CSCE 144
- collect assessment data

January 2009:

- evaluate assessment data
- write up results and submit a paper and/or tutorial to a CSEd conference such as CCSC-NW
- update website

Spring 2009:

- write final report