Computer Supported Collaborative Learning

Units: 12
Books: None

Instructor:
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You will be required to purchase your own copy of the text book, which you can order from Aamzon.com. All other readings will be provided in pdf form in the course blackboard account.

Prerequisites: None. Some familiarity with educational technology, linguistics, or machine learning would be beneficial, but not required.

Course Description

Collaborative technologies featured in the current day social web offer a snapshot vision of the next generation of learning opportunities. Environments such as Second Life, the Knowledge Forum, Wikipedia, and the Virtual Math Teams environment offer a wide range of formal and informal learning opportunities to individuals and groups worldwide. These social web technologies hold the potential to greatly increase opportunities for fostering advancement of underserved populations and leveraging the large amount of out-of-school time that school age kids have for their intellectual and social development. The field of Computer Supported Collaborative Learning has as one of its foundational goals to work towards understanding the pedagogical and technological features that make on-line education in general, and collaborative learning in particular, effective. The purpose of this class is to expose students to the foundational theoretical, technological, and methodological issues underlying previous work in on-line learning, to introduce students to the wide range of current on-line environments for formal and informal interaction and learning on-line, and to explore current research in improving the quality of experiences these environments have to offer. The course is oriented around a hands-on project of the student's own choosing and design that will offer the opportunity to gain experience with available tool kits and work towards making their own contribution to what the modern day web has to offer for on-line learning.
Assignments

I. Each student will be responsible for leading the discussion for one class session of the student’s choosing. This involves both offering a concise presentation at the beginning of class that outlines the key points of the readings for the day (20-30 minutes) and moderating the class discussion.

II. Starting during the second week of class, write a response to posted discussion questions for the week by 10pm Monday evening in the Blackboard discussion thread for the week. The specific reading assignment and blog discussion prompt for each week will be posted by Wednesday night the week before. You are encouraged also to print out what you have written and bring it to class for reference during the discussion. There is also a discussion for week 1 in the blog space, but you can post your contribution any time during week 1.

III. Major Project: Work in groups of 2 or 3 to design and prototype a form of adaptive collaborative learning support. Alternative types of projects related to the theme of the course are negotiable with the instructor. Furthermore, you may pick any issue relevant to the course to focus on with your prototype, but the design challenge theme for the semester is to develop a collaborative activity to help students learn how to do an error analysis. Below are individual assignments that are meant to cumulatively result in the completion of the term project. The purpose of the project is to give students experience with each part of the process of designing and prototyping this type of intervention with the understanding that there is not sufficient time to perfect each step along the way.

   (a) In week 1, get an account at coursera.org and sign up for a course. Participate informally during the first week of class and then answer the discussion prompts in the blog discussion space on blackboard for week 1.
   (b) Identify an issue of interest and review at least 5 related articles (Informal write up due at the end of week 5)
   (c) Build a prototype using tools taught in class or others (first version prototyped by end of week 10)
   (d) Collect preliminary data with your prototype – possibly with friends.
   (e) Write a short report about your prototype, including a short literature review (primarily the review written up earlier in the semester).
   (f) Present your project in class during Week 15. Final paper due by Dec 17, 2013 at midnight.

Grading

There will be no exams. The term project and its components are 70% of the grade. In-class presentation and online discussion are 20% of the grade, and classroom participation is 10% of the grade.
Syllabus (Readings)

Week 1-2 Course Intro: History and Theoretical Foundations


Week 3 Design and Development


Week 4-6 Instructional Issues and Approaches


**Week 7-8 Traditional Support Technology and Environments**


**Week 9-10 Massive Scale Collaborative Learning**


**Week 11-12 Prototyping Tools**


**Week 13-15 The Future of CSCL: Towards Dynamic Collaboration Support**


