OPEN HOMEWORK SYSTEM

PROJECT UPDATE

January 30, 2020

Happy new year! I have a few updates on the project that I wanted to pass your way.

COMMERCIAL COURSEWARE RESEARCH

I have found a researcher to conduct more detailed system research on the use of homework systems in the British Columbia post-secondary system. Jeff Clemens has begun this research work and will be delivering a preliminary report in March and a final report in June that should help to identify what systems are in use in BC, what disciplines are high users of these systems, and how much students are actually paying for them.

This report will help the project in 2 ways. First, it will give us some more rationale for the project that can help with advocacy in informing the system that this is an issue for students in BC. Second, it will help focus the future direction of the project based on empirical information.

OPEN TEXTBOOK ANALYSIS

I have completed the analysis of the data that Josie Gray compiled on what current open textbooks in our collection could benefit from the addition of homework activities. It is my hope that I can align the research Jeff is doing with the research Josie has done to target a call for proposals for some subject matter experts to develop question sets in H5P that will make those textbooks identified by Josie in those disciplines identified by Jeff exemplar projects of what homework combined with textbook can be. I have attached the results of the research to this report (see Appendix).

H5P & PRESSBOOKS

I have begun working with Pressbooks and H5P on scoping out some work on what it would take to add more homework functionality to Pressbooks & H5P. We are currently exploring developing deeper integration between Pressbooks/H5P and institutional LMS's to enable features such as user authentication and grade passback from H5P activities to Learning Management Systems. We are also exploring building a Pressbooks based library of H5P interactions that could easily be shared, discovered and cloned from one Pressbooks instance to another, giving us the ability to create and share H5P activities not only within Pressbooks, but to any LMS that has H5P incorporated.

YOU'RE INVITED TO A ONE DAY H5P PRESSBOOKS WORKSHOP

To help demonstrate the capabilities of H5P and Pressbooks, I am hosting a one day H5P Pressbooks workshop on Friday, May 14th at SFU Segal Building. I have limited the number of participants to 30 for this event where we will workshop using H5P and Pressbooks. I officially open registration next week for this, but if you are in Vancouver and would like to attend, here is the early bird link to register:
https://events.eply.com/2020H5PandPressbooksWorkshop

WEBWORK

Results of my survey of to the Math articulation groups shows there is significant interest and use in WeBWorK across the province, and the major barrier to use includes the complexity involved in hosting the application, and in using the application. Many Math departments see preexisting question sets is an important and, to some a crucial, aspect of using a homework system. So, in this regard, it helps to underscore the importance of content as well as platform to whatever solutions we recommend.

I have not made significant progress in this area yet. I am still hoping to organize a WebWorK OPL Workshop this summer but have not moved this forward as of yet.

COMPARISON ANALYSIS OF STEM OPTIONS

The work continues on the comparative analysis of three Math based open source homework platforms: Numbas (Newcastle University) IMathAS (Pierce College, Washington State), and WeBWorK (Math Association of America).

Since the last update, our contractor, Alan Levine, has installed all three applications on a BCNET EDUCLOUD server that we will be using for testing. The site where he has set up the three platforms is at
http://mathtest.bccampus.ca/

Our lead for the testing, TRU Math instructor Shirin Bouroshaki now has access to all three platforms and has begun her testing. Our accessibility expert, Josei Gray, also has access to all three platforms and will be conducting accessibility testing on all three platforms. Final reports from Alan, Shirin and Josie are due in March, at which time I will compile into a single report with what we have learned in our testing and use that to make some recommendations for next steps with those platforms.

Final reports due in May, 2020.

OTHER NEWS

I have taken on a BCcampus sub-project related to Open Homework Systems. It is a Philosophy project being led by David Gilbert at UBC which began shortly before the Open Homework Systems project officially began but is related to the work I am doing in this area. David is developing a number of interactive formal reasoning exercises that will be used to support the open textbook *forallx.* There will be a blog post on the BCcampus website next week that will discuss the project in more details, but this is an exciting project that will greatly enhance the adoption of the *forallx* open logic textbook.

APPENDIX: BCCAMPUS OPEN TEXTBOOK ANALYSIS

Open textbooks published in Pressbooks in the BCcampus collection that have been reviewed and could be made stronger with integration of homework activities

Title	Publisher	Existing ancillaries	Adopting Institutions	Notes
Introduction to Psychology - 1st Canadian Edition	BCcampus	Test bank, course file, case studies, study guide	KPU (19, 18, 17, 16), NVIT (19, 18, 17), JIBC (19, 18, 17, 16), Art Inst (17), Camosun 16)	"I wish the text had some multiple-choice questions where students could test their knowledge" "I would like to see a larger self-test section"
Mastering Strategic Management - 1st Canadian Edition	BCcampus	PPT	Camosun (19, 18, 17, 16), Coast Mountain (19, 18, 17, 16), Langara (19, 18, 17), VIU (19, 18, 17, 16), Douglas (18), TRU (17, 16), Capilano (16)	"Could find ways to engage students -- perhaps more and better exercises"
Introduction to Sociology - 2nd Canadian Edition	BCcampus	Case studies, test bank	NIC (19, 18, 17, 16), Camosun (19), Okanagan (19, 18, 17, 16), Alexander (19, 18, 17), Douglas (19, 18, 17), TRU (19, 18, 17, 16), Langara (19), KPU (19, 18, 17, 16), NVIT (18, 17), Ascenda (18), Capilano (16)	"If it's possible to develop further resources to accompany the book, that would be wonderful"
Business Communication for Success	University of Minnesota	No	COTR (19, 18)	"This textbook would benefit from more examples, more practice opportunities." Canadian edition: Communication for Business Professionals
Macroeconomics Theory Through Applications	BCcampus			Not published by us, but in our instance. "Each chapter also has a number of student exercises although there are no solutions to questions for the student"
A Concise Introduction to Logic	Open SUNY			"there are not many practice problems for students, which might be problematic in an introductory course and no solutions are provided for the problems"
Principles of Marketing	University of Minnesota		Okanagan (18), CotR (16)	"The exercise problems were sufficient. Additional types of questions would be welcomed (MC, T/F) as would longer cases."
Information Systems for Business and Beyond	Saylor			"it lacks online teaching tools for a more suitable online delivery method – like PowerPoints for each chapter, take home exercises, online tests, and case studies or quizzes