TLt 2016 Conference Program

May 2, 2016

8:00 – noon — Registration (Dr. John Archer Library)

8:45 – 10:00 — Pre-conference Workshop (Regina/Wascana Rooms – LY 107.32/107.33)
Dipping our Toes in the Waters of Open Pedagogy
Mary Burgess, BCcampus

In this session, attendees will gain an understanding of the principles of Open Pedagogy and will have a chance to explore how their own instructional contexts can benefit from the application of those principles.

10:00 – 10:15 — Coffee break (Regina Room)

10:15 – 11:30 — Pre-conference Workshop (Regina/Wascana Rooms – LY 107.32/107.33)
Designing for Online & Blended Courses
Alec Couros, University of Regina

While learning managements systems like Moodle and Blackboard are still popular choices for facilitating online and augmented courses, these systems are being challenged by 'small-tools-loosely-joined' approaches to instructional design. This workshop will outline various pedagogical approaches used to construct learning environments based on freely available or low-cost tools. Participants will learn the ins and outs of some of the most common and powerful tools while coming to understand the pedagogical frameworks afforded by distributed learning environment design. Both closed and open models of learning will be explored throughout the workshop.

11:45 – 12:45 — Lunch (University Club)

1:00 – 2:00 — First Keynote Presentation (RIC 119)
Educational Technology Intersections: Collaboration, risk and scholarship
Mary Burgess, BCcampus

This keynote will focus on the key ingredients to making decisions about pedagogically effective uses of educational technology that benefit learners, faculty and institutions. By taking a broader view of factors that impact the use of educational technology, we will explore how to navigate decision making and evaluation processes for individuals and institutions.

2:15 – 3:15 — Concurrent Session One

60-minute Interactive Workshop (Regina Room)
Linking Learning Communities with Stories
Nancy Carswell, Saskatchewan Polytechnic

When was the last time you read or included a story in an online course? Typically, when a course goes online, stories get discarded because the writing takes "too long" or because the stories told in the classroom are "personal." Discarding stories is tragic because stories create suspense that draws learners' attention, plus, experiencing stories together connects a learning community.

Stories don't take "too long" if you use Randy Olson's rapid "And-But-Therefore" (ABT) story formula. In the beginning the "ANDs" create an ordinary world. "BUT" is a fulcrum in the middle that poses a question. "THEREFORE" answers the question ending the story. Writing an ABT sentence ensures your story is a story and speeds up your writing.

The "personal" stories told in the classroom are true and truthful but stories need only be truthful. For example, Joe approached Bob, his parole officer, for a meeting AND Bob wanted to say no. Bob ignored his gut feeling AND Bob and Joe went into Bob's office. Bob entered first AND walked across the room to his desk AND sat down. Joe pulled out a gun AND stood blocking the door. Bob pressed his alarm button BUT no one came. THEREFORE …. (Now you have to attend the session to find out the ending.)

In the session, you will see how this story became a touchstone for learning activities that supported the course outcomes. Then, following the rules of good improvisation, we will generate stories and explore how to integrate content. You will return to your students ready to apply the ABT formula to serve up stories that engage learners and build shared connections in your learning communities. As a bonus, you will find you can help your students become better storytellers too.

References:
Ohler, J. (2008). Digital storytelling in the classroom: new media pathways to literacy, learning, and creativity. Thousand Oaks, CA: Corwin Press.
Olson, R., Barton, D., & Palermo, B. (2013). Connection: Hollywood storytelling meets critical thinking. Los Angeles: Prairie Starfish Productions

60-minute Interactive Workshop (Wascana Room)

Creating Learning Communities with High Altitude Balloon Launches Using Open-Source Technologies

David Gerhard and Stephen Cheng, University of Regina

Stratosphere balloon projects have been used to engage students building learning communities across the United States in the past few years. Straub et al. (2013) use the high altitude balloon project to inspire middle school students in engineering and science. Voss et al. (2011) incorporate high altitude balloon launches in the introductory astronomy class. Recently, Coleman & Mitchell (2015) implement the high-altitude balloon project into atmospheric science classes to motivate undergraduate students improving attendance and increasing enrollment of their program. At the University of Regina, our National High Altitude Balloon Experiment Program began as a class project in a computer science course that gives students opportunity to build electronic gadgets using open source technologies.

Following the initial success of the class project, we have teamed up with Science Rendezvous, post-secondary institutions, middle and high schools, school divisions, and aboriginal communities to launch high altitude balloons to the stratosphere to study the environment. In 2015, sixteen helium balloons were successfully launched and hundreds of high school and postsecondary students across Canada have been connected to do environmental research. Recently, we sent out invitations to Saskatchewan high schools to participate in the balloon launches in 2016; 48 schools have shown interest to participate. To create a Canada-wide learning community, we have created the s2ss2s.ca website for our partners to share environmental data and video footage collected during the balloon journey.

In our interactive workshop, we will demonstrate how the balloon experiment has been successfully used to engage K-12 and post-secondary students building learning communities. Participants will see the amazing near-space video footage and the
environmental data collected with our low-cost turnkey open source technologies; they will learn how agriculture and industry would affect the environment of their communities. For example, carbon monoxide concentration in Regina is higher than the
rural area.

References:
Coleman, J. S. M., & Mitchell, M. (2015). Active learning in the atmospheric science classroom and beyond through high altitude ballooning. Journal of College Science Teaching, 44(2), 26-30.
Straub, J., Ingwalson, G., & Fevig, R. (2013). A design for inspiring students with near-space exploration. Journal of Aviation/Aerospace Education & Research, 23(1), 35-48.

Voss, H. D., Dailey, J., & Snyder, S. J. (2011). High-altitude balloon launches and hands-on sensors for effective student learning in astronomy and STEM. In Earth and Space Science: Making Connections in Education and Public Outreach, 443, 340.

60-minute Panel Discussion (CTL Instructional Space)

We Synch or Swim Together – Panel on Synchronous Activities in Online Learning

Gregory Bawden, Michelle van Ginneken, Erin Beckwell, Leah Knibbs and Ken Kolb, University of Regina

Often times students may feel isolated when taking online courses. Introducing synchronous elements can increase student-to-student and student-to-instructor engagement and help establish a positive learning environment. Panel participants from various disciplines will share how they used synchronous elements [Adobe Connect, Zoom, etc], and touch upon successes and challenges within their online courses. Some questions panelist will consider are:

• Why did you use a synchronous element in your online course? How did this element support your class learning goals?
• Was your course improved? Not improved with this strategy? Do you feel you had increased participation in other areas of
the course or in other courses without synchronous activities?
• How did this solution help student learning? Did you hear positive or negative feedback from your students.
• Was there any active learning or was it used for content delivery? Or both?
• Have you used a synchronous tool for student assessment? Was it successful?
• Did you notice a difference in your student learning or team building within the class? Do you feel the synchronous element
improved student connections or were students frustrated?
• Did you have support or other preparations to make this happen? If so, what kind?

References:

Yamagata-Lynch, L. (2014). Blending online asynchronous and synchronous learning. International Review of Research in Open and Distance Learning, 15(2)

Yuan, J., & Kim, C. (2014). Guidelines for facilitating the development of learning communities in online courses. Journal of Computer Assisted Learning, 30(3), 220-232. Available at http://onlinelibrary.wiley.com/doi/10.1111/jcal.12042/full.

Tucker, S. Y. (January 2012). Promoting Socialization in Distance Education. Turkish Online Journal of Distance Education, 13(1).

Murphy, E., & Ciszewska-Carr, J. (2006). Landscape without bearings: Instructors' first experiences in Web-based synchronous environments. First Monday, 11(3).

3:15 – 3:30 Coffee break (Regina Room)

3:30 – 4:30 (5:00) Concurrent Session Two

90-minute Interactive Workshop (Regina Room)

The Educational Technology Critique (ETC) Studio: Creating a Makerspace Community for Pre/In-Service Teacher Training

Marguerite Koole, Jordan Epp, Robert Heppner, Hossain Mohamed and Jay Wilson, University of Saskatchewan

A makerspace is “a place where young people have an opportunity to explore their own interests; learn to use tools and materials, both physical and virtual; and develop creative projects” (Fleming, 2015, p. 5). It is a place where learners can create new things and develop skills in an environment promoting discovery and problem-based learning. In these spaces, people can engage in traditional crafts and/or cutting-edge electronics and digital creations. The availability of digital

computing technologies and online, networked communities allow sharing, collaboration, and even distribution with others located in distant communities (Anderson, 2012, Dougherty, 2012).

In light of the benefits of makerspaces for creative problem solving and the need for technological knowledge in today's economy, education faculties need to help teachers develop interest and confidence in integrating technology in their teaching praxis. Of the makerspace literature in the field of education, most research is focused on learning outcomes of kindergarten to grade 12 (K-12) students. So far, we have not been able to locate research designed to examine makerspace training of pre-service and in-service teachers.

The primary purpose of our project is to initiate a makerspaces for K-12 teacher training. On the research-side, our goals are 1) to measure the effects of participation in makerspace workshops on in-service and pre-service teachers' perceptions of technological self-efficacy and 2) to explore how teachers could use makerspace technologies and environments for teaching and learning.

For our TLT workshop, we will open with a discussion of the makerspace movement through a hands-on exercise using VR and the participants' smartphones/tablets. Then, sorted into groups, participants will move from table to table to test and discuss various makerspace-amenable technologies/activities. Participants will be encouraged to share their makerspace experiences—positive and negative.

References:

Anderson, C. (2012). Makers: The new industrial revolution. Toronto, Ontario: McClelland & Stewart.

Davee, S., Regalla, L., & Chang, S. (2015). Makerspaces: Highlights of select literature. Retrieved from http://makered.org/wp-content/uploads/2015/08/Makerspace-Lit-Review-5B.pdf

Fleming, L. (2015). Worlds of making: Best practices for a makerspace for your school. Thousand Oaks, CA: Corwin: A SAGE company.

Libow Martinez, S., & Stager, G. S. (2013). Invent to learn: Making, tinkering, and engineering in the classroom. La Verne, TN, USA: Lightning Source Inc.

60-minute Interactive Workshop (Wascana Room)

Educators in a Digital World: Social Media, Connected Learning, and Teacher Identity

Katia Hildebrandt, University of Regina

In a world where our identities are increasingly public and digitized, many teachers are afraid of saying or doing the "wrong thing" online for fear of tarnishing their professional identity. Avoiding online spaces entirely, however, is less and less feasible and also prevents teachers from modelling positive digital identity, taking up the many advantages of networked learning, and demonstrating digital citizenship. In this workshop, educators will explore the incredible benefits of engaging professionally in social media and will be introduced to variety of tools and techniques for building a positive digital presence. As well, participants will consider the implications of digital participation for social justice issues and learn how to leverage online presence to work towards greater societal equity.

Participants are encouraged to bring a laptop, tablet, or other device.

References:

boyd, d. (2008a). Social network sites as networked publics: Affordances, dynamics, and implication. In Z. Papacharissi (Ed.), A networked self: Identity, community, and culture on social network sites (pp. 39-58). New York, NY: Routledge.

Brown, J. S., & Adler, R. P. (2008). Minds on fire: Open education, the long tail, and Learning 2.0. EDUCAUSE Review, 43(1), 16–32.

Veletsianos, G. (2014, January 13). The fragmented educator [Web log post]. Retrieved from

http://www.veletsianos.com/2014/01/13/the-fragmented-educator/

Wellman, B. (2002). Little boxes, glocalization, and networked individualism: From little boxes to social networks. Revised
Papers from the Second Kyoto Workshop on Digital Cities II, Computational and Sociological Approaches. Retrieved from
http://homes.chass.utoronto.ca/~wellman/publications/littleboxes/littlebox.PDF

60-minute Interactive Workshop (CTL Instructional Space)

Stepping Up, Stepping In: Understanding Student Needs in Distance Education – An Example from A Saskatchewan Regional College

Brandi Bell, Northlands College and Tobias Sperlich, University of Regina

Students in distance education, particularly in remote areas such as northern Saskatchewan, face specific and often unusual sets of challenges. Identifying and addressing these challenges can be difficult for instructors normally based in locations that are not only geographically removed from delivery sites, but can also differ vastly from them on economic, cultural and educational grounds. Dare, Zapata and Thomas (2005) have argued that "in order to understand and meet the needs of the distance learning population, student affairs administrators must partner with our colleagues in the fields of technology and distance education". The system of Saskatchewan regional colleges and their satellite sites offers a unique additional opportunity to understand and meet these needs. Northlands College (La Ronge), for example, employs a number of student advisors who are intimately familiar with the daily lives of northern students and the challenges they face in their studies at a distance. Northlands College has also spent considerable time devising programs and mechanisms to improve student success and alleviate the complications that stem from living and learning in remote, northern communities.

This workshop will introduce the realities of living and studying in northern Saskatchewan. We will share our experiences engaging with students from various Northlands College campuses, both from the perspective of a student advisors and that of a distance education instructor. We will also introduce and discuss some of the formal and informal mechanisms found successful in providing student supports. Finally, we encourage discussion as well as the sharing of experiences, challenges and successes of all workshop participants in an effort to identify further mechanisms for improving student achievement in distance education.

References:

Dare, L.A., Zapata, Lisa P., and Thomas, A. G., 2005. "Assessing the needs of distance learners: A student affairs perspective", New Directions for Student Services 112:39-54.

Floyd, D., and Casey-Powell, D., 2004. "New Roles for Student Support Services in Distance Learning." In B. L. Bowler and K. P. Hardy (eds.), From Distance Education to ELearning: Lessons Along the Way. New Directions for Community Colleges, no. 128. San Francisco: Jossey-Bass.

O'Shea, S., Stone, C. and Delahunty, J., 2015. "'I 'feel' like I am at university even though I am online.' Exploring how students narrate their engagement with higher education institutions in an online learning environment", Distance Education 36(1):41-58.

May 3, 2016

7:30 – 8:30 Breakfast (University Club) for all conference registrants
Instructional Designer Get Together

8:45 – 9:45 Second Keynote Presentation (RIC 119)
The Power & Promise of Open/Connected Learning
Alec Couros, University of Regina

In recent years, we have seen massive advances in technology that have brought enormous changes to the tools we use and the content we can now access instantly. In turn, these changes have shaped and shifted every aspect our lives: today's world is truly a digital and networked global culture, far different from anything we have previously known. This new reality has profound implications for teaching and learning; indeed, the pedagogical possibilities of Web 2.0 tools seem limitless, yet our education systems have been reluctant to adapt to the connected world. In this presentation, Dr. Couros describes our changed (and changing) world and explores the ways that educators might take up the tremendous affordances of technologies to transform their practice, prepare students for a rapidly changing future, and create open and connected educational spaces that embody the best of our digital reality.

9:45 – 9:55 Coffee break (Regina Room)

9:55 – 10:40 Concurrent Session Three

45-minute Research Presentation (Regina Room)
Online vs. Face-to-Face Supplemental Instruction
Myra Zubot-Mitchell, Saskatchewan Polytechnic and Kerri Finlay, University of Regina

Supplemental Instruction (SI) has been proven to be an effective tool for students in challenging first year science courses (Congos and Schoeps 1993; Ning and Downing 2010). The standard model for SI delivery involves hiring upper-year undergraduate students to attend lecture, and develop materials for peer-based study sessions in a face-to-face setting. In contrast, live web-conferenced SI sessions that students can access from a remote location, or from their own computers or mobile devices, are relatively new, and offer the option to provide this valuable resource to students who may not have the flexibility to attend additional sessions at the University, or who live and/or study at a distance from the traditional campus. The effectiveness of online SI, however, relative to traditional face-to-face offerings is not well known.

In 2015, we offered both live web-conferenced and face-to-face SI sessions for students enrolled in a first year Human Anatomy and Physiology course at the University of Regina. In addition, we recorded the live web-conferenced sessions for students to watch later. We evaluated the effectiveness and perceptions of the different modes of SI offerings by measuring attendance, comparing final grades, and surveying the students for their perceptions of the different offerings. Preliminary results suggest that both online (live and recorded) and face-to-face Supplemental Instruction offer valuable benefits to students in terms of increasing their confidence with the material and improving exam grades, but online SI was generally perceived to be less interactive and provided less of a social side to studying course material. Despite the downsides of online SI, it may provide a viable alternative for offering SI when traditional face-to-face offerings are not possible. In addition to discussing our research on the effectiveness of online SI, we will discuss our findings regarding best practices for web-conferenced SI.

References:
Congos, D. H., and Schoeps, N. (1993). Does supplemental instruction really work and what is it anyway? Studies in Higher Education, 18(2), 165-176.

Ning, H.K. & Downing, K. (2010) The Impact of SI on learning competence and academic performance: Studies in higher education.35 (8)921.

45-minute Research Presentation (Wascana Room)
Open Textbook Adoption on the Prairies: Initiatives and Support at One University
Heather Ross, Nancy K. Turner and Jay Wilson, University of Saskatchewan

In the past ten years, textbook costs have risen more than four times the rate of inflation in the United States (Senack & Donoghue, 2016), with similar increases occurring in Canada. While commercial textbook costs are on the rise, alternatives are available.

Throughout the 2015-2016 academic year, instructors at the U of S made use of open textbooks for at least seven courses, saving students, overall, approximately $90,000. These adoptions were across multiple colleges including Arts and Science, Agriculture and Bioresources, and the Edwards School of Business.

Open textbooks are digital texts that carry Creative Commons or other open licenses that usually allow for not only free access, but also the ability to adapt and redistribute the adapted materials. The open textbooks used at the U of S overwhelmingly come from repositories with texts written by instructors and peer reviewed (e.g. BCcampus, OpenStax, the Open Textbook Library).

This presentation will explore how open textbooks have been introduced at the U of S, how adoptions are supported, and what plans the university has for expanding the use of these materials to replace commercial textbooks. The theory of diffusion of innovations (Rogers, 2003) will be used to examine the anecdotal information gathered on the approach taken to support provisions across the stages of adoption (e.g. Knowledge, Persuasion, Decision, Implementation, and Confirmation) and consider why instructors at the U of S may adopt OER.

References:
Rogers, E. (2003) Diffusion of innovations (5th edition). New York: Free Press.

Senack, E. and Donoghue, R. (2016) "Covering the cost: why we can no longer afford to ignore high textbook prices". Retrieved from http://studentpirgs.org/reports/sp/covering-cost.

45-minute Research Presentation (CTL Instructional Space)
Example of a Flipped Classroom using Brightspace and Synchronous Classroom Time
Linda Aksomitis, Saskatchewan Polytechnic

This session details the delivery of a completely flipped course, LIBR-2081 Marketing the Library & Information Services (course credit through Red River College in Manitoba), supported with online materials in Brightspace as well as Web materials, and a three-hour weekly synchronous class. Students in the course had previously been attending class one night a week for three hours, so this was their first experience with a flipped classroom. They had varying degrees of comfort in the Brightspace online environment—and with the software used to create assignment promotional products—as the course could be taken at the beginning or end of their program. The course was delivered in the fall of 2012, and again in 2013, in this format.

A number of assessments were included in the course including written materials, software created product, reflection journal, and an in-class synchronous presentation based on gamification of real-life scenarios. The assessments were all linked to a single project on marketing the library, with each component ensuring active learning of the individual outcomes. Most students were already working or volunteering in some capacity in libraries, so the main parameters of the project were broad enough to make it directly applicable for all students.

The session will examine the rationale for course design, along with "lessons learned" from delivering it on two different occasions. It will also provide examples of resources used in Brightspace to prepare students for the synchronous classes, along with the classroom plans detailing how learning outcomes were met and technology was integrated.

10:45 – 11:30 Concurrent Session Four

45-minute Interactive Workshop (Regina Room)

Online or Face to Face, Early Engagement is Critical to First Year Experience
Nola Joorisity, Wallace Lockhart and Karen Hackl-Graham,University of Regina

Theoretical and Pedagogical Background:

ENGAGEMENT: The UK "What Works" project (Thomas, 2012) concluded early engagement is critical to retention. Yorke (2014) developed a model to assess student engagement, belongingness and self-confidence.

AUTONOMOUS LEARNING: Online or in class, students need to develop autonomous learning skills. MacAskill & Taylor (2011) developed measures to assess.

TECHNOLOGY: Kennedy (2008) refuted Prensky's (2001) assumptions about "digital natives". suggested they play and are entertained, but found a gap in functional learning skills. ECAR (2015) concluded that although students own more internetcapable devices, technology resources are not realizing their potential in post-secondary education.

PEDAGOGY: Lockhart et al (2014) examined student experience through their transition year into university, with focus on engagement, autonomous learning and the use of technology in course pedagogy.

OUR TLT WORKSHOP
With these models as a foundation, we will lead a workshop exploring our experiences using technology and integrated course co-ordination in student engagement and success for a first year course. Key components of our discussion will include:
- Textbook supported online tests and learning games
- Pre-class online assignments (flipped classroom)
- Use of Turnitin
- The U of R App
- Contrast in-class and online class formats
- Videos developed for online and used to reinforce in-class concepts
- Challenges with managing diverse faculty and students
- Results of our research into student engagement and outcomes
- We are mentoring student TAs to play a learning and development role

Our presenters include the Intro Business Course Co-ordinator and our Teaching Assistant Co-ordinator, both of whom have had leadership roles through recent years of course development. The workshop will include both sharing of our results and an open discussion so we can all share our experiences, challenges and successes.

References:
Lockhart, W, B. Schumacher, B. Anderson, K. McGovern, D. Balas, "Students in Transition: How they Experience First Year in University". 2014 Symposium on Scholarship of Teaching and Learning, Mount Royal University, Nov 6, 2014

Macaskill, A. & E. Taylor (2010). The development of a brief measure of learner autonomy in university students. Studies in Higher Education, 35(3), 351-359.

McGovern, K, W. Lockhart (2015). Guiding a diverse mix of first-year business students: implications for university administrators, instructors and students Tertiary Education and Management, Volume 21 Issue 3 pages 200-214.

Yorke, M. (2016). The development and initial use of a survey of student 'belongingness', engagement and self-confidence in UK higher education. Assessment and Evaluation in Higher Education. 41, 1, p. 154-166 13 p.

45-minute Interactive Workshop (Wascana Room)
#disrupting#postsecondary#teaching
Sandra Bassendowski and Pammla Petrucka, University of Saskatchewan

In early 2015, the Gates Foundation released the results of a survey that focused on faculty attitudes toward new teaching technologies and approaches. The results suggest that faculty members are aware of new developments in teaching, but that less than half implement them in their classrooms (FTI Consulting 2015). Approximately 29% of respondents said that they had adopted a flipped classroom and 27% had used open source material to augment course content (FTI Consulting). Although most faculty members were familiar with a variety of approaches, they often believed the approach was not relevant or that they had not yet tried it. For instance, the majority of faculty said that they were familiar with clickers, team teaching, and social media but had not used them or felt that they were not pertinent to their classes. So what does this mean for postsecondary educators? How are they to select from the palette of tools that are available and move them into their classrooms to support communities of learners (Bass, 2012; Bassendowski & Petrucka, 2015; Wheeler, 2013)? What criteria should drive the selection of tools and approaches? And what should educators consider in terms of challenges and opportunities when it comes to using new teaching technologies and approaches? Classrooms are changing, the student body is changing, and pedagogical beliefs are changing. The diversity and information age mindset of today's students have led many educators to take a critical look at ways to enhance and/or disrupt the teaching and learning process through the integration of technology because "...for disruptive innovations to flourish, they must be packaged in a way that delights customers" (Christensen, Aaron, & Clark, 2003 p. 31). This session will provide an opportunity for participants to be involved in a few of the innovative and disruptive strategies that the presenters have been used to connect and engage undergraduate and graduate nursing students in a variety of teaching and learning spaces.

Bass, R. (2012). Disrupting ourselves: The problem of learning in higher education. EDUCAUSE Review, March/April, 23–33.
Available: http://www.educause.edu/ero/article/role-disruptive-technology-future-higher-education

Bassendowski, S., & Petrucka, P. (2015). Disruptive by design: Making informed choices about the use of technology for teaching. Ubiquitous Learning, 8(4), pp. 15-22. Available: http://ijq.cgpublisher.com/product/pub.186/prod.263

FTI Consulting 2015. U.S. 'Postsecondary Faculty in 2015', viewed 14 February 2015: <http://postsecondary.gatesfoundation.org/wp-content/uploads/2015/02/US-Postsecondary-Faculty-in-2015.pdf>.

Wheeler, S. (2013). The meaning of pedagogy. http://steve-wheeler.blogspot.ca/

11:30 – 12:30 Lunch (University Club)
Open Textbooks and Other OER Get Together

12:40 – 1:25 Concurrent Session Five

45-minute Research Presentation (Regina Room)
Development of an Open Source Environment for Mathematics and Science Textbooks
Robert Petry, Campion College at the University of Regina

Creation of open textbooks and resources in mathematics and the sciences presents particular challenges. The desirability of keeping texts truly open informs the decision to use open source software tools (such as LaTeX) in their creation. Development of ancillary resources (test banks, simulations, etc.) on open platforms (such as Moodle) or utilizing free mathematics and science software is similarly desirable. This talk will look at issues regarding this development process and how the potential to create a custom open source software platform based on Debian Linux might be used to disseminate the necessary development tool sets to textbook creators/modifiers as well as the final open resources to educators and students.

References:
Mittelbach, F., & Goossens, M. (2004). The latex companion (2nd ed.). Boston, Massachusetts: Addison-Wesley.

Stallman, R. M. (2010). Free software, free society: Selected essays of Richard M. Stallman (2nd ed.). Boston, Massachusetts: GNU Press.

45-minute Research Presentation (Wascana Room)

Dear LMS, I Think We should See Other Platforms

Jordan Epp, University of Saskatchewan

SITES.USASK.CA was created as an online curriculum alternative to the Learning Management System. Using the WordPress platform as the foundation the Instructional Design Team of the DEU (Distance Education Unit) is able to offer flexible, modern, and mashable instructional design solutions for colleges and departments looking for innovation in their distance delivered course work. These tools, paired with a changing paradigm of online instruction, allow instructors and designers to collaborate without system enforced restrictions and rethink how we learn from one another online. Social, interactive, and collaborative connections make use of the world wide web by removing the confines of the standard digital classroom. Beginning in 2014 we began piloting several courses and course specific resource sites and experimenting with what online learning can look like. This presentation will look at the benefits we've seen by adding this platform to our suite of institutionally supported tools and address some of the workflows and models of tool mashing we've found successful.

References:

Crosslin, Matt. (2014, April 11). The LMSification of the Education Narrative Retrieved April 14, 2014, from http://www.edugeekjournal.com/2014/04/11/the-lmsification-of-the-education-narrative/

Groom, Jim. (2014, April 15). Considering Running Domain of One's Own on Your Campus? Retrieved April 15, 2014, http://bavatuesdays.com/considering-running-domain-of-ones-own-on-your-campus/

Groom, Jim. (2014, March 7). How the Web was Ghettoized for Teaching and Learning in Higher Ed? Retrieved April 2, 2014, from http://bavatuesdays.com/how-the-web-was-ghettoized-for-teaching-and-learning-in-higher-ed/

Groom, Jim. (2014). Reclaim Learning: A Domain of One's Own [Keynote Recording]. Retrieved from http://events.mediasite.com/Mediasite/Play/141448bc55bd4b39b23ed582e3788bc81d?playFrom=1218487&autoStart=true&popout=true

45-minute Research Presentation (CTL Instructional Space)

Providing Personalized Advice to Students on a Large Scale

Paul Dick, Ryan Banow and Ken Wilson, University of Saskatchewan

Providing prompt feedback to individual students is recognized as a principle for success in undergraduate education (Chickering & Gamson, 1987). Unfortunately, personalized student feedback is a significant demand on instructor time and resources that escalates to unattainable levels in large-enrollment courses. To prevent losing students in the crowd, the Learning Analytics team and the Gwenna Moss Centre for Teaching Effectiveness have developed the Student Advice Recommender Agent, or SARA. SARA is an automated system that provides students with personalized advice directly, reducing instructor time requirements while increasing student engagement.

Every week within the learning management system students are provided with a new "Note from SARA" - a compilation of short "advice strings" that are individually targeted based on student demographics, past and current academic achievement, and student responses to other standardized instruments. This advice includes weekly reminders, directions to learning resources, notifications of relevant events, and motivational images and messages. SARA also functions as an early alert system to identify academic distress; based on a number of variables, an algorithmic model calculates each student's predicted final grade twice per semester, and significant deviations can be used as a target for more urgent advice. This allows SARA to provide under-achieving students with directions to additional learning resources or academic advisors, while also encouraging and nurturing students who exceed expectations. This SARA messaging to students is inline with Chickering and Gamson's principles of communicating high expectations and emphasizing time on task (1987).

SARA has been used for two years in multiple sections of a large first year Biology course (~1600 annual enrollment) with great success, and is expanding to other courses at the U of S. This presentation will explore the usage of this system in context and the impact on students.

Reference:
Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. AAHE bulletin, 3, 7.

1:30 – 2:15 Concurrent Session Six

45-minute Interactive Workshop (Regina Room)

The Growth of Socially Mediated Teacher Professional Development - The Development of an Educational Twitter Chat

Kelly Christopherson, University of Regina

Educational twitter chats have grown in popularity. In Saskatchewan, #saskedchat is a twitter chat which focuses on connecting educators from the province and opening discussions, sharing and curation of resources related to education. The chat continues to evolve and grow, including taking place during U of R classes to introduce and demonstrate the use of the chat for pre-service teachers and graduate students. The workshop will introduce the twitter chat, demonstrate how to take part in a twitter chat and explore possible ways that teachers can utilize a chat in their own classrooms.

References:
Davis, M. R. (2011). Social Media Feeds Freewheeling Professional Development - Education Week, 31(9), 13-14. Retrieved from http://www.edweek.org/ew/articles/2011/10/26/09edtech-social.h31.html

Baker-Doyle, K. J. (2011). The networked teacher : How new teachers build social networks for professional support New York, NY: Teachers' College Press

Carpenter, J.P., & Krutka, D.G. (2014). How and Why Educators Use Twitter: A Survey of the Field. Journal of Research on Technology in Education, 46(4), 414-434.

Goa, F., Luo, Tl, & Zhang, K. (2012). Tweeting for learning: A critical analysis of research on microblogging in education published in 2008-2011 British Journal of Educational Technology, 43(5), 783-801. doi:10.1111/j.1467-8535.2012.01357.x

45-minute Interactive Workshop (Wascana Room)

Integrating the Reflect Rubric into Online Learning Personal Reflection Journals for Health Professionals studying the Role of the Practitioner in Indigenous Wellness

Daniel Mittelholt, Stacey Lovo Grona and Heather Stenerson
Continuing Medical Education
University of Saskatchewan

In 2014 the CMPA provided a grant to conduct a needs assessment on Indigenous healthcare safety by Continuing Medical Education and Continuing Physical Therapy Education. The objective of this study was:

To identify health providers' continuing Interprofessional cultural safety education needs from the perspective of rural and remote Indigenous community members. The results of this study identified seven key areas that needed to be developed:

1. Cultural understanding/awareness
2. Traditional medicines
3. Healing
4. Barriers to accessing care
5. Respect for elders
6. Communication

7. Empowerment/community development

CME and CPTE have taken the results here and developed an online course broken into 3 major modules and further refined into 8 main topics. The focus of this presentation today will be on the integration of the REFLECT™ rubric developed out of Brown University into the Journal tool built into Blackboard. We will discuss the mechanics of setting up the tool, how easy it is to work with and how it is functioning to provide excellent feedback from our learners. Again, we will use the journals written by our learners in the course (1 journal for each topic from each learner) to qualitatively analyze whether their perspectives and attitudes have changed in regard to the health care of their indigenous patients. Our hope is that at the completion of this course the learner will be able to develop a communication plan that will integrate the seven key areas mentioned above into their day-to-day interactions with their Indigenous patients and ultimately result in improved overall health care for indigenous populations.

References:
Reis, MD, MHPE - Fostering and Evaluating Reflective Capacity in Medical Education: Developing the REFLECT Rubric for Assessing Reflective Writing. Academic Medicine, 2012; 87:41-50

Supplemental digital content for Wald HS, Borkan JM, Taylor JS, Anthony D, Reis SP. Fostering and evaluating reflective capacity in medical education: Developing the REFLECT rubric for assessing reflective writing. Academic Medicine, 2012:87(1).

Bureau of Statistics. Saskatchewan Aboriginal Peoples 2011 National Household Survey. Government of Saskatchewan, 2011. http://www.stats.gov.sk.ca/pop/.

Health Council of Canada. Empathy, dignity and respect: Creating cultural safety for Aboriginal people in urban health care. December 2012.

Statistical profile on the health of First Nations in Canada. Health Canada. http://www.hc-sc.gc.ca/fnihspni/ pubs/gen/stats_profil_e.html.

Thomas JW, Perchansky R. Relating Satisfaction with Access to Utilization of Services. Medical Care.

45-minute Interactive Workshop (CTL Instructional Space)

A Critical Approach to Instructional Design

Stephen Wihak and Kirsten Hansen, University of Regina

Our critical perspective on education rests on the argument that educational institutions often support the maintenance and reproduction of social structures that favour certain groups over others, resulting in widespread social injustice. The application of a critical lens to understanding the changing role of technology in the university raises an important question: is technology within the university becoming a tool to support privilege rather than to end oppression?

Individual and institutional pressures, including the current avalanche of available technologies and the increasing caché in adopting the 'tool of the day, drive us to seek solutions to pedagogical problems through technology without stopping to consider the social justice questions inherent in such decisions. Often the discourse on pedagogical technology is dominated by slick presentations from vendors, offers of comprehensive packages of bundled software, questions of ongoing tech support, previous adoption by other (rival) institutions, budget-driven numbers games, and economies of scale. In this scenario, the 10 Questions proposed by Educause for Tech Adoption (http://er.educause.edu/articles/2004/1/adopting-digitaltechnologies-in-the-classroom-10-assessment-questions) often become secondary considerations. But beyond that, we ask an eleventh question: to what extent must we all be advocates for socially just technology applications in the contemporary university?

This workshop will offer opportunities to discuss some of the areas of concern around the intersection of technology and socially-just teaching and learning: profit, corporate oligarchy, neo-

colonialism, privacy concerns suggestive of Orwellian nightmares, and the digital divides of gender, race, and class. Whether we are making decisions for our own teaching, recommending products to others, or thinking at an institutional or organizational level, we can all benefit from taking a step back to ask some important social justice questions that may not previously have been part of how we made our choices. We invite you join in a dialogue around the aforementioned matters.

References:
Gramsci, A., & Buttigieg, J. A. (1992). Prison notebooks (Vol. 2). New York, NY: Columbia University Press.

Habermas, J. (1970). Technology and science as ideology. Toward a rational society. Boston: Beacon Press.

Ragnedda, M., & Muschert, G. W. (2013). The digital divide: The Internet and social inequality in international perspective (Vol. 73). Florence, KY: Routledge.

Wajcman, J. (1991). Feminism confronts technology. University Park, PA: Penn State Press.

2:15 – 2:25 Coffee break (Regina Room)

2:25 – 3:10 Concurrent Session Seven

45-minute Interactive Workshop (Regina Room)
Using a Variety of Teaching Tools in Science Courses at the First Nations University of Canada
Fidji Gendron and Malin Hansen, First Nations University of Canada

At the First Nations University of Canada, we are committed to deliver culturally-relevant scientific learning to all of our students. A variety of teaching tools are used to enhance student participation in Biology and in our new Indigenous Environmental Science courses. In this interactive workshop, we will demonstrate how these tools are used and provide examples of activities and assignments. These tools include Voicethread presentations, the Livescribe pen, case studies on Indigenous issues centered on the environment with forum discussions, and the inclusions of videos with Elders sharing stories and teachings about materials covered in lectures. We use these teaching tools in both online and face-to-face courses. It is hoped that these teaching tools will facilitate student participation and engagement and provide avenues for braiding Indigenous knowledge and Western science in our courses.

References:
Andresen, M. A. (2009). Asynchronous discussion forums: success factors, outcomes, assessments, and limitations. Educational Technology & Society, 12 (1), 249–257.

Hogue, H.H. (2012). Interconnecting Aboriginal and Western paradigms in post-secondary science education: an action research approach. Journal of the Canadian Association for Curriculum Studies, 10(1), 77-114.

Kimmerer, R. W. (2002). Weaving Traditional Ecological Knowledge into Biological Education: A Call to Action. BioScience, 52 (5): 432-438.

Popil, I. (2011). Promotion of critical thinking by using case studies as teaching method. Nurse education today, 31 (2), 204–207.

45-minute Research Presentation (Wascana Room)
Online Student and Instructor Feedback
Darrel Lawlor, Michelle Van Ginneken and Gregory Bawden, University of Regina

For the past three years, the Instructional Design (ID) Team at the University of Regina (U of R) have engaged in an ongoing action research project to assess the experiences of students taking fully online U of R courses with the hope of creating a better online learning experience for students. Research has been gathered from a combination of two focus groups and more recently, an e-survey. Approximately 40 off-campus and on-campus students were part of the focus groups. In 2015, we decided to administer an e-survey instead of conducting additional focus groups with the hope of getting a better response rate. The e-survey was sent to 2,932 unique online students of which 655 responded.

In the fall of 2015, an e-survey with similar questions was sent to academic members who had developed and delivered one or more fully online course(s). The purpose of the survey was to help better serve the needs of academic members who developed and delivered one or more fully online course(s) and to find out any disparities that existed between student and instructor experiences online.

Some of the questions asked in the each of the two surveys include the following.
• What features/tools/activities/design elements in online courses worked well and not so well? What could be improved?
• Do students/instructors use mobile devices and if so, for what purpose?
• What is your preferred method of learning material - audio/video, reading, individual or group activities, projects, exams?
• Why did you take/develop an online course(s)?
• For instructors, what has your experience been working with an instructional designer, assistant instructional designer and graphics/web developer?

In this session we will show results from the two e-surveys and how these results compared and contrasted to our assumptions prior to conducting the research.

45-minute Research Presentation (CTL Instructional Space)
Learning Analytics Enable Curricular and Program Decisions
Jim Greer, Craig Thompson, Ryan Banow and Stephanie Frost
Learning Analytics Group
University of Saskatchewan

In this session we will present several tools that have been implemented and developed at the University of Saskatchewan to support data-informed decision making. Visualizations of student data, including demographics, grades, registration patterns, attrition and retention, flows through programs, and curriculum impacts have been our primary focus. Powerful interactive and animated visualizations can rapidly summarize large quantities of data and can move decision makers to action.

We will share our experiences with interactive dashboards, dynamic reports, and flow diagrams representing various aspects of institutional and student information. We will discuss how these visualizations can impact decision making at the curriculum and program level.

3:15 – 4:00 Concurrent Session Eight

45-minute Interactive Workshop (Regina Room)
Constructing Digital Identities and Personal Learning Networks: Supports in Becoming Anti-oppressive Educators
Meagan Dobson and Raquel Bellefleur, University of Regina

Developing a positive digital identity is critically important for pre-service teachers in order to gain employment and to model digital citizenship for students. Building a positive digital identity via multiple platforms provides ample opportunities for growth, reflection, and development of critical thinking skills. By selectively constructing personal learning networks, pre-service teachers can collaborate and connect with like-minded educators who offer continual support and allyship. However, constructing a PLN solely around like-minded educators enables pre-service teachers to

avoid discomforting knowledge. Therefore, in order to sustain opportunities for growth, pre-service teachers must be self-reflective and cognizant of inner resistance to knowledge when constructing their PLNs.

In the proposed presentation, we discuss the ways we have used a variety of platforms to build our digital identities in our journey from pre-service to in-service educators, both personally and professionally. More specifically, we outline the ways we have begun to construct ourselves as anti-oppressive educators in both on and offline spaces by engaging with discomforting topics such as privilege, racism, sexism, and mental health through Twitter and professional blogs. We will reflect on our process of becoming, examining the challenges we face and the benefits we receive through building personal learning networks. Moreover, we will share the ways in which we have transferred our experiences into our teaching, including using social media in the classroom, teaching about digital citizenship, and empowering our students to develop positive digital identities.

References:

Couros, A., & Hildebrandt, K. (2015). *Digital Citizenship Education in Saskatchewan Schools* (Canada, Government of Saskatchewan, Saskatchewan Ministry of Education). Retrieved April 12, 2016, from http://publications.gov.sk.ca/documents/11/83322-DC Guide - ENGLISH 2.pdf

Duckworth, S. (2015). The SAMR Model for Technology Integration [Digital image]. Retrieved April 12, 2016, from https://pbs.twimg.com/media/CBn_SauVIAE7WTE.jpg

Kumashiro, K. K. (2004). *Against common sense: Teaching and learning toward social justice*. New York: RoutledgeFalmer.

Marx, S. (2006). *Revealing the invisible: Confronting passive racism in teacher education*. New York: Routledge.

Ribble, M. (2016). Nine Themes of Digital Citizenship. Retrieved April 12, 2016, from http://digitalcitizenship.net/Nine_Elements.html

45-minute Research Presentation (Wascana Room)

Integrating Technology to Connect Post-Secondary Students with Enterprises in a Community

Aldene Meis Mason, Faculty of Business Administration, University of Regina

This session will present a real life experience in which a post-secondary business program created partnerships and mobilized resources from the business sector. New directions in business education include providing students with real world consulting projects to enhance their critical thinking skills (Cooper and Hanlon, 2012; Regale and Neck, 2012; Lefebvre and Redien-Callot, 2013). Nine businesses in the Town of Nipawin Saskatchewan agreed to have students in Business 400 - Strategy and GBUS/MBA 815 – Strategy do field work as teams of consultants to prepare strategic analysis reports. Nipawin is located 4 1/4 hours driving distance from Regina, therefore a technology enhanced community was created. The town and enterprises provided background information for posting to the UR courses website. The town's economic development officers and enterprise owners were connected to the website and participated with the students in discussion forums. They also had access to the course textbook, readings, and cases. The professor facilitated three one-hour meetings in the classroom between each student team and the enterprise owner using Skype and telephone technology. At the end of the semester, students made face-to-face presentations to the business owners and provided written consulting reports. The end of course evaluations indicated students found the course very interesting and had improved their research and critical thinking skills. None of the owners had previous post-secondary business training. Using follow-up interviews and surveys, the economic development officers and enterprise owners indicated they found this a beneficial experience as they were exposed to new concepts and they were able to implement recommendations to improve profitability and sustainability.

References:

Cooper, T. and Hanlon, D. 2012. “Bridging the divide: Enhancing real-world experience in a Management Consulting course.” Preparing Better Consultants. The Role of Academia. Ed. Susan M. Adams and Alberto Zanzi. Information Age Publishing. North Carolina. Pg. 19-39
Lefebvre, M.R. and Redien-Collot, R.. 2013. “How to Do Things with Words”: The Discursive Dimension of Experiential Learning in Entrepreneurial Mentoring Dyads”
Journal of Small Business Management 2013 51(3), pp. 370–393. doi: 10.1111/jsbm.12022

Regele, M. D., & Neck, H. M. (2012).”The entrepreneurship education subsystem in the United States: opportunites to increase entrepreneurial activity.” Journal of Business and Entrepreneurship, 23(2), 25-47.

45-minute Research Presentation (CTL Instructional Space)

Digital Smart Board for Masses - Next Revolution in Bringing Augmented Reality to our Classes

Daniel Soto Lopez and Mehran Mehrandezh, University of Regina

We present our research work on developing a cost-effective portable digital smart board that can turn a writing pad to a smart board by using an IR pen, and IR eraser, and an wii-based IR detector.

This was pioneered by Johnny Lee from Carnegie Melon University. He presented his invention in a TED talk in 2008. Many researchers from all over the world with expertise and/or interest in virtual reality, digital media, and smart teaching have joined in by contributing to the software development since then.

We have been trying to make the hardware design simpler and more accessible. Also, we have used mathematical tools to optimize the performance of the system and to make it more user friendly. Furthermore, our IR-detection/tracking algorithm can distinguish a physical "writing pen" from a physical "eraser" now. This way, the user can write on a board and erase the material as normally done in a classroom, without having to do any eye-hand coordination between the virtual and physical templates.

Also, our tracking algorithm provides a smooth tracking of the IR-pen and the IR-eraser's movement even if they are faded due to a line-of-sight occlusion. This has been possible by the use of a Kalman-filter-based motion predictor.

One key factor in optimizing the performance of the proposed smart board is to mount the IR detector in the best pose with respect to the writing board for optimal coverage and best view angle. For this, an extending arm with 3 revolute joints to hold the IR detector was used. The position and orientation of the IR detector attached to the end-effector of this robotic arm can be adjusted by the user. Two collimated laser lines projected from the IR-detector onto the writing board can be used to guide the IR detector to its best view point in a short time.

Reference:

Johnny Chung Lee, June 2008, “Low-Cost Multi-point Interactive Whiteboards Using the Wiimote” Retrieved from http://johnnylee.net/projects/wii/