Editorial: Education as Transformative Experience

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This eighth volume of CELT considers the transformation of our learning experiences, which was the theme of the 2014 STLHE conference in Kingston. The university or college is a place where students can re-create themselves, becoming the kind of person they wish to be, preparing themselves for a vision of where they are headed after their post-secondary education. Yet, many students do not approach their education in this manner; rather, they choose to go through their learning experiences simply as hoops to be jumped, courses to be checked off their list, with little cumulative learning (Smith, 1998) and no intention of attending to how they hope to transform themselves as people.

Today's student is typically characterized as a digital native having been raised in the digital environment of computers, tablets and smartphones, though this characterization is being challenged (Smith, 2012). Regardless, it is often assumed that current students are able to seamlessly navigate between their physical and digital lives with the internet as the constant interface between the two. The Internet, however, has been described as a distracting technology (Carr, 2010); students fool themselves into thinking that they can be efficient and effective by multi-tasking, yet it has been shown that time on task without the distraction of social media is what leads to deep learning (Weimer, 2012). Using the Internet as an educational technology raises an important issue: How does a distracting technology impact educators' desire to transform students' learning experiences? Is providing online texts with hyperlinks enabling the connection of different sources of knowledge leading to deep learning or is it distracting students from learning?

However, having access to the vast wealth of information available through Google Scholar, Wikipedia, or the myriad of online databases is of great value; we are able to research faster and more completely than if we had to flip through paper of individual articles and indices. In addition, there is value in integrating knowledge: finding and investigating the connections that exist among the academic disciplines. To some extent it might be argued that the Internet is breaking down the academic silos that have existed in academia for so very long (Brooks, 2012).

However, is connectivity worth it if in exchange we give up deep reflective analysis? We, as instructors, still need to design learning environments/experiences for our students that enable their deep consideration of our contemporary perspective of the world (Newstock, 2013). Perhaps this seeming dichotomy between connectivity and reflection is simply the tension that exists between breadth and depth of knowledge and understanding. Deep understanding requires considered focus on a very narrow topic. Yet breadth allows one to scan the horizon for connections to that knowledge.

What instructors and administrators must do is continually assess the educational value of a particular teaching strategy and how that will achieve a transformative learning experience. Technology for its own sake or for the sake of being efficient is the wrong frame of reference. Instead, instructors must consider what will produce a transformative experience that is an ontological condition for deep learning (Bramming, 2007). For example, at the Augustana Faculty of the University of Alberta, we have implemented a program in which we annually

assess how well we, as instructors, are inculcating our students with the skills we assert are embedded in our curriculum. Our Committee for Academic Skills Assessment facilitates the ability of faculty teaching in the individual degree programs to gather the data (student grades, assignments, exams) and consider whether it demonstrates our students' success at mastering thinking, research, and communication. This data enables us to make informed changes to the educational experiences of our students. Bramming (2007) argues that the nature of the educational experience must not be determined solely by students' satisfaction, because for transformation to occur, frustration, anger, and loss may be part of the learning process as students experience a deconstruction/reconstruction of their knowledge structure which forms the filter through which they view their world. Thus, real learning—transformative learning—alters the way we see the world.

At the 2014 STLHE conference in Kingston, ON, we gathered to consider how to transform our educational experiences. What teaching strategies and learning activities will provide the most fertile ground for our students to transform themselves into who they wish to be and provide them with the skills to flourish where and how they envision living their lives? How can we best provide for students a deep learning experience that will aid them throughout their life? How do we best give students the skills to connect and make sense of the growing tsunami of information that floods our lives? The scholarship of teaching and learning aims to answer these questions through reflection on our teaching and learning experiences and also by gathering data to provide evidence of what does produce the best educational environment; evidence we need to use to ground metacognition of our own teaching (Tanner, 2012). In the articles that comprise this eighth volume of CELT, authors have reworked their conference presentations into essays which examine these questions of educational transformation from different vantage points. The editors have collected this volume's articles into five sections: (1) Transforming Learning – Invited Papers, (2) Transforming through Metacognition, (3) Writing as Transformative Experience, (4) Supporting Students'

Transformative Experiences, and (5) Transforming Our Teaching.

The two invited papers are authored by the winners of the 2014 Alan Blizzard award and 3M National Student Teaching Fellows. In *Curricular and Co-curricular Leadership Learning for Engineering Students*, Doug Reeve and his colleagues describe their unique program at the University of Toronto which is designed to transform their students into leaders in engineering. Five of the 3M Student Fellows explain in *Initiating Innovation in Post-secondary Institutions* their visions to transform higher education in Canada. Both essays, in their own way, call for a transformation in education which involves teaching theory linked to practice with learning deepened through reflection on the experience. They thus advocate for higher education to make use of active learning strategies connected to metacognition of the experience.

Metacognition of learning enables students to become self-regulated learners (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010b) such that they no longer fool themselves into thinking they know something when they don't. Developing our metacognitive ability is what leads to expertise (Brown, Roediger, & McDaniel, 2014), but can only be developed in the context of learning something else (Girash, 2014): A course on metacognition will not promote metacognition. The four metacognitive articles discuss different approaches to becoming engaged in learning through heightened awareness of our thinking. In the *Interplay of Space, Place & Identity*, Alice Cassidy and her colleagues consider the role of place in our learning experiences by reflecting on the canoe trip in the St. Lawrence Islands National Park that occurred as a preconference workshop at STLHE 2014. They suggest that bringing students into the outdoors, or bringing the outdoors into the classroom, is an effective strategy to engage students in learning in the moment.

Mindfulness may not be metacognition but they seem to be related to each other (Jankowski & Holas, 2014) such that mindfulness possibly improves metacognition (Was, 2014). In *Mindfulness in the Academy*, Paula Gardner and Jill Grose discuss their use of mindfulness in class and with the greater

campus community as a strategy to develop focus in one's life. It has the potential to develop students' metacognition of what needs their attention in the moment while studying rather than multitasking with the elements that distract from learning. Relatedly, Gail Frost and Maureen Connelly in *The Road Less Travelled?* describe their use of reflective writing to focus students' orientation on mastery of skills and theory instead of on grades. Students with a mastery, as opposed to a performance orientation, are more likely to have better learning outcomes (Coutinho, 2007). *Transforming Passive Receptivity of Knowledge into Deep Learning Experiences at the Undergraduate Level* by Anna Ferenc describes a collaborative writing project in music theory in which students pair up as author-editor teams. Her analysis of students' reflections suggests that metacognition of their learning was enhanced and that students' meta-learning may transfer to their other courses.

Cognition is thinking whereas metacognition is thinking about our thinking (Girash, 2014). For many years, Richard Paul has been a proponent of writing as a means to cultivate critical thinking (Paul & Elder, 2000) and it was by attending one of his critical thinking workshops that started my weekly writing requirement in the capstone course I teach. Menary (2007) argues that writing is thinking and that the act of writing transforms our thinking by integrating our thoughts through the manual and neural processes of manipulating pen or keyboard. Four of this volume's papers focus on writing as a transformative experience. The first two articles on writing present assignments designed to stimulate students' thinking: either about their own writing (*Performance, Feedback, and Revision* by Jessica Riddell, a 2015 3M National Teaching Fellow) or about the particular course subject matter (*Toward Accuracy, Depth and Insight* by Kristi Dukewich & Deborah Vossen). Both essays consider the structure of the writing assignment such that marking does not overburden instructors of large classes. Some students, however, have a fixed mindset that assumes that writing ability is innate and therefore revision is pointless because improvement is not possible. Mark Feltham and Colleen Sharen write in "*What Do You Mean I Wrote*

a C Paper?" an initial assessment of a term-long series of assignments and workshops designed to transform students to have a growth mindset and thus willing to partake in feedback and revision of their writing. "*He Just Told Me to Get on With It*" by Marcia Johnson discusses a program of doctoral writing conversation developed in New Zealand to shape graduate students' thinking while writing their dissertation through a structured conversation with their peers.

For students to experience a transformative education, there must be the support to produce an engaged learning environment: Students need to be supported to overcome their own fears and self-doubts (Cox, 2009; Bledsoe & Baskin, 2014). In addition, for deep learning to occur course objectives and instructor goals must be aligned with students' motivations (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010a). This volume's fourth section on supporting students' learning opens with *Fostering Student Engagement* by Patricia Samson in which she explains how Creative Problem-Solving is a transformative pedagogy that motivates students' learning. In a similar vein, Catherine Bates' article *Learner Characteristics and Motivation* explains the ARCS model of instructional design and how it can be used to align instructional with student goals thereby enhancing learner motivation. Both papers by Samson and Bates incorporate active learning into the instructional strategy which has been shown to improve student learning outcomes relative to a traditional didactic lecture (Weimer, 2013, 2015). "*There is no Single Right Answer*" by Victoria Chen explains her experience at Queen's University in facilitating the transition of instructors to an active learning classroom and how the physical educational environment can impact the choice of learning activities and open-mindedness of students. Kirstin Poling describes in *MySci Advisors* a program at the University of Windsor that partners senior and first year undergraduate science students to support the first year students' transformation from high school to university student. *Realizing Partnership Potential* by John Bolan and colleagues, describes a collaborative program between the University of Toronto's libraries and Centre for Teaching Support

& Innovation designed to develop librarians' instructional excellence.

The last section of this volume of CELT consists of four papers that discuss different approaches to transforming our teaching. In the first, *Integrated Testlets*, Ralph Shiell and Aaron Slepko explain a system of developing multiple choice questions which tiers questions within a concept such that students' understanding of the material may be probed higher up Bloom's taxonomy of learning than is typically possible while providing students immediate formative feedback. This system is in the spirit of Eric Mazur's (2014) appeal in his STLHE conference plenary to make assessments an authentic learning experience. *Peer Review of Teaching* by Shaya Golparian, Judy Chan, and Alice Cassidy considers how peer review can be a rewarding and renewing process for both the reviewer and reviewee with the goal of improving teaching. Cynthia Korpan and her colleagues present a framework for *Teaching Assistant Competencies in Canada* produced by the Teaching Assistant and Graduate Student Advancement (TAGSA) Special Interest Group (SIG) of STLHE designed to support the development of TAs teaching ability. The last article in volume VIII by Erika Kustra et al, *Teaching Culture Perception*, considers the perception of campus teaching cultures of select Ontario universities and how that may be used to transform our learning experiences.

Finally, CELT has undergone its own transformation this past year. The editorial board has undergone a complete turnover. The success of such transition is only as good as the support provided to the new recruits. The editorial board of CELT wishes to express its gratitude to past managing editors Catherine Chiappetta Swanson and Jessica Raffoul for orienting us to the Open Journal System that runs CELT. In addition, the support of the STLHE board, in particular Robert Lapp, Dianne Bateman, and Diane Salter Menzo in securing funding and becoming indexed in ERIC and EBSCO has been invaluable. Institutional support has also been instrumental in ensuring that CELT remains on sure footing. The University of Windsor continues to freely host our journal on their servers and the Augustana Faculty of the University of Alberta

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References

- Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010a). What factors motivate students to learn? In *How learning works: Seven research-based principles for smart teaching* (pp. 66–90). San Francisco, CA: Jossey-Bass Publishers.
- Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010b). How do students become self-directed learners? In *How learning works: Seven research-based principles for smart teaching* (pp. 188–216). San Francisco, CA: John Wiley & Sons, Inc.
- Bledsoe, T. S., & Baskin, J. J. (2014). Recognizing student fear: The elephant in the classroom. *College Teaching*, 62, 32–41. <http://dx.doi.org/10.1080/87567555.2013.831022>
- Bramming, P. (2007). An argument for strong learning in higher education. *Quality in Higher Education*, 13, 45–56. <http://dx.doi.org/10.1080/13538320701272722>
- Brooks, D. (2012, May 4). The campus tsunami. *The New York Times*, p. A29. New York, NY. Retrieved from <http://www.nytimes.com/2012/05/04/opinion/brooks-the-campus-tsunami.html>
- Brown, P. C., Roediger III, H. L., & McDaniel, M. A. (2014). Avoid illusions of knowing. In *Make it stick: The science of successful learning*

- (pp. 102–130). Cambridge, MA: The Belknap Press of Harvard University Press.
- Carr, N. (2010). *The shallows: What the internet is doing to our brains*. New York, NY: W. W. Norton.
- Coutinho, S. A. (2007). The relationship between goals, metacognition, and academic success. *Educate*-, 7, 39 – 47. Retrieved from <http://educatejournal.org/index.php/educate/article/view/116>
- Cox, R. D. (2009). “It was just that I was afraid”: Promoting success by addressing students’ fear of failure. *Community College Review*, 37, 52–80. <http://dx.doi.org/10.1177/0091552109338390>
- Girash, J. (2014). Metacognition and instruction. In V. A. Benassi, C. E. Overson, & C. M. Hakala (Eds.), *Applying science of learning in education: Infusing psychological science into the curriculum* (pp. 152–168). Society for the Teaching of Psychology. Retrieved from <http://teachpsych.org/ebooks/asle2014/index.php>
- Jankowski, T., & Holas, P. (2014). Metacognitive model of mindfulness. *Consciousness and Cognition*, 28, 64–80. <http://dx.doi.org/10.1016/j.concog.2014.06.005>
- Mazur, E. (2014, June). *Why you can pass tests and still fail in the real world*. Paper presented at the annual meeting of the Society for Teaching and Learning in Higher Education, Kingston, ON. Abstract retrieved from <http://www.queensu.ca/stlhe2014/program/plenary-sessions/plenary-i-dr-eric-mazur>
- Menary, R. (2007). Writing as thinking. *Language Sciences*, 29, 621–632. <http://dx.doi.org/10.1016/j.langsci.2007.01.005>
- Newstok, S. L. (2013). A plea for “close learning”. *Liberal Education*, 99(4), 16–19. Retrieved from <http://www.aacu.org/liberaleducation/le-fa13/newstok.cfm>
- Paul, R., & Elder, L. (2000). Critical thinking: Teaching students the logic of writing. *Journal of Developmental Education*, 23(3), 36–37.
- Smith, B. L. (1998). Curricular structures for cumulative learning. In J. N. Gardner, G. Van der Veer, & Associates (Eds.), *The senior year experience: Facilitating integration, reflection, closure, and transition* (pp. 81–94). San Francisco, CA: Jossey-Bass Inc., Publishers.
- Smith, E. (2012). The digital native debate in higher education: A comparative analysis of recent literature / Le débat sur les natifs du numérique dans l’enseignement supérieur: une analyse comparative de la littérature récente. *Canadian Journal of Learning and Technology / La Revue Canadienne de L’apprentissage et de La Technologie*, 38(3), 1–18. Retrieved from <http://www.cjlt.ca/index.php/cjlt/article/view/649>
- Tanner, K. D. (2012). Promoting student metacognition. *CBE-Life Sciences Education*, 11, 113–120. <http://dx.doi.org/10.1187/cbe.12-03-0033>
- Was, C. (2014, October 31). A mindfulness perspective on metacognition. *Improve with metacognition*. Retrieved from <http://www.improvewithmetacognition.com/a-mindfulness-perspective-on-metacognition/>
- Weimer, M. (2012, September 26). Students think they can multitask. Here’s proof they can’t. *The Teaching Professor Blog*. Retrieved from <http://www.facultyfocus.com/articles/teachi>

ng-professor-blog/multitasking-confronting-students-with-the-facts/

Weimer, M. (2013). Research: Evidence that learner-centered approaches work. In *Learner-centered teaching: Five key changes to practice* (2nd ed., pp. 28–55). San Francisco, CA: Jossey-Bass.

Weimer, M. (2015, June 3). More evidence that active learning trumps lecturing. *The Teaching Professor Blog*. Retrieved from <http://www.facultyfocus.com/articles/teaching-professor-blog/more-evidence-that-active-learning-trumps-lecturing/>