## USING SOCIAL MEDIA TO ENGAGE AND DEVELOP ONLINE LEARNERS

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#### Abstract

Social media technology provides educators with an opportunity to further engage learners in the online classroom, as well as to support development of learner skills and competencies. This case study research project explores the role of social media in promoting cognitive and meta-cognitive learner development and in creating more self-directed and capable learners using a heutagogical teaching approach. Research was conducted using questionnaires and interviews and incorporated the perspectives of both students and instructors on the use of social media in the online classroom and how social media has influenced interaction and learner development. In addition, e-portfolios – created by students using social media – were reviewed to determine evidence of acquired competencies and reflective practice. This paper presents the findings from the case study, as well as general guidance to instructors for incorporating social media in the online classroom.

## Introduction

Heutagogy is the study of self-determined learning where responsibility for the learning path is placed in the hands of the learner, and the learner is "the major agent in their own learning" (Hase & Kenyon, 2007, p. 112). Initial research in heutagogy has shown that the approach can support development of lifelong learning capacity, as well as aid learners in managing and solving complex problems within changing working environments (Ashton & Newman, 2006; Bhoryrub, Hurley, Neilson, Ramsay, & Smith, 2010; Canning & Callan, 2010). Because of the high level of learner maturity and autonomy required in self-determined learning, a heutagogical approach is considered a form of adult learning. A renewed interest in heutagogy is partially due to the adoption of social media within education, as social media is characterized by certain affordances that support a heutagogical educational approach (McLoughlin & Lee, 2007). The combination of an adult-learning focus and social media makes the topic of heutagogy highly relevant to distance education, as technology use for education delivery and an adult learner audience are both characteristics of distance education. The heutagogical educational approach is also considered to be "a natural progression from earlier educational methodologies... [which] may well provide the optimal approach to learning in the twenty-first century" (Hase & Kenyon, 2007, para. 1) and a "net-centric" theory for today's emerging technologies (Anderson, 2010, p. 33). The author's research interest in this field is in investigating how a heutagogical teaching and learning approach, assisted by active use of social media, can engage learners in their individual learning process and support the development of learner competencies and capabilities, and as a result, better equip students for the workforce.

# Literature Review

According to the Pearson Social Media in Higher Education Survey (2010), over 80% of faculty is using social media, with 52% of faculty using social media in the classroom. However, use of social media in the classroom is primarily passive, or consumptive (e.g., in the form of watching an online video). Only 10 to 12% of faculty uses social media in an active way (e.g., in the form of learners interacting and creating own content). Weisberger (2010) suggests that active use of social media may be more pedagogically beneficial (as cited in Educational-Portal blog, 2010). Weisberger's hypothesis is supported by preliminary research by Blaschke, Porto, & Kurtz (2010), which indicates that, from a student perspective, the active use of social media may increase interaction levels (student-student, student-instructor, and student-content) and promote the development of cognitive and meta-cognitive learning skills, such as reflection, critical thinking, construction of knowledge, and understanding of one's individual learning process. McLoughlin & Lee (2007, 2008, and 2010) report on the pedagogical benefits of social media and identify specific affordances of social media - connections and social rapport, collaboration (information finding and sharing), learner-generated content, and accumulation of knowledge and information that contribute to the cognitive development of learners. McLoughlin & Lee (2008) also propose that the inherent design of social media supports the development of learner self-directedness, a capability that is essential in preparing lifelong learners for the complexities of today's workforce (Canning, 2010). While the current literature discusses general pedagogical benefits of social media usage in the classroom (Minocha, 2009), there is limited

research into the pedagogical benefit of *actively* using social media in the online classroom, for example, by using social media to encourage learner interaction and to create own content, and the role this can play in making learners more self-directed and competent.

A heutagogical educational approach emphasizes learner-centeredness and the development of learner capabilities, which need to developed "as a complementary set of attributes to competency" in order to create a culture of lifelong learning (Gardner, Hase, Gardner, Dunn, & Carryer, 2008, p. 257). Capability is thus an extension of competency (knowing in familiar environments) in that the learner is able to apply what she or he has learned to complex situations (knowing in unfamiliar environments). Examples of capabilities include: knowing how to learn, working well with others, creativity, critical thinking, empathy, active and experiential learning, autonomy, self-efficacy, self-confidence, active citizenship, and deliberative dialogue (Gardner, Hase, Gardner, Dunn, & Carryer, 2008; Walker, 2008). A review of the literature demonstrates that there is limited research into heutagogy as an approach for development of learner capabilities (Blaschke, 2012).

As development of meta-cognitive learning skills through double-loop learning is characteristic of heutagogy, there could be a connection between active use of social media and capability development using a heutagogical approach. This possible connection is further supported in research by McLoughlin & Lee (2008, 2010) and Cameron & Tanti (2012). However, missing in the current literature is research into how the combination of a heutagogical educational approach and the use of social media – in an active rather than passive way – can support development of learner competencies and, by extension, capabilities. The question explored in this research was: What role can social media play in engaging learners and in promoting cognitive and metacognitive learner development? This question is part of a larger context in understanding the role of social media (active usage) in developing learner competencies and capabilities, particularly when social media is used to support a heutagogical teaching and learning approach.

# Methodology

This case study research was conducted during the Spring 2012 semester at the University of Maryland University College (UMUC) within the newly revised *OMDE601 Foundations of Distance Education and E-Learning* online course of the Master of Distance Education and E-Learning (MDE) program. In the summer and fall of 2011, the OMDE601 course underwent an extensive redesign intended to help new students build a stronger foundation of knowledge and skills in preparation for their MDE graduate studies.

In conducting the research, a holistic design-based research approach was undertaken. Using the backward design, or results-based, approach to course design (Wiggins & McTighe, 2005), the author and another MDE faculty, Jane Brindley, identified the desired outcomes at both course and program level and then worked backward in developing learning activities and course content that would support development of those outcomes (Figure 1).

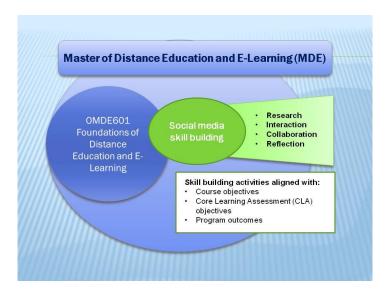


Figure 1: Holistic Approach Using Backward Design

Specific aspects of a heutagogical teaching approach were also incorporated into the new design, for example:

- Considering students' level of learner autonomy and adjusting accordingly (through learner questionnaires)
- Building learner skills while allowing them to determine and reflect on their learning path (through scaffolding of learning activities and learner-directed questions for reflection)
- Incorporating activities for self-reflection, self- and information-discovery, and collaborative information creation (through learning journals and collaborative group work)
- Assessing learner achievement by negotiating the assessment process (using formative and summative assessment)

Digital skill building activities, which incorporated social media tools for research, interaction, collaboration, and reflection, were developed as part of the redesign. The new version of the course made extensive use of social media technology, which students used for collaboration purposes and to create new content. These activities were closely tied with course and program objectives, as well as UMUC's core learning area (CLA) objectives. In addition, the activities took into consideration strategies for encouraging deep learning and reflection on one's own learning process (double-loop learning) (Kimber & Wyatt-Smith, 2006). Course learning activities that incorporated social media are shown in Table 1.

Table 1 Skill Builders Using Social Media

Skill Builder	Social Media Used
Post a biography in WebTycho and "pin" location on a class Google Map (icebreaker	Google Map
activity).	
Join Twitter and follow OMDE601 course and a distance education scholar.	Twitter
Retweet an interesting article by the scholar.	
Contribute to a class wiki of e-portfolio best practices.	Wiki
Create online mind map with key words that represents initial and ongoing definition	Mind Mapping
of distance education.	
Using Google Docs, develop a group grid depicting evolution of distance education	Google Docs
across waves of development as part of an ongoing collaborative group project.	
Conducting research within the UMUC library, select a scholarly article, and write and	Diigo
post an annotation to the class Diigo account.	
Create an individual web site using a wiki, blog, or other web tool as an e-portfolio,	E-portfolio (e.g., wiki,
including pages for a reflective learning journal and artifacts (group grid, bibliography,	blog, other)
annotation, mind map).	,

Data gathering techniques included student and instructor interviews (qualitative) and a survey on student perceptions regarding the use of social media in the classroom. The pre-course student survey gathered data about students' familiarity with online learning and social media, ways in which they used social media, their preferred ways of learning, and their confidence level in research and writing. The end-of-semester survey gathered data about students' experience using social media in the OMDE601 course and their perceptions on how social media influenced 1) their sense of connectedness in the classroom (e.g., with other students and the instructor) and 2) development of their individual cognitive and meta-cognitive skills, such as critical thinking, knowledge construction, reflection, empathy, understanding of own learning process, and application of social media competency in other contexts (current work environment).

The instructor survey gathered information about the instructor's perceptions on the active use of social media and its influence on student engagement levels and development of student cognitive and meta-cognitive skills. In-depth student interviews were planned as a follow-up to the student surveys; however, only two students volunteered for the interviews. One interview took place, but the second interview did not. Student e-portfolios and reflective learning journals that were created within the OMDE601 course were also reviewed to determine evidence of acquired competencies and reflective practice.

## **Results**

Two sections of OMDE01 were offered in Spring 2012, with 23 students in cohort 9040 and 22 in cohort 9041 (N=45). Pre-course survey findings showed that 100% of the students had previously taken an online course

(N=40, with 5 non-participants). In terms of familiarity with social media, students were most unfamiliar with (never used) mind maps (75% in 9040; 90% in 9041) and Twitter (55% in both sections). Students were most familiar with blogs (60% in both sections), Google Docs (50% in 9041), and Facebook (90% in 9040, 84% in 9041), although Facebook was not used in the course. Primary uses of social media were: connecting with friends and family (85% in 9040; 90% in 9041), learning new things (80% in 9040, 61% in 9041), and making business and academic connections (60% in 9040; 37% in 9041).

At the end of the semester, 27 of 45 students were still registered in the two sections. The end-of-semester surveys (N=18, with 9 non-participants) showed that students felt they were competent in all social media tools used in the course, albeit in differing degrees. The exception was 9041, where one student stated that s/he was not competent (never used) with wikis (1) and blogs (1). The e-portfolio/learning journal, Google Docs, and mind map tools seemed to have been most effective in helping students develop cognitive and meta-cognitive skills (e.g., over 75% of students agreeing that the tool helped them construct new knowledge, reflect on course content, and better understand their individual learning process). Students perceived that the use of Twitter contributed the least to development of cognitive/meta-cognitive skills. Use of Google Maps differed significantly between the two sections, with students in 9040 agreeing with most of the statements, and students in 9041 disagreeing to most statements. Students' sense of connectedness with teaching staff also differed between sections, which could indicate that level of interaction with teaching staff perceived by students may be more influenced by the instructor than the tool. Use of Google Docs in one section seemed to promote empathy in one section (7 out of 10 students agreeing), while in the other it did not (6 out of 8 students disagreeing); this could indicate that the sense of empathy may be dependent on group constellation rather than upon the media used. In both sections, use of Google Docs helped students feel more connected to other students, more so than any of the other social media tools used.

In the student interview, the student noted that generational gaps made it difficult to keep up with the new media, and, although she was able to successfully complete the activities, they were very time consuming. She also noted that **Twitter** and **Diigo** helped her to follow and create and explore her own trails of learning, as well as aided her in becoming more self-directed in her learning.

From the instructor perspective, which aligned with the student findings, the **e-portfolio/learning journal**, **Google Docs**, **and mind map** activities were found to be helpful in development of critical thinking and knowledge construction (although mind maps only partially). Specifically, the **e-portfolios and learning journals** were found to provide "a broader and at times deeper picture of a learner", although journals were "low to average" in terms of reflective quality (C.Walti, personal communication, April 22, 2012). The instructor also found that students were not prepared to participate in social media, which may be due to an older course description appearing as the official course description in institutional publications. In general, the instructor of 9041 did not find the social media tools to be instrumental in development of cognitive and meta-cognitive skills such as empathy, creativity, student autonomy, and the students' understanding of their learning process. However, the instructor noted that there is potential for ongoing development of these skills across courses and in the program and recommended tracking students as they progressed through the program. The instructor also found the tracking of student activities within the social media tools to be very time-consuming.

In a general evaluation of the course **e-portfolios**, the researcher found that students demonstrated basic competencies in using the e-portfolio to: 1) establish an online presence using a form of web 2.0 media (e.g., wikis, blogs, or Weebly); 2) present two or more examples of work that represented competency in using social media as part of a learning activity or skill builder (e.g., online mind map of personal definition of distance education, Google Docs group grid of the evolution of distance education, Diigo annotation); and 3) in most cases, reflect upon the individual learning experience (e.g., how a student's understanding of distance education changed as s/he progressed through the course and what specifically influenced the student's thinking).

The dropout rate in both sections was relatively high. In 9040, 11 out of 23 students withdrew, with 12 passing the course. In 9041, nine out of 22 students dropped, with 13 passing the course. Research data was not available on student reasons for dropping the course. Additional research could explore whether there is a correlation between student technology skills and/or preparedness for graduate level studies and the relatively high dropout rate.

## Discussion

Based on the research conducted in this case study, generalizations cannot easily be made regarding the use of social media to engage students and develop their cognitive/meta-cognitive skills. To a large degree, the ability to achieve learner engagement and development is not only dependent upon course design (e.g., alignment with learning objectives) and delivery, but also upon the individual leaner and his/her level of autonomy and maturity. Evidence of capability was also challenging to identify. While students felt they were competent and also exhibited competency in using social media, instances where capability was clearly demonstrated were minimal. Within the collaborative group work, there was some evidence of capabilities such as empathy and the ability to work with others. Students also exhibited self-confidence upon gaining a competency (e.g., using Twitter to tweet more often and using new tweet formats). In the student interview, the student gave an example of applying what she had learned to a new situation (e.g., using Twitter to follow political candidates in order to gain a better understanding of a candidate's platform). That there was minimal evidence of capability could be due to the students' inability to achieve full competency in using social media tools, and as a result capability could not emerge as an extension of the competency. It could also be the case that a capability evolved, but was not observed within the online classroom environment where the research was conducted, or that learners within a beginning graduate course do not yet have the level of learner autonomy and maturity to move from competency to capability. Further research could explore the role of social media in development of learner competency and capability during the course of the learners' graduate studies, both inside and outside of the classroom, as part of a longitudinal analysis, for example, by evaluating student e-portfolios by coding for evidence of achieved competency or capability. Other areas of research could include investigating individual social media and their ability to promote engagement and support learner capability development (such as the Twitter research by Welch & Bonnan-White, 2012).

#### Recommendations

Based on this case study, here are general recommendations for using social media in the online classroom:

- Incorporate social media in a holistic way, clearly aligning its use with overall course goals and
  objectives and learning activities, and taking into consideration the pedagogical benefits of the tool.
- Plan for possible gaps in learner skill level; for example, provide learner support and additional informational resources.
- Provide guidance sometimes extensive on tool use and mirror desired behavior where possible
- Be prepared for students who are fundamentally opposed to social media due to privacy issues.
- Make expectations about the use of social media clear.
- Encourage students to create social media accounts/e-mails for academic purposes only separate from personal accounts.
- Allocate time for managing social media use and be prepared to spend significant time tracking student activity.
- Strive for establishing competency and building capability by helping students become competent and provide them with opportunities to use social media in new and original ways.

## Conclusion

Heutagogy, or self-determined learning, provides a potential theoretical framework for use emerging technologies such as social media to creating learner-centered educational environments. The inherent design of social media supports a self-determined learning approach, offering learners possibilities to connect with each other, as well as to further engage in their individual learning process and determine own paths to learning. By helping students achieve competency in social media use, we can empower our students to find new ways of acquiring knowledge, as well as equip them with skills for adapting to changing and complex environments.

#### References

 ANDERSON, T. (2010). Theories for learning with emerging technologies. In G. Veletsianos (Ed.), *Emerging technologies in distance education*. Edmonton: Athabasca University Press. Retrieved from: http://www.aupress.ca/books/120177/ebook/02\_Veletsianos\_2010-Emerging\_Technologies\_in\_Distance\_Education.pdf

- 2. ASHTON, J. & ELLIOTT, R. (2007). Juggling the balls study, work, family and play: Student perspectives on flexible and blended heutagogy. In *European Early Childhood Education Research Journal*, *15*(2), 167-181.
- 3. BLASCHKE, L. (2012). Heutagogy and lifelong learning: A review of heutagogical practice and self-determined learning. In *The International Review of Research in Open and Distance Learning*. Retrieved from: http://www.irrodl.org/index.php/irrodl/article/view/1076/2087.
- 4. BLASCHKE, L..M., PORTO, S., & KURTZ, G. (2010). Assessing the added value of web 2.0 tools for e-learning: The MDE experience. In Proceedings of the European Distance and E-learning Network (EDEN) Research Workshop, October 25-27, 2010. Budapest, Hungary.
- 5. BHORYRUB, J., HURLEY, J., NEILSON, G.R., RAMSAY, M., & SMITH, M. (2010). Heutagogy: An alternative practice based learning approach. In *Nurse Education in Practice*, *10*(6), 322-326.
- 6. CAMERON, L., & TANTI, M. (2011). Students as learning designers: Using social media to scaffold the experience. In *E-Learning Papers*, 27. Retrieved from: http://www.elearningpapers.eu/en/download/file/fid/23947
- 7. Canning, N. (2010). Playing with heutagogy: Exploring strategies to empower mature learners in higher education. In *Journal of Further and Higher Education*, 34(1), 59-71
- 8. CANNING, N., & CALLAN, S. (2010). Heutagogy: Spirals of reflection to empower learners in higher education. In *Reflective Practice*, *11*(1), 71-82.
- EDUCATIONAL-PORTAL BLOG. (2010). Social media in the college classroom: Professor Corinne Weisgerber talks about the educational value of new media. Retrieved from: http://educationportal.com/articles/Social\_Media\_in\_the\_College\_Classroom\_Professor\_Corinne\_Weisgerber\_Talks\_About\_the\_ Educational Value of New Media.html
- GARDNER, A., HASE, S., GARDNER, G., DUNN, S.V., & CARRYER, J. (2008). From competence to capability: A study of nurse practitioners in clinical practice. In *Journal of Clinical Nursing*, 17(2), 250-258. DOI: 10.1111/j.1365-2702.206.0188.x
- HASE, S., & KENYON, C. (2007). Heutagogy: A child of complexity theory. Complicity: An International Journal of Complexity and Education, 4(1), 111-119. Retrieved from: http://jtp.ipgkti.edu.my/map/resource/ppismptesl/referedu-tech\_htm\_files/40028168-Heutagogy-A-Child-of-Complexity-Theory.pdf
- 12. KIMBER, K. & WYATT-SMITH, C. (2006). Using and creating knowledge with new technologies: A case for students-as-designers. In *Language, Media and Technology*, *31*(1), 19-34.
- 13. McLoughlin, C. & Lee, M.J.W. (2007). Social software and participatory learning: Pedagogical choices with technology affordances in the Web 2.0 era. In Proceedings from ascilite, December 2-5, 2007. Singapore. Retrieved from: http://www.ascilite.org.au/conferences/singapore07/procs/mcloughlin.pdf
- 14. McLoughlin, C., & Lee, M.J.W. (2008). *Mapping the digital terrain: New media and social software as catalysts for pedagogical change*. In Proceedings from ascilite, November 30, December 3, 2008. Melbourne, Australia. Retrieved from: http://www.ascilite.org.au/conferences/melbourne08/procs/mcloughlin.pdf
- 15. McLoughlin, C., & Lee, M.J.W. (2010). Personalised and self regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software. In Australasian Journal of Educational Technology, 26(1), 28-43. Retrieved from: http://www.ascilite.org.au/ajet/ajet26/mcloughlin.pdf
- 16. MINOCHA, S. (2009). Role of social software tools in education: A literature review. In Education + Training, 51(5/6), 353-369.
- 17. PEARSON SOCIAL MEDIA IN HIGHER EDUCATION SURVEY. (2010). Retrieved from: http://www.prweb.com/releases/2010/05/prweb3960844.htm
- 18. WALKER, M. (2008). A human capabilities framework for evaluating student learning. In *Teaching in Higher Education*, 13(4), 477-487. DOI: 10.1080/13562510802169764
- 19. WELCH, B.K., & BONNAN-WHITE, J. (2012). Twittering to increase student engagement in the university classroom. In *Knowledge Management & E-Learning: An International Journal*, *4*(3), 325-345.
- 20. WIGGINS, G., & McTIGHE, J. (2005). Understanding by design. Alexandria, VA: ASCD.

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