Historical and Contemporary Synopsis of the Development of Field Education Guidelines in BSW, MSW and Doctoral Programs

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Traditional Pedagogy Through the Lens of Technology

Campbell, Lucio, and Abel

Abstract

Arguably, innovation is critical to survival in higher education. As the students' needs shift, so too does the effort to engage students in active learning. Innovation and change bring with them excitement, opportunity, and challenges. This paper will review the literature on student engagement and offer several practical examples of innovative pedagogy that leverage digital technology to deliver classic on ground techniques. These examples provide direction for the evolving literature on distance learning with a discussion of their application, impact on higher education, and the challenges of learning in a digital age.

Introduction

The foundation of social work education was forged with two strong anchors: a) traditional concerns for human relationships; and b) the recognition that social change has a meaningful impact on individuals, groups, and communities. Since that foundation was established, the Council on Social Work Education, responding to societal shifts, has overseen numerous changes in social work curricula and teaching approaches. The last few decades have shown a monumental increase in technological advances and applications. As a result, the number of social work programs that have added distance learning via online or virtual education has seen tremendous growth. This growth has transformed the meaning of "classroom," student-faculty relationships, and student engagement. Per Flynn (2017), innovation often involves disruption to customary relationships.

Innovative uses of technology have certainly disrupted and transformed social work education. Accordingly, novel approaches for using innovation to respond to these disruptions are critical to assist faculty who are striving for excellence in higher education (Zwelijongile, 2015). As students' needs shift, so must faculty strategies for enhancing active, student-centered learning (SCL). The literature on SCL indicates collaborative learning with motivated and self-directed learners holds strong promise for social work education (McCombs & Whistler, 1997; Lea, Stephenson, & Troy, 2003; Weimer, 2002). This paper offers practical illustrations of how innovative pedagogy that leverages both digital technology and classic on-ground teaching techniques can be utilized to increase student engagement. It is anticipated that these examples will provide direction for faculty involved in distance learning.

Adapting and developing innovative pedagogical approaches that have been used on ground but can be successfully transitioned to the online/virtual classroom is essential in order to safeguard the integrity of social work education. Fletcher, Comer, and Dunlap (2014) provide a compelling argument for using technology as a conduit for student engagement through a supportive relationship. Borrowing concepts from psychoanalytic theory, they propose that virtual holding areas in the classroom are key to creating student-to-student and student-to-faculty connection in the online environment. Similarly, Knight (2016) calls for higher education to serve a "placemaking" function in the development of distance learning. Knight argues that one way to help preserve academic integrity in this time of market place upheaval is to return to fundamental tenants of pedagogy and create the learning space (digital or otherwise) that promotes a connection between students, faculty, and the broader university system.

Accordingly, in the next sections of this paper, the authors identify and describe specific classroom techniques and discuss how each can support student-centered learning in both the online and virtual environment. In the subsequent sections, several tools (one-minute paper, digital

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whiteboards, small group break-out sessions, infographics, and photovoice) that are compatible with the virtual holding area concept will be presented. Each of these tools has origins in classic on ground pedagogy but have been translated to achieve similar aims in the digital space of distance learning. These applications offer innovative uses of technology to promote student engagement.

Techniques

One-Minute Paper

The One-Minute Paper (OMP) is a formative assessment tool that has been used in grounded classrooms for several decades (Light & Cox, 2001; Weaver & Cotrell, 1985). It serves as a tool for real-time student feedback; the goal of using the OMP is to find out if students have recognized the main points in a class session (Stead, 2005) and can use critical thinking skills to distill those points in a brief paper. The OMP is used to promote student learning, instructor learning, and assessment of the teaching presented by asking a brief series questions (typically no more than three) at the end of a class session (Almer, Jones, & Moeckel, 1998; Harwood, 1996; Magnan, 1991).

Pintrich and Zusho (2002) have suggested that formative assessment and feedback can be empowering for enhancing the self-regulation of students. This is particularly relevant in the online environment, as self-management of learning is often the key to student success (Vonderwell, Liang, & Alderman, 2007). Despite the fact that online higher education appears to have given formative assessment less attention that summative evaluation (McLaughlin & Yan, 2017; Zwelijongile, 2015), the literature is in agreement that both teachers and students see value in the OMP (Lucas, 2010).

We offer the OMP as a formative assessment tool with the aim to promote student learning, instructor learning, and assessment of the teaching (Campbell, Abel, & Lucio, 2018). At the close of each class, the instructor directs students to respond to a series of learning and process questions (i.e. "Identify 1-3 new concepts learned

in class today," "Share what you liked about this class session today," and "What would you like to see a change in future sessions?"). Unlike the on-ground version of the OMP, where the students write their responses on a piece of paper, the digital version calls them to type their responses into the session chat bar or similar process in the online classroom.

The OMP exercise can be an elective exercise which is ungraded or expected and thus scored. The OMP was used in an Advanced Clinical Practice course to help reinforce learning and offer a voice for students on the nature and flow of the synchronous course offering. The students engaged feedback through the chat bar feature at the close of each session. When using the chat bar feature, there is a strong sense of transparency as the student's responses are visible in real time to the student, their peers, and the instructor. The OMP exercise is a silent form of information exchange; once the student completes their posting, they are encouraged to review their peers' comments. and then they can exit the virtual class. The digital OMP bridges the technical divide and allows student and instructor to gather formative feedback on the content learned, the aspects of classroom management that that are well received. and those that are not. It creates a continuous feedback loop that can drive ongoing improvement of classroom processes, reinforces the importance of an expectation of active learning, and builds on the longstanding history of its role in pedagogy.

Digital Whiteboards

Wojenski (2019), in his review Erasing the Past, chronicles the evolution of the whiteboard in traditional brick and mortar classes. He points out the ubiquity of the chalkboard as a tool of pedagogy starting back in the early 1800s and giving way to the whiteboard in the 1990s and then ultimately the SMART board (a whiteboard with digital interface) in the early 2000s. The rich history of interactive boards in primary and secondary education has yielded clear directions for their application to teaching and learning in higher education (Heemskerk, Kuiper, & Meijer, 2014; Ipek & Sozcu, 2016). The 200-year history

of interactive boards serves as a poignant reminder of the power and import of these boards that have served as a physical mainstay in education. Whiteboards support the needs of active, visual, and kinesthetic learners.

Distance educators are challenged to grapple with the loss of the physical board in digital online learning spaces. Given that these boards offered a vital convening space to share information and promote engagement between instructors and students, as well as between students, it is not surprising that one piece of technology often cited in the distance learning literature as a tool to promote engagement is the digital whiteboard (Ipek & Sozcu, 2016; Türel & Johnson, 2012).

The evolution of these tools in higher education has followed a similar escalation of use (Shackel, 2012). One innovative use for digital whiteboards can be found in the development of assignments that promote students working together to accomplish a common goal (Campbell, Lucio, & Detres, 2019).

For example, in an Evaluation of Social Work Practice course, the digital whiteboard was used to foster the development of a logic model. The logic model is a framework based on a logic of interconnected flow of inputs, activities, outputs, outcomes, and impact based on a common goal agreed on by all stakeholders. Students were presented with the shell of a logic model, and they worked collaboratively to add content to each aspect of the model shell presented in the digital whiteboard.

The students worked in a two-step flow with a defined timeframe in step one to add their content to the whiteboard shell. Students were invited back to the whiteboard in step two to review what their peers had added to the model. Once they reviewed the evolved framework, they worked in small groups to answer questions about their understanding of logic models (knowledge), the use of logic models for program evaluations (application), and their experience with the use of the whiteboard (process) as a tool for information exchange and learning. This iterative process mirrored the traditional use of student-posted content on chalk and traditional whiteboards with

the added digital convenience of real-time access and adjustment from anywhere at any time.

Small Group Break-Out Sessions

Small group breakouts are an effective approach for encouraging student engagement (McKimm & Morris, 2013). In traditional on ground social work classes, students are frequently assigned to small groups to problem solve, discuss issues, and/or address case studies (Huba & Freed, 2000). These small breakout sessions are both task- and process-focused (Sparrowe, Liden, Wayne, & Kraimer, 2001). While students are required to end the session with a "product" that will be reported to the entire class, the process of being in the small group also allows for a more relaxed environment that can enhance student engagement. Small groups change the class setting, the interaction, and the pace. As such, this technique can support the visual, kinesthetic, and auditory learner and facilitate Problem Based Learning (PBL).

PBL advocates for a more cooperative pedagogical model where students and faculty are equally engaged in the classroom (Greening, 1998). In the online environment, technology allows the instructor to easily establish breakout rooms for students to work in virtual small groups. Just as in the physical classroom, the instructor can use breakout sessions to "be more around the classroom than in front of it" (Weimer, 2002, p. 14). With a click of a button, the instructor can establish and monitor these online breakout groups. Handouts or case illustrations may be uploaded to individual students and/or to the entire small group. Whiteboards and chat boxes can be added to each of the small group settings to further enhance student interaction.

In a social work theory course, for example, the small group breakout was consistently used in order to integrate and synthesize learning. As new theories were introduced, cases were electronically downloaded to each breakout group. Students were then asked to apply specific theoretical concepts to their understanding of the "client's" situations.

End of the semester evaluations indicated that students found the vignettes and breakout

sessions to be helpful. Students reported feeling a stronger connection with their peers and were "less intimidated" to share their developing ideas about social work practice in the small group setting. Further, the majority of students indicated that they felt that the connection between theory and practice became clearer as a result of the breakout sessions.

Infographics

Infographics are data-driven stories that use visual images and graphics to convey their message (Jones, Sage, & Hitchcock, 2019). The benefits of infographics are that they can convey a wide variety of information in a quick, easy to digest format. Infographics often include some text to augment the graphics and visual images and are frequently a stand-alone product designed to convey a data story rather than simply presenting data. Quality infographics should tell a compelling story using accurate data and visual imagery (Andrei & Bernard, 2013; Neibaum, Cunningham-Sabor, Carrol, & Bellows, 2015). They should also have a clear purpose, tell an easy to follow story, and provide clear actionable information. Ultimately, infographics should be easily sharable, digestive and easy to read in a short time, and provide an emotional or intellectual engagement using an eye-catching design.

Infographics have been shown to have an impact on increasing academic performance for those that use them as part of the classroom setting over only traditional lecture, PowerPoints, and papers (Alrwele, 2017). Infographics are excellent tools for supporting the educational needs of visual learners. Some studies have shown that increases can be seen if the infographic was created as an assignment or used by instructors as a teaching method (Davis & Quinn, 2014; Dur, 2014; Nuhoğlu Kibar & Akkoyunlu, 2014). In addition to academics, there is some research which suggests infographics can also tap into higher level thinking (Shanks, Izumi, Sun, Martin, & Byker Shanks, 2017). Students who are required to create infographics must use higher order and critical thinking skills in their research, interpretation, evaluation, conclusion,

design, creation, and explanation. Instructors who use them in the classroom can engage students who must apply their digital literacy skills in understanding, interpreting, evaluating, and making meaning when viewing the infographics.

Kiernan, Oppezzo, Resnicow, and Alexander (2018) found that participants who viewed infographics versus reading reports were more likely to correctly identify study findings; they also reported higher levels of trust in the data. Others have hypothesized that since infographics use text and graphics, the information can be learned more easily retained for a longer period of time, improve comprehension, and create better decision making (Ghallager et al., 2017; Yildrum, 2016). It is possible that readers can access the important information about a concept rapidly in one place, and the relationship among the information is illustrated more clearly than just reading the text.

Infographics have also been used to promote advocacy and address social justice. Yildrum (2016) noted that infographics are an ideal mechanism to convey important points to specific audiences quickly, which is one of the key purposes of advocacy. Guo and Saxton (2014) looked at this issue further and found across their review of 188 non-profit organizations that social media-based advocacy was a new organizational practice and way to communicate efforts that has yet to be really studied in the literature. They further identified three stages of this advocacy work through their "pyramid" model which included reaching out to people raise awareness, keeping the frame alive by engaging passion among supporters, and stepping up action to create social change. Each step is a place where infographics could be applied as a new tool to disseminate information and engage stakeholders to act.

As another example, within the field of human rights advocacy there has been a growing shift toward using infographics and visualizations to share data and increase the effectiveness of efforts (Rall et al., 2016). In interviews with key informants, it was found that the approach of using visualizations to present data helps address the low levels of data literacy within the world of

advocacy. However, they caution that it is vital to select the right visualizations for the right data and the right audience. As social workers engaging in advocacy work, understanding the strengths and limitations of this tool can help enhance advocacy approaches and provide better outcomes (Guo & Saxton, 2014).

Applying infographics to higher education and specifically social work is just starting to occur. Young, McLeod, and Brady (2018) discussed new ethical challenges related to social work education and noted that visual input has the potential to increase recognition and recall, and thus is a powerful tool for future social work education. Bernklau Halvor (2016) looked at ways to increase social workers' political interests and efficacy. From this study, one recommendation for effective teaching was directly applicable to the use of infographics in social work education. It was recommended that instructors and assignments expose students to a variety of different political advocacy methods. Students had a difficult time envisioning an advocacy approach beyond what they were exposed to in their courses. This makes the notion of including infographics as a critical step in engaging students in advocacy efforts.

This was applied in an online social policy course through an assignment which required students to create an infographic which addressed an issue within the realm of social justice. This assignment was a two-part assignment which required students to identify relevant information about the social justice issue and then create an infographic about the topic using the information and evidence gathered in the first part of the assignment. For Part 1, students were asked to focus on their specific aspect of the social issue identified and look at a social justice policy issue with significant history, landmark legislation, continued social injustices, advocacy efforts, and success stories. Specifically, they were tasked with a) defining the issue or problem by summarizing the social issue and providing context to the nature of the problem; b) identifying the scope and magnitude of the issue by describing the population, level of advocacy, and issue they were focused on; c) discussing the

individuals affected, how they were affected, and how this issue contributed to their social injustice d) reviewing the background and history or evolution of the social system's response to the population; e) identifying resources and barriers by describing the factors influencing this social issue that may positively influence change or continued oppression/social injustice; and f) relaying the positive and negative impacts by identifying the impact of this problem on the individuals and society. This could be monetary, lost opportunities, lack of educational opportunities, or other "costs."

In a social policy course, students engaged the infographic technique as a critical thinking application. Once the students gathered this information, they were then asked to create an infographic which would be developed to address the perspective of a key audience group that might oppose or support their issue. The goal was to create a graphical/text handout which tells a story that outlines the social problem, uses available evidence to further demonstrate the social problem, recommends a policy solution, and includes a call to action. These were created with the purpose of providing integral information on an issue that can potentially influence key decision-makers. Overall, this type of assignment represents the art of advocacy where the goal is to bring attention to an issue, engender passion among supporters, engage stakeholders in wanting to know more about the issue, and provide a way for others to get more information.

Photovoice

Photovoice is a visual approach designed to create social awareness and action through photographs (Wang & Burris, 1994; Wang & Burris 1997). The original idea of Photo Novellas was developed to create an open environment to have dialogue around social justice and policy issues. In Photo Novellas, participants used their photos and the story behind the photos to tell a contextual story of the view of the photographer. This was further refined into Photovoice to encourage community change under the lens of Photovoice. The transition from Photo Novella to

Photovoice allowed participants to be the ones who create images as a way of thinking critically about the social and political forces which impact their lives. The goal of Photovoice is to be a catalyst for community change, and it is often focused on community members whose voice is often not heard or seen. Not only does this bring communities into the assessment process, but it's also a stimulus for social action.

Three main goals of Photovoice are to a) to identify and record community strengths and concerns, b) promote dialogue and knowledge about important issues, and c) ultimately affect social change by reaching lawmakers and policymakers (Wang & Burris, 1997). Traditionally, Photovoice involves taking photos and then having facilitated discussions to reflect on the pictures that were taken. Photovoice often involves working as facilitators with community members to allow them to tell their stories, identify community assets, and create avenues for change. This might include community members taking photos of some area of their lives that they might be concerned about and want to change. After participants have taken their photos, there is often a facilitated small and large group discussion where participants get together to provide context for the photos. They do this through selecting the photos which most accurately represent the question and community, providing contextual stories about what the photos mean, and identifying themes that emerge across all the photos and stories. Finally, there can also be a showcase of the work to raise awareness and spark social change.

There are many reasons to consider using Photovoice to engage students in addressing social justice issues. These include technical considerations in the digital age, community building inside and outside the classroom, and a call to social action. When thinking about applying Photovoice in a digital even online environment, Berk (2010) discusses insights into leveraging new technologies. When linking student characteristics and teaching pedagogy, there are ten learner characteristics to consider. Within these, several are directly relevant to the application of Photovoice. It is noted that students

are interested in multi-media and often have created web content. This is coupled with the idea that many students also learn best by inductive reasoning and learn through experiential engagement. And finally, there are some students who communicate visually and are used to sharing photos as a means of communication by posting photos and sharing photos through social media. Using Photovoice as an extension of this can help promote critical dialogue about important issues and different thinking.

Sharing photos can also help create a sense of social engagement for students, which can be even more critical in an online environment where students do not often interact directly with their peers. Photovoice can support the needs of visual, auditory, and kinesthetic learners. Oeldorf-Hirsh and Sundar (2016) explored reasons why people post photos online and found that creating a sense of community was one of the top reasons. Berk (2010) recommended that one way to engage students through technology was to allow them to collaboratively pool knowledge and insights through online means, such as blogs or even e-portfolios. When Photovoice was applied in an MSW program in Canada, one of the students noted the sense of community that was created through the course assignment as they worked together, got to know each other, and were able to share insights (Walsh, Casselman, Hickey, Lee & Plizka, 2015). Another study of the application of Photovoice in an online class found social interaction as one of the key themes that emerged from participants (Edwards, Perry, Janzen, & Menzies, 2012).

Caricia and Minkler (2010) did a review of Photovoice research papers in public health and found that outcomes from these projects tended to fall into one of three categories: a) community engagement in taking action and advocacy; b) improved understanding of the community, including the strengths and challenges; and c) an increase in individual empowerment. While a majority (60%) of the research projects led to some action aimed at addressing the issue, even if they didn't lead to direct action 96% created a public space to display the photos and findings with the broader community. This is reiterated by

Sanchez (2015) who prefers the term Photo Activism as a way to convey how the taking, interpretation, and dissemination of photos can be used to influence social justice and lead to action. This approach is also in line with and promotes a feminist pedagogy by challenging the traditional structure of the instructor-student hierarchy, provides value and honors the student experience, and facilitates critical consciousness for participants (Robinson-Keilig, Hammill, Gwin-Vinsant, & Dashner, 2014).

While Photovoice was originally implemented in health and public health, there have been some cases where it has been used in social work programs and more specifically to engage students in social justice issues. Several articles have looked at the application of Photovoice within on ground BSW and MSW curricula, particularly around its application to research (McGovern, 2017; Walsh e. al., 2015) and self-reflection (Mulder & Dull, 2014). Overall, the studies found that including Photovoice helped engage students as active participants in the   research process and as a result seemed to have an impact on students as they explored their own selves as social workers.

While the implementation within social work has focused on the research process and critical self-reflection, which are worthy aims, Peabody (2013) focused on the social justice impact. Students identified the political, social, and economic issues that underlie many of the broader social injustices that our communities face. Through their projects, students were able to make meaning of the pictures in this broader context and raise awareness of how to think about engaging in advocacy and social change.

One application of this was to incorporate Photovoice through an online discussion post format in a client advocacy course. While transitioning this to an online assignment, it was important to keep the same focus on awareness of social justice, the underlying causes, and mechanisms for change. Within this context, for their first assignment during a social policy course, students were asked to post a picture which represents some type of social injustice in their community. Then other students in the class were tasked with commenting on the meaning of the photo and how it relates to social injustice. This sparked a great dialogue among students, which also led to critical thinking about the underlying causes and potential solutions. The online discussion forum provided an opportunity for students to interact and for the instructor to also provide guidance on the discussion by probing for additional details and further questions. This approach provided a venue for the public display of the photographs, critical thought about social injustice issues, and the identification of potential actions to address the issue.

Discussion

The literature suggests that a key element of shared pedagogy across the digital divide is the consistent focus on a student-centered approach to learning (Lee & Hannafin, 2016). In a hypercompetitive marketplace like higher education, digital learning solutions like those offered in this paper may be best suited to address some of the greatest challenges facing higher education generally (Heider, 2015) and to support learning across the foundations of social work education (human relationships and the recognition that social change has a meaningful impact on individuals, groups, and communities).

The techniques discussed within this paper lend support to the use of technology to promote student engagement as a bridge from on-ground pedagogy into these digital translations. It is fitting that one of the earliest theories of interpersonal engagement is similarly offered as a bridge, via virtual holding areas, to creating student connection with learning, with one another, and with the faculty (Fletcher, Comer, & Dunlap, 2014). The applications offered in this paper frame innovative use of technology that creates safe spaces for self-exploration and growth in the varied digital space of distance learning. They support all three of the established learning styles (visual, auditory, and kinesthetic).

Over the last several decades, academicians have railed against the possible denigration of higher education via the slippery slope of technology and the apparent industrialization of

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learning. Hartley (1995) warned of the "McDonaldization" of higher education, and Hayes and Wynyard (2002) further argued that innovations such as industrialized learning and aspects of digital technology, among others, foster a weakening of higher education. This shift, it is argued, aligns the institution to treat students like customers and the confirmation of degrees it's work product (Lane & Kinser, 2012). As recently as 2013, Pratt's scathing indictment of the diminishment of higher education paints the potential picture of an overtly transactional "Walmart like" business structure in which, one may argue, technology could simply function as entertainment and not as a tool for critical thought.

Ethical arguments about the role of technology applications in higher education can be made on both sides of the equation. The examples offered in this paper create clear support for the capacity of higher education to break with a highly processed learning space to deliver "old school" pedagogy in the digital era. These teaching techniques are offered in an intentional effort to leverage known pedagogy, aimed to promote interpersonal engagement and learning via digital technology to challenge and stimulate discourse among distance learners. Utilizing sound pedagogy in the virtual/online environment enhances high quality social work education across the board. When sound pedagogy, through the application of technology, creates safe, virtual holding spaces for students to think, learn, and grow, there is an argument to be made that through these types of technology, we are engaging Hayes' (2017) implicit challenge to move beyond McDonaldization in higher education.

References

Almer, E. D., Jones, K., & Moeckel, C. L. (1998). The impact of one-minute papers on learning in an introductory accounting course. *Issues in Accounting Education*, 13(3), 485–497.

Alrwele, N. S. (2017). Effects of infographics on student achievement and students' perceptions of the impacts of infographics. *Journal of Education and Human Development,* 6(3), 104 -117.

Andrei, K. H., & Bernard, C. (2013). *Infographics for advocacy, outreach and marketing: From data to design.* Philadelphia, PA: Idealware.

Berk, R. A. (2010). How do you leverage the latest technologies, including Web 2.0 tools, in your classroom? *International Journal of Technology in Teaching and Learning*, 6(1), 1-13.

Bernklau Halvor, C. D. (2016). Increasing social work students' political interest and efficacy. *Journal of Policy Practice*, 15(4), 289–313.

Campbell, M., Abel, E., & Lucio, R. (2018, November). *Equity through engagement: The one-minute paper levels the classroom/playing field*. Poster session presented at the meeting of the Council of Social Work Educators Annual Program Meeting, Orlando, FL.

Campbell, M., Lucio, R. & Detres, M. (2019). Can a digital whiteboard foster student engagement? *Journal of Social Work Education*. 38(6), 1-19.

Caricia, C. & Minkler, M. (2010). Photovoice: A review of the literature in health and public health. *Health Education & Behavior*, 37(3), 424-451.

Davis, M., & Quinn, D. (2014). Visualizing text: The new literacy of infographics. *Reading Today*, 31(3), 16-18.

Dur, B. (2014). Data visualization and infographics in visual communication design education at the age of information. *Journal of Arts and Humanities*, 3(5), 39-50.

Edwards, M., Perry, B., Janzen, K., & Menzies, C. (2012). Using the artistic pedagogical technology of Photovoice to promote interaction in the online post-secondary

classroom: The students' perspective. *Electronic Journal of e-Learning*, 10(1), 32-43.

Fletcher, K. I., Comer, S. D., & Dunlap, A. (2014). Getting connected: The virtual holding environment. *Psychoanalytic Social Work*, 21 (1-2), 90–106.

Flynn, M. 2017. Science, innovation, and social work: Clash or convergence? *Research on Social Work Practice*, 27(2), 123-128.

Gallagher, S. E., O'Dulain, M., O'Mahony, N., Kehoe, C., McCarthy, F., & Gerard, M. (2017). Instructor-provided summary infographics to support online earning, *Educational Media International*, 54 (2), 129-147.

Greening, T. (1998) Scaffolding for success in problem-based learning, *Medical Education Online*, 3(1), Article 4297

Guo, C., & Saxton, G. D. (2014). Tweeting social change: How social media are changing nonprofit advocacy. *Nonprofit and Voluntary Sector Quarterly*, 43(1), 57–79.

Hartley, D. (1995). The 'McDonaldization' of higher education: Food for thought? *Oxford Review of Education*, 21(4), 409-423.

Harwood, W. S. (1996). The one-minute paper: A communication tool for large lecture llasses. *Journal of Chemical Education*, 73(3),: 229–230.

Hayes, D. (2017). *Beyond McDonaldization*. New York, NY: Routledge.

Hayes. D., & Wynyard, R. (2002). *The McDonaldization of higher education*. Westport, CT: Bergin and Garvey.

Heider, J. S. (2015). Using digital learning solutions to address higher education's greatest challenges. *Publishing Research Quarterly*, 31(3), 183-189.

Heemskerk, I., Kuiper, E., & Meijer J. (2014). Interactive whiteboard and virtual learning environment combined: Effects on mathematics education. *Journal of Computer Assisted Learning,* 30(5), 465-478.

Huba, M. E., & Freed, J. E. (2000). *Learner centered assessments on college campuses: Shifting focus from teaching to learning*. Boston, MA: Allyn and Bacon.

Ipek, I., & Sozcu, O. F. (2016). Preferences and attitudes for using interactive whiteboards in different courses and learning. *European Journal of Contemporary Education*, 15(1), 173-184.

Jones, N. P., Sage, M., & Hitchcock, L. (2019). Infographics as an assignment to build digital skills in social work. *Journal of Technology in Human Services*. Advance online publication.

Kiernan, M., Oppezzo, M. A., Resnicow, K., & Alexander, G. L. (2018). Effects of a methodological infographic on research participants' knowledge, transparency, and trust. *Health Psychology*, 37(8), 782–786.

Knight, B. (2016). Placemaking: Attracting and retaining today's students. *Community College Journal*, 87(2), 8-9.

Lane, J., & Kinser, K. (2012). MOOCs and the McDonaldization of global higher education. *The Chronicle of Higher Education*, Retrieved from: https://www.chronicle.com/ blogs/worldwise/moocs-mass-education-and-the-mcdonaldization-of-higher-education/30536

Lea, S. J., Stephenson, D., & Troy, J. (2003). Higher education students' attitudes to student-centered learning: Beyond 'educational bulimia'? *Studies in Higher Education,* 28(3), 321-334.

Lee, E., & Hannafin, M. J. (2016). A design framework for enhancing engagement in student-centered learning: Own it, learn it, and share it. *Educational Technology Research and Development*, 64(4), 707-734.

Light, G., & Cox, R. (2001). Learning and teaching in higher education: The reflective practitioner. London, England: Paul Chapman Publishing.

Lucas, G. M. (2010). Initiating student-teacher contact via personalized responses to one-minute papers. *College Teaching*, 58(2), 39-42.

Magnan, B. (1991, January). Teaching idea: The one-minute paper'. *Teaching Concerns* [University of Virginia newsletter]. Retrieved from http://cte.virginia.edu/resources/teaching -idea-the-one-minute-paper-3/

McCombs, B. L., & Whisler, J. S. (1997). *The*

Learner-centered classroom and school: Strategies for increasing student motivation and achievement. San Francisco, CA: Jossey-Bass Inc.

McGovern, J. (2017). Integrating student research across the social work curriculum: A photovoice case study. *Journal of Baccalaureate Social Work*, 22(1), 43-51.

McKimm, J., & Morris, C. (2013). Small group teaching. *British Journal of Hospital Medicine*, 70(11), 654-657. Retrieved from https://doi.org/10.12968/hmed.2009.70.11.45059

McLaughlin, T., & Yan, Z. (2017). Diverse delivery methods and strong psychological benefits: A review of online formative assessment. *Journal of computer assisted learning,* 33(6), 562-574.

Mulder, C. & Dull, A. (2014). Facilitating self-reflection: The integration of Photovoice in graduate social work education. *Social Work Education*, 33(8), 1017-1036.

Neibaum, K., Cunningham-Sabor, L., Carrol, J., & Bellows, L. (2015). Infographics: An innovative tool to capture consumers attention. *Journal of Extension*, 53(6), Number 6.

Nuhoğlu Kibar, P., & Akkoyunlu, B. (2014). A new approach to equip students with visual literacy skills: Use of infographics in education. In S. Kurbanoğlu, S. Špiranec, E. Grassian, D. Mizrachi, & R. Catts (Eds.), *Information literacy: Lifelong learning and dgital citizenship in the 21st century* (pp. 456-465). Cham, Switzerland: Springer.

Oeldorf-Hirsch, A., & Sundar, S. S. (2016). Social and community social and technological motivations for online photo sharing. *Journal of Broadcasting & Electronic Media*, 60(4), 624–642.

Peabody, C. G. (2013). Using photovoice as a tool to engage social work students in social justice. *Journal of Teaching in Social Work*, 33(3), 251–265.

Pratt, T. (2013, December 26). We are creating Walmarts of higher education [Article from *The Atlantic*]. Retreived from https://www.theatlantic.com/education/archive/2013/12/we-are-creating-walmarts-of-

higher-education/282619/

Pintrich, P. R., & Zusho, A. (2002). The development of academic self-regulation: The role of cognitive and motivational factors. In A. Wigfield & J. S. Eccles (Eds.), *A Vol. in the educational psychology series: Development of achievement motivation* (pp. 249-284). San Diego, CA: Academic Press.

Rall, K., Satterthwaite, M. L., Pandey, A. V., Emerson, J., Boy, J., Nov, O., & Bertini, E. (2016). Data visualization for human rights advocacy, *Journal of Human Rights Practice,* 8(2), 171–197.

Robinson-Keilig, R. A., Hamill, C., Gwin-Vinsant, A., & Dashner, M. (2014). Feminist pedagogy in action: Photovoice as an experiential class project. *Psychology of Women Quarterly*, 38(2), 292-297.

Sanchez, L. (2015). Students as photo activists: using cameras in the classroom for social change. *Theory into Practice,* 54(2),163–171.

Shackel, R. (2012). Beyond the whiteboard: E-Learning in the law curriculum. *Quality Law & Justice Journal*, 12(1), 105-134.

Shanks, J. D., Izumi, B., Sun, C., Martin, A., & Byker Shanks, C. (2017). Teaching undergraduate students to visualize and communicate public health data with infographics. *Frontiers in Public Health, 5*, Article 315.

Sparrowe, R. T., Liden, R. C., Wayne, S. J., & Kraimer, M. L. (2001). Social Networks and the Performance of Individuals and Groups. *The Academy of Management Journal,* 44(2), 316-325.

Stead, D. R. (2005). A review of the one-minute paper. Active Learning in Higher Education, 6(2), 118-132.

Türel, Y. K., & Johnson, T. E. (2012). Teachers' belief and use of interactive whiteboards for teaching and learning. *Educational Technology & Society,* 15(1), 381-394.

Vonderwell, S., Liang, X., & Alderman, K. (2007). Asynchronous discussions and assessment in online learning. *Journal of Research on Technology in Education*, 39(3), 309–328.

Walsh, C. A., Casselman, P. J., Hickey, J., Lee,

N., & Pliska, H. (2015). Engaged in research/achieving balance: A case example of teaching research to Master of Social Work students. *Contemporary Issues in Education Research*, 8(2), 93-102.

Wang, C., & Burris, M. A. (1994). Empowerment through Photo Novella: Portraits of participation. *Health Education Quarterly*, 21 (2), 171-186.

Wang, C. C. & Burris, M. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education & Behavior,* 24(3), 369-87

Weaver, R. L., & Cotrell, H. W. (1985). Mental aerobics: The half-sheet response. *Innovative Higher Education*, 10(1), 23-31.

Weimer, M. (2002). *Learner-centered teaching: Five key changes to practice*. San Francisco, CA: Jossey-Bass.

Wojenski, J. (2019). Erasing the past, typing the future: Timeline of the chalkboard. Retrieved from https://chip.web.ischool.illinois.edu/people/projects/timeline/1801wojenski.htm

Yildrum, S. (2016). Infographics for educational purposes: Their structure, properties and reader approaches. *The Turkish Online Journal of Educational Technology*, 15(3), 98-110.

Young, J. A., McLeod, D. A., & Brady, S. R. (2018). The ethics challenge: 21st century social work education. *Journal of Social Work Values and Ethics*, 15(1), 13-22.

Zwelijongile, G. B. (2015). Online formative assessment in higher education: Its pros and cons.*The Electronic Journal of e-Learning*, 14 (4), 228-236.