InSight

A Journal of Scholarly Teaching

Volume 16

A Journal of the
Faculty Center for Innovation

"The more learning in school resembles the successful learning that is so abundant outside school, the greater the chance that some learning will take place" (p. 2).

~Blum, S. D. (2016, Jan. 13). *"I love learning: I hate school": An anthropology of college*. Cornell University Press.

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InSight's *cover photo provided by:* ***Cassandra Baltazar***
Cassandra Baltazar is a part-time Park student at Mountain Home AFB studying social psychology and a full-time mother of two amazing kids. She said this about photography and this photo: "Photography has always been something I have enjoyed. I enjoy capturing the simplicity of lines, shadows, and patterns within the everyday things I see. Photography lets me capture moments in time, and I enjoy the idea of capturing something that will mean more than words to someone. The black and white picture I submitted was of the books I was reading at that moment in time: school books, a dictionary, a thesaurus, and books I was reading for fun."

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"For those of us committed to changing higher education for the better, to making a genuine difference in our classrooms and on our campuses, a commitment to *radical hope* offers the chance to do so in a clear-eyed and sustainable manner without succumbing to hostile resignation or burned out despair" (p. 4)

~Gannon, K. M. (2020). *Radical hope: A teaching manifesto*. West Virginia University Press.

Introduction

About Park University…

Park University (originally Park College) was co-founded by George S. Park, Dr. John A. McAfee, and Rev. Elisha B. Sherwood in 1875. An independent, private institution, accredited by the Higher Learning Commission of the North Central Association, Park University currently enjoys a distinguished position in higher education as a growing institution with its flagship campus in Parkville, MO, a campus in Gilbert, AZ, 39 campus centers in 22 states, and an extensive online degree program. In 2005, Park University created The Faculty Center for Innovation (originally the Center for Excellence in Teaching and Learning) to promote the practice and profession of teaching, including scholarly inquiry into teaching across the disciplines. *InSight: A Journal of Scholarly Teaching*, an outreach of the Center's programming, is a refereed academic journal published annually. The editorial staff invites submissions of research and scholarship that support faculty in improving teaching and learning. Open to submissions from all disciplines and institution types, *InSight* articles showcase diverse methods for scholarly inquiry and reflection on classroom teaching. Additionally, as *InSight's* readership continues to grow, in 2021 the Center decided to create an opportunity for higher education faculty to submit practical teaching tactics accompanied by a reflection and evidence-based educational material aligning to the scholarship of teaching and learning (SoTL). This category, known as *InStruct*, was designed to showcase innovative instructional strategies within the classroom while displaying SoTL principles.

From the Editor…

2020-2021 has been a challenging year for those of us teaching in higher education, from lockdowns and mask mandates to economic crises and major overhauls of curricula. Many inequities of the academic system have been deepened by these crises, and many other inequities brought fully to light. One example is the data showing that journals are receiving fewer submissions during COVID, and the submissions they do receive show a widening gender gap, raising questions about overall equity and access for faculty researchers and teachers (King & Frederickson, 2021). The reasons why this is happening are numerous, including academic and employment status, extreme workloads created by reinventing curriculum and teaching online, gendered expectations, and socioeconomic status. It is no wonder then that journal submissions are down, especially from faculty whose teaching, service, and home life were greatly altered over the last year.

While this trend during the pandemic was not the impetus for some of the changes we made at *InSight* this year, it highlights some of the reasons why those changes make sense for our publication. Though *InSight* has always published high quality empirical studies of teaching and learning (and this volume is no exception), the focus on theory and empiricism can unintentionally overshadow the creative work done by practitioners of teaching in higher education. As James Lang points out in his editorial in this volume, empirical work on teaching does not start with a study; instead it starts with a "creative teacher [who] has a hunch, tries something new, [and] finds

that it resonates with her students" (p. 11). It is only after the fact that we seek to theorize why something works, in what situations, and for whom.

One way we seek to value our creative practitioners and open up our journal to more accessible publication is the new section we introduced this year called *InStruct*. The purpose of *InStruct* is to allow faculty to share their creative and innovative teaching practices while still framing those practices within the scholarship on teaching and learning. The pieces are shorter by design, and we have encouraged more narrative-based reflective writing in order to value different ways of knowing about teaching and to provide alternative avenues for more faculty to share their work.

One other change you will see in this year's volume is a new student editorial on teaching and learning. So often, research on teaching prioritizes the values of the teacher, program, or institution, but students have perspectives on their learning that are just as valuable. This year, the *InSight* editorial team was joined by a student editorial intern, Taylor Lucas, who we invited to contribute a piece on a teaching and learning topic that she felt strongly about. The result was an amazing piece that advocates for contract grading, an alternative grading practice that prioritizes the process of learning and increases student motivation and agency. Ms. Lucas cites the research on efficacy of contract grading, shares her positive experiences with contract grading as a student, and invites you to try it out in your own classroom.

We are excited to share this volume with you, and we hope you also enjoy the wider diversity of voices and styles that these new features represent. I would like to thank all of the peer reviewers and authors for their hard work making this volume a reality during an extraordinarily busy and difficult time. A special thanks goes to Dr. Jamie Els, *InSight's* Assistant Editor, for everything she does to help me get this volume out the door; I quite literally could not do this without her. Many thanks also to Taylor Lucas, our outstanding editorial intern. I would additionally like to thank Lauren Lovvorn, our proofreader, for her excellent and speedy work. We are also grateful for the support of the Director of the Faculty Center for Innovation, Dr. Amber Dailey-Hebert, and Associate Provost Dr. Emily D. Sallee, Drs. Stacey Kikendall and Jean Mandernach, advisory board members, and the rest of the FCI team.

--Amy Mecklenburg-Faenger, PhD

More Acknowledgements…

InSight's editorial staff would like to thank the board of trustees and executive staff of Park University; their leadership and support in providing faculty resources makes this publication possible. A special thank you is given to Shane Smeed, Interim President, Dr. Michelle Myers, Provost, Dr. Emily D. Sallee, Associate Provost for Faculty and Academic Affairs, Brian Shawver, Associate Provost for Teaching and Learning, and Dr. Jayme R. Uden, Associate Vice President and Dean of Students.

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From Evidence to Imagination

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During the final year of my PhD program, I was looking for some part-time work to supplement my graduate stipend. I saw an advertisement for a graduate fellow position at the Center for Teaching Excellence on campus, and it seemed like the number of hours was about right for me. I had no idea what a Center for Teaching Excellence was, but I sent in my application and got an interview.

The director of the center at that time was Ken Bain, a historian whose powerful and influential works—still germinating at that time—include *What the Best College Teachers Do* and *What the Best College Students Do*, two bestselling accounts of the habits and practices of highly successful faculty and their students. He offered me a job at the center. My primary duties there would include assisting in the development of programs for graduate students, helping Ken continue the research he had been conducting for *What the Best College Teachers Do*, and serving as a general factotum around the teaching center, assisting with whatever other projects demanded our attention. I enjoyed the work so much that when I finished my dissertation the next year, I applied for a position as assistant director, and served in that position for the next three years.[1]

What drew me into the work of studying teaching and learning in higher education were two things that Ken did for me, one specific and one more general. The specific thing that Ken did when I was first hired was point me to the bookshelves and file cabinets in the center, all of which were stuffed with monographs and articles on teaching and learning, and say, "Take some time and explore the library. Read around a little bit in the subjects that interest you." I was teaching as a graduate student at that time, and struggling to get students engaged in meaningful discussions of the literature they were reading, so I immediately pounced on the articles about teaching by discussion, and was thrilled to discover a host of specific new strategies I could try.[2]

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[1] A longer version of this story appears in Chapter Nine of *Small Teaching: Everyday Lessons from the Science of Learning*, 2nd ed., which was in press at the time of this writing.

[2] The first article I discovered was one whose recommendations I still use to this day: Peter Frederick's (1981) "The Dreaded Discussion: Ten Ways to Start," in *Improving College and University Teaching*, *29*(3), 109-114.

From that moment on, I got into the habit of addressing any teaching problem I might have by first digging into the literature in search of research and recommendations.

But beneath this specific invitation that Ken issued to me to explore the literature, he did something much more substantive. In his approach to faculty development, in the books he wrote and the talks he gave, in everything he did in this field, he communicated to me and to his audiences a fundamental idea that has animated my career ever since: Helping another human being learn is a fascinating challenge, one as worthy of our scholarly attention, as are the questions we pursue in our disciplines. Strange though it might seem, this had never occurred to me before. I had always walked into the classroom wondering how I was going to teach. It never occurred to me that my actual job was to help people learn. Of course once you make this mental shift, an avalanche of questions follow. How *do* people learn? What happens in the brain when we learn something? Why does learning fail at times and succeed at other times? Why do we forget some things we learn and remember others? What inspires people to learn, and what turns them away from learning? Questions like these have sent me continually back to the scholarship of teaching and learning in higher education throughout my career, wondering how to solve the latest problem I have encountered in my classrooms.

The body of scholarship available to help me solve such teaching problems has exploded in the past couple of decades; I doubt very much that the library of the teaching center where I began my career would be able to contain all the books that have been written on this subject since the late 1990s. That has been a welcome development, as working faculty now have access to a wide range or research on teaching and learning. In the wake of the expansion of that research has come a host of synthesizers and translators, among whom I would count myself, who are drawing from laboratory experiments on learning or new findings in brain research in order to offer practical recommendations for course design and classroom practice. Increasingly the mantra has become that our teaching should be "evidence-based." We should ensure that the teaching practices we deploy have support either from educational experiments or from a clear understanding of cognitive processes.

But while I find all of this promising in our efforts to improve our work as teachers and the learning of our students, we should remain ever alert to the possibility of the pendulum of educational thinking swinging too far in any one direction. I edit a book series on teaching and learning in higher education, and one of the things I have noticed is that the book proposals we receive tend to come in topic-related waves. For example, during the early months of the pandemic, we received multiple proposals for books on supporting students emotionally, especially in online courses. What I have been seeing more recently have been book proposals interested in exploring the development of creativity in teaching. These books are considering how teachers develop their pedagogical imaginations—how they conceive of new course designs or

develop innovative teaching strategies for their specific contexts. While these potential authors are clearly familiar with the research on teaching and learning, they are thinking beyond it—and trying to understand how their fellow faculty can do the same.

Coming from the field of English literature, and having spent years teaching creative nonfiction writing, I think they are onto something. No matter how much evidence we might have for a specific teaching practice, every course, every classroom, and every group of students have their own unique personality. We can't apply evidence-based approaches mechanically; they always need adapting to our particular context. For that we need imagination and artfulness. My time teaching creative writing has convinced me that this is a skill people can learn and improve upon. Contrary to the tired myth that some people are just born creative, while others lack some bone or muscle of imagination, I have found repeatedly that study and practice can improve creativity just as it can improve problem-solving or test-taking skills. This applies to teachers as much as it does to students.

The act of teaching should begin with an understanding of how people learn, and the implications of that understanding for teachers. Journals like *InSight* are providing us with ongoing opportunities to engage with those ideas. But as the field continues to expand and evolve, we need to make sure we are validating and valorizing those teachers who are exploring and attempting radically creative new ways to teach. That can always include ideas for how to apply and adapt evidence-based practices, but it should also include strategies that push us into brand-new territories, creative techniques that might surprise ourselves and our students, and open new areas for future research. We tend to think about practice as deriving from theory, but reversing that direction can produce surprising new results. A creative teacher has a hunch, tries something new, finds that it resonates with her students, and then she or others seek to understand what might be underpinning its success. Just as we need theorists to speak to practitioners, we need such creative practitioners to clear new ground for theorists to explore.

Just as we need theorists to speak to practitioners, we need such creative practitioners to clear new ground for theorists to explore.

I expect that any reader of this journal shares my fascination with the question of how to help another human learn. As you continue to explore the research that can help us answer this question, I encourage all of us to remember the essential role that creativity plays in our work and recognize that the practice of teaching depends at least as much upon imagination as it does upon evidence.

James M. Lang is a Professor of English and the Director of the D'Amour Center for Teaching Excellence at Assumption University in Worcester, MA. He is the author of six books, the most recent of which are Distracted: Why Students Can't Focus and What You Can Do About It *(2020*), Small Teaching: Everyday Lessons from the Science of Learning *(2016) and* Cheating Lessons: Learning from Academic Dishonesty *(2013). He writes a monthly column on teaching and learning for* The Chronicle of Higher Education*, and edits a book series on teaching and learning in higher education for West Virginia University Press.*

"Instead of working from a deficit model—what the students lack—faculty need to embrace the unique features of their own communities of practice, helping students to braid together their prior knowledge to construct new ways of knowing in disciplinary settings" (p. 4).

~Goode, J. R., Morris, K. K., Smith, B., & Tweddle, J. C. (2021). Why aren't my students reading: Faculty & student research unveiling the hidden curriculum of course material usage. *International Journal for the Scholarship of Teaching and Learning, 15*(1), Article 2. https://doi.org/10.20429/ijsotl.2021.150102

A Student Perspective on Contract Grading

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When I was a senior in high school, I enrolled in a first-year college writing course. Our assignments included the typical essays, like a personal narrative, an expository essay, and a media criticism analysis paper. I loved writing, but the class was daunting; the grade I earned in this course would go on my college transcripts before I'd even chosen a college to attend. To ensure I maintained good grades and met the requirements for every paper, I wrote two essays per assignment. Every due date, I asked my teacher to read both and help me choose the stronger paper. Every due date, she refused. "Turn in the one you like better," she always told me. The problem was that I didn't care about which one I liked better; I cared about turning in the one my teacher would like better because I was trying to earn an A in the course. (In case you're wondering what my first course grade ended as, I did get the A.)

It wasn't until my sophomore year of college that I realized what it meant to write and submit an assignment because I liked it, not because I thought it was what my professor wanted. The course that helped me discover my writing style was called Introduction to English Studies (EN205), and it was the first class in which the syllabus used contract grading, also commonly referred to as unilateral grading (Danielewicz & Elbow, 2009).

The course was set up so that students were rewarded for meeting assignment criteria and turning the work in on time; if a student didn't meet the expectations of the assignment but did meet the due date, our professor offered them the opportunity to revise or redo the assignment so that it could meet the assignment expectations without penalizing their grade. Our grades were either marked complete or incomplete, and the syllabus explained that to get an A, we needed to get a complete mark on all major assignments and 90% of the minor assignments. Other scholars use similar but slightly different models of contract grading, one of the many benefits to implementing a contract into the grading criteria. A popular example is Peter Elbow's unilateral grading model, in which students are guaranteed a B in the course simply by attending class and turning in work, but must earn an A by exceeding expectations and producing quality work (Danielewicz & Elbow, 2009).

Contract grading offers a safe and unique learning opportunity for students who otherwise, like me, get caught up in the intricacies of rubric requirements and possible teacher biases. I learned to stop thinking about my writing in terms of what my professor would want to read, and instead I began writing what I wanted to write.

I was still putting forth the effort my professor was hoping for, but I knew that I could take risks without being punished for it.

Many scholars consider contract grading a method to engage fairness in the classroom (Mallette & Hawks, 2020; Reardon & Guardado-Menjivar, 2020). This is because it rewards students for participating in class and working on assignments, even if they don't quite reach the expectations the first time. "One of the central features of grading contracts is that they create exchange value for labor, guaranteeing minimum grades that correspond to completion of the work of a writing course" (Gomes et. al., 2020, p. 1). This grading method allowed students to make mistakes and learn from them, but it didn't exempt students from putting forth effort in the classroom. Instead, it seemed to promote student motivation. A large part of the reason contract grading seems to work so well in classroom settings is because it doesn't take responsibility off of the students or the teachers. We were still required to submit work by a deadline that met certain criteria, and our professor gave us feedback to let us know what we did well and what we needed to improve. We weren't afraid of failure in the classroom anymore; as long as we were willing to put in the work, we could take risks, learn from our mistakes, and end the course with a portfolio of quality assignments.

EN205 grew my confidence as a writer and student and shaped my student habits for the rest of my college experience. I'm no longer that scared high school senior who was afraid of failure because I was provided a classroom experience where I could fail safely, and as a result, I watched my writing go from the dreaded five paragraph essay writing to genuine prose. I still strive for As, but now I want to receive them because my professors like the writing I want to write, not because I write what my professors might want to read. I encourage professors to consider contract grading in their courses because it enforces student independence and allows them to learn from mistakes. As Elbow and Danielewicz (2009) note, "Even teachers who are not free to depart from a conventional grading system can experiment tentatively with a contract for only certain purposes, or for certain features of a course." Contract grading allows students to focus primarily on the process of learning, which reflects the phrase "It's not about the destination, it's about the journey." So many students, including myself, focus on the destination (the grade) rather than the journey (the act of learning). In my experience, unilateral grading not only allowed me to truly experience the journey of learning, but it taught me how to appreciate it in other classes as well.

Contract grading allows students to focus primarily on the process of learning, which reflects the phrase "It's not about the destination, it's about the journey."

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Taylor Lucas graduated from Park University where she earned a BA in English, a minor in Organizational Communications, and is certified in Professional and Technical Writing. Throughout her student career, Taylor served as president of Park's chapter of Sigma Tau Delta, received the Mary Barlow Writing Award, and published several of her short stories in Park's student literary magazine, The Scribe. *Her future hope is to become an editor, and she has taken the first step by gaining professional experience by serving as* InSight's *editorial intern during the 2021 spring semester.*

Exploring Value Variations in Instructor Presence Techniques for Online Students

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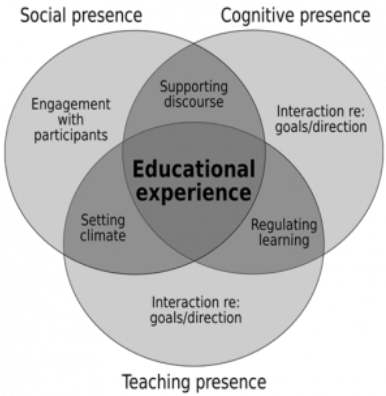
Abstract. This study sought to define and measure online undergraduate students' perceived value of instructor presence techniques across five communication mediums per pedagogical goal (connection to course content, connection to classmates, connection to the instructor, foster interest, and facilitate immediate feedback). Students found personalized written messages from an instructor (M=4.61) as most valuable due to their ability to provide immediate feedback. Interactive phone calls (M=3.24) were the least valuable in the area of familiarity. Results indicate all instructor presence techniques had value, but some were more valuable than others.

As more universities provide fully online programs, it is imperative to develop techniques that continue to improve learning and teaching online. To illustrate, at least 32% of college students enrolled in an online course in 2013 (Sun & Chen, 2016). More than six million students had completed at least one online course by 2017 (Pawl, 2018). Plus, more than 279 colleges and universities provided fully online courses in 2019 (U.S. Department of Education, Recognition and Accreditation, 2019).

With continued enrollment growth in online-only programs, it is critical that educators continue to adapt and meet the needs of their students in online settings. Meeting online students' needs can be done with the use of learning objectives and the Community of Inquiry (CoI) model as guides to help educators select tools that will help students make the best connections with their content, classmates, and teacher (Thompson et al., 2017). The CoI model is a pedagogical theory that integrates social, teaching, and cognitive presences. The utilization of the CoI model has been theorized to most closely create an ideal educational experience. Within the CoI model, social presence consists of the ability of all the participants in the community to project themselves socially and emotionally within the classroom environment (community of inquiry) (Garrison et al., 2000). Teaching presence is the shared responsibility for the educational experience among students and teachers (Garrison et al., 2000). Cognitive presence consists of "…the extent to which learners are able to construct and confirm

meaning through sustained reflection and discourse in a critical community of inquiry" (Garrison et al., 2000, p. 90). Each of these presences overlaps with one another. See Figure 1 below for a graphic of the standard CoI model.

Figure 1

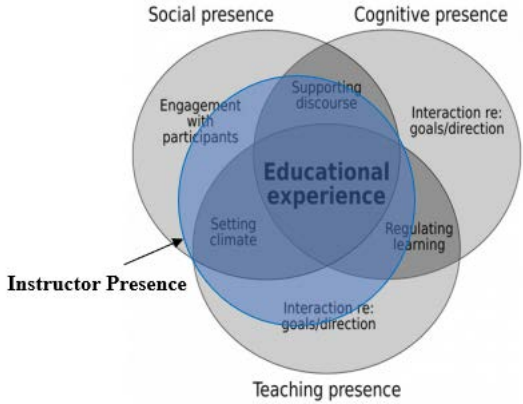


Note. CoI Framework. Elements of an educational experience (Garrison, Anderson, & Archer, 2010).

Instructor Presence within CoI

As more and more institutions adopt this framework for use in curriculum design, course development, and instructor training, additional dialogue and research have been completed using the model as a theoretical foundation. "Although thousands of CoI-based articles have been published (Befus, 2016), those critical of the framework suggest that more presences should be added in the framework" (Bektashi, 2018, para. 1). Instructor presence is one such presence that needs identification within the CoI framework. This presence is purported to overlap social and teaching presences (Richardson et al., 2015). See Figure 2 for a visual of where instructor presence would be within the CoI model. Instructor presence is difficult to describe, as it is not a physical presence in an online classroom but rather the essence of the instructor's presence while a learner is in class. Some of the previous literature describes this concept as instructor social presence (Collins et al., 2019). The purpose of this conceptual framework behind the

Figure 2



Note. Visual of proposed instructor presence within CoI Framework.

terminology of instructor presence is designed to help researchers understand the role of online instructors. The latter may teach pre-designed courses, design their own courses, or are designer-instructors of the course (Collins et al., 2019). Instructor presence is the central area of focus within the research study.

In the traditional setting, instructor presence develops naturally while the instructor is in front of the classroom as students can physically see and hear the instructor (Kennette & Redd, 2015). On the contrary, in the online setting, the instructor must work to develop this instructor presence. Fostering instructor presence has been of the utmost importance as it is predicted to have a positive impact on online undergraduate students who are often at the highest risk of dropping out. Student engagement and student connection with the instructor are relational (Collins et al., 2019). In a similar study, which investigated the role of interaction with dropping out of school, it was concluded that the learner-instructor interaction had the most considerable effect on the dropout rate (Croxton, 2014). Though all instructor presence techniques could help to increase instructor presence and increase learner-instructor interactions, some formats may have differential perceived value with different pedagogical goals. Thus, this study aims to examine the perceived value of various forms of instructor presence techniques for meeting specific goals (i.e., connecting to course content, connecting to classmates, connecting to the instructor, fostering level of interest, providing immediate feedback). Past studies have assessed specific techniques to increase teaching presence in the online classroom (Steele, Robertson, et al. 2017; Steele et al., 2018). However, instructors and researchers have yet to determine their value in comparison to one another and, if any, have equivalent perceived value to synchronous learning options such as live video conference calls.

One current understanding is that synchronous communication, such as phone calls and live video conferencing, is the best form of integrating instructor presence because it can break down the psychological and physical barriers that interrupt interaction and participation (Falloon, 2011). Synchronous communication can be challenging to achieve as completing learning tasks in an asynchronous environment is the primary design and management need for the online classroom. Clark and Mayer (2011) propose instead that incorporating an instructor's sense of presence into asynchronous learning components, such a pre-recorded video lectures and audio feedback on assignments, could enhance learning and make the learner feel more connected to the instructor and course. It could be that any method an instructor uses to integrate their sense of presence into an online classroom may be well received by learners, despite the specific course content, design, learning management system, or teaching style. After all, the purpose of items such as personalized lectures, announcements, and phone calls is to display the instructor's presence to help students feel more connected, comfortable taking learning risks, and ease in approaching the instructor with questions during a course (Collins et al., 2019).

Though an instructor may have helped to develop the course, including the syllabus, assignments, discussion questions, selected the ebook, and/or additional materials, it does not necessarily mean that the student will feel their instructor presence within the course (Bolldén, 2016). Collins et al. (2019) noted that building instructor presence is a vital element of an instructor's role and vitally important to the overall student learning experience. When instructors find a way to embody their

presence in the classroom, students report a stronger connection to the instructor, class, and even sometimes content (Bolldén, 2016; Steele, Robertson, et al., 2017; Steele et al., 2018). An instructor's efforts to enhance their instructor presence within a classroom can result in greater connection with their students because of the connection that such presence can materialize for the learner.

Some activities that are theorized to add instructor presence within the classroom include creating a video biography, video welcome message, weekly check-in videos, instructor created podcasts, sharing personal examples with the class, instructor generated assignments, content, direction clarification posts, and more (Kupczynski et al., 2010; Steele, Robertson, et al., 2017; Steele et al., 2018). Furthermore, all of these methods of incorporating instructor presence into the classroom may have added benefits. For instance, some may also increase immediacy for the student, further connect students with class content, or others are an opportunity for students to gain elaborative feedback on an assignment. The enhanced value can end up crossing over into all three presences of CoI (teaching, social, and cognitive) (Kozan & Caskurlu, 2018). For example, students may feel comfortable enough with the instructor to also project themselves as individuals in the classroom (Collins et al., 2019). Moreover, instructors can encourage deeper reflective thinking from their learners with the addition of their instructor presence within discussion materials. Many different communication mediums allow for instructors to increase their instructor presence.

Communication Mediums

With advancements in technology, humans have increased options for communication mediums. A medium is the method or channel one uses to communicate. In the recent past, these channels were often chunked into three larger communication medium umbrellas (traditional, email, and social media) (O'Neal et al., 2016). Online education presents an added layer as personal learning environments (PLEs) or learning management systems (LMS) use social software to enable instructor-to-learner and peer-to-peer communication (Jeremić et al., 2012). Typically, instructor presence techniques are used within the LMS in one of four mediums: typed/written words, images, audio, and video. Outside of the LMS, instructors and students can also interact via typed/written words through email, text messages, and mailed letters. While each of these mediums offers an opportunity for instructors to build their presence, little is known about which format is best aligned for meeting various anagogical goals.

Typed Words

The traditional format of teaching content in the online modality originates with simple text (Jeremić, et al., 2012). Text-based instruction is the foundational approach in the online modality. The original study with the personalization principle simply changed the text in a quiz from a more formal third person to a friendlier sounding conversational tone displaying the power of personalization with text (Moreno & Mayer, 2004). Furthermore, Moreno and Mayer (2004) found that

personalizing text reduces the cognitive load allowing students to learn better. Personalizing text is perhaps the easiest way to increase instructor presence by changing the text to less formal tone and personalizing it with names and instructor names.

- *Personalized Typed Words Example:* Using the student and instructor names in feedback and/or conversational language.
- *Non-Personalized Typed Words Example:* A curriculum generated written lecture and/or formal language.

Static Visual

Verbal lectures and written text are not always enough to explain concepts or even the relation of one idea to another in a course offered in any modality. Static visuals such as diagrams, figures, charts, maps, images, and other graphics enhance the likelihood of student understanding (Shabiralyani et al., 2015). Besides, images can help aid in storing the information into memory, improve the learning environment, and promote thinking (Shabiralyani et al., 2015). Pao-Nan Chou and Hsi-Chi Hsiao (2010) found that during a lower-order thinking process, text-based instruction was inferior to static visual instruction. Additionally, instructors can personalize the classroom to increase instructor presence with visuals as including a picture of themselves in the classroom or class profile.

Audio

Audio content can add another supplemental way to enhance and deliver content in the online modality. Supplements such as audio lectures can be time savers for faculty due to the ease and speed of creating them (Copley, 2007). Not only can it be beneficial for faculty, but supplements such as audio lectures or podcasts can also offer students mobility to listen to them on the move (Steele, Robertson, et al., 2017; Steele et al., 2018). Audio files also provide a great deal of flexibility to easier accessibility with regards to bandwidth (Steele, Nordin, et al., 2017). An example of personalized audio is a personalized MP3 audio grading feedback recorded by the classroom instructor. Audio can also be provided that aids in instruction but was not personalized by the instructor.

Video

Personalized videos are one of the easiest ways online instructors can boost their instructor presence and connection with the class. [author redacted] et al. found that students who viewed video lectures with their instructors in the videos were more likely to have an increased connection to their instructor. Also, the students in the study indicated that personalized videos with their instructor made them feel more connected to the classroom (Steele, Robertson, et al., 2017; Steele et al., 2018). Mayer et al. (2004) determined that eliminating unnecessary words, sounds, and/or pictures reduced the cognitive load while increasing learning. Thus, the shorter and more to the point, the more effective the video will be. Nagy (2018) found that the attitude toward

and the perception of the usefulness of the videos to be the most critical factors that influenced video usage. Non-personalized videos can also be helpful but did not rank as high in helping students feel connected with their classroom and instructor. An example of a non-personalized video lecture is an educational YouTube video created by someone other than the instructor.

Study Design and Procedure

Research Question

What instructor presence techniques are rated as most and least valuable based on need: Connection to course content, connection to classmates, connection to the instructor, increases in the level of interest, provides an outlet for immediate feedback, and medium: text, image, video, and audio.

Survey Creation

The researchers created a list of instructor-generated materials that have been established to increase instructor presence in the online classroom (Steele, Robertson, et al., 2017; Steele et al., 2018) across the four proposed communication mediums (written words/text, images, audio, and video) that an instructor might use to enhance their instructor presence within an online classroom. See Appendix A for a matrix example.

Upon completing the matrix, each box was then transformed into a survey question. The questions are designed as five-point agree/disagree Likert scale statements. The survey scale ranged from 1-5 with 1 indicating no value, 3 indicating the neutral value, and 5 indicating the highest value. To reduce the likelihood of survey fatigue, the survey was divided into four parts. Part one included informed consent, demographic questions, and all questions assessing value differences of instructor presence techniques within the medium of images/visuals. Parts two through four included all items assessing value differences of teaching presence within each of the remaining mediums (typed/written words, audio, video, and interactive web). After creating the initial personalization matrix, the researchers deleted instances of replication between one part of the study and another. These elements were removed because the type of value did not apply to that particular communication medium and instructional example. For example, interactive video is not able to or likely to be printed out by a student. These sections of the matrix were eliminated. All four parts of the survey were integrated into the web 2.0 Survey Monkey tool. Each piece of the survey took students approximately 5-15 minutes to complete.

Procedure

After research questions and survey creation, site and IRB approval were completed. A link to access the survey within Survey Monkey was created and included informed consent with a click to confirm button at the end before participant access to demographic and part 1-4 survey questions. Two instructors volunteered to

post a recruitment script to participants within designated courses. Data collection spanned from January 2018 to June 2018.

Population and Sample Size

The target population for the study was full-time, undergraduate online students enrolled in one of two of their first year, 100-level courses. These courses at the university are seven weeks long. Each course has approximately 25 students enrolled. Nearly 6,300 students enrolled in either of the two designated courses during the duration of the study. Two of the instructors scheduled to teach the courses volunteered to post a recruitment script with a survey link to participants using an announcement within the first five weeks of each of their classes. For this study, 18 consecutive course sections were used per instructor resulting in a sample of 900 students. The four-part survey was quite long. Participants were provided the option to end the survey at the end of each survey part. The ability to exit the survey was provided to help prevent survey fatigue. That said, not all participants completed all parts of the survey. Only 111 participants and their responses could be utilized during data analysis. Ages for the 111 participants ranged from 18-64. The mean age was 32.26. The mode was 22, 23, and 31 years old at 7 participants each.

Results

Means were obtained for all items and subscales in the survey. The means for each were placed into the matrix to compare values (Appendix C). Sections of the table with an X represent instances where the researchers did not ask a question to measure that particular value and communication medium because it was either not applicable or was already assessed in some other way in the matrix. Highlighted means indicate the highest mean for each instructor presence technique (Appendix A).

All instructor presence techniques had at least one dimension of value with a mean $\geq$ 3.55, and no techniques had values with means below 3.24, as noted in the Table 2. Means support that students do find some level of value in all instructor presence techniques. Surprisingly, the highest mean across all mediums and perceived values were that of typed/written words only (such as personal responses from the instructor within the individual forum) with a value provides immediate feedback M=4.61. While this was not what was expected, it did confirm students highly value typed/written words that are instructor-generated. In fact, typed/written word techniques including typed/written directions M=4.59 and additional posts in class (such as instructor added communication and checks for understanding) M=4.54, had the second and third highest means; student comments highlighted the value of typed/written words was linked to the ability to access at any time. The fourth highest mean of M=4.41 was documented for static image with the student value description of "…helps make course content more interesting," (Table 1). Though techniques using video scored with a high value mean M=4.40, value means were often below that of static image, and typed/written word value means. The lowest rated value mean across all modes and values was 3.24 interactive audio phone calls with a mean of 3.24 because "…it aligns with how I am used to learning," as noted in Table 2. Students in this study preferred

asynchronous techniques to that of synchronous techniques. It is important to note, particularly in relation to the preference for asynchronous communication, that the current study collected data prior to the 2020 pandemic. While synchronous videoconferencing became popular during emergency remote teaching that occurred during the pandemic, typical online learning utilizes very limited synchronous interaction.

Discussion and Implications

The results confirmed that students found value in all dimensions. Surprisingly, the text dimension received the highest score of 4.61. While this was not what had been expected, it did confirm the value that students found in personalized text. The results affirmed that students deem the highest value in instructor personalized text. This result is good news for instructors, and a reminder to all that though we may continue to integrate video, images, and audio into online classrooms, our written messages to students are still very valuable. Next, the second highest was Static (Image) category with a 4.41. The great part about this is that these are two (text and static images) of the more common ways that instructors will personalize content with instructor presence techniques.

Additionally, results confirmed that students found some value in all of the different dimensions of personalization with instructor presence techniques. The biggest revelation is that students rated personalized typed messages as the best value. Thus, the Moreno and Mayer (2002) study into the element of the personalization principle where the researchers changed the text on a quiz from a more formal tone to an informal conversational tone caused students to score higher on a quiz. Simply personalizing the text and using an informal tone continues to be a great way to build instructor presence online. The good thing is that for a busy faculty member, this is sometimes the fastest and easiest way to build instructor presence.

…though we may continue to integrate video, images, and audio into online classrooms, our written messages to students are still very valuable.

Consequently, the second highest-rated value was the static image. However, this does not diminish that other forms of incorporating instructor presence into the classroom were also valuable in their own ways. Thus, adding some form of instructor presence to the online classroom is better than not including any at all. However, adding a bit of variety by using a few different instructor presence techniques may be the most beneficial way to meet the varying needs and desires of a wide range of students offering more convenience. The best part is that the two dimensions with the highest rated values (text and visuals) are also the easiest for busy instructors to incorporate. Therefore, the most effective and efficient ways that an instructor may be able to incorporate instructor presence are also the easiest and least time-consuming.

The results further reveal the complexity of online instruction. What was previously known is that instructor presence is in fact valued and important within online learning. Bolldén (2016) noted that instructors who embody their presence in the classroom results in stronger student connections to the instructor, class, and even sometimes content. Embodiment of the instructor, however, may be that it is not a one-

size-fits all for instructors, classes and students alike. In this study, students preferred asynchronous techniques to that of synchronous techniques. There could be a few different explanations or implications from the data. First, students have different preferences for the ways they would prefer to receive content. From a teaching perspective, the results reinforce the importance of providing a variety of ways for students to access course information. For example, Steele et al. (2018) recommend providing choices for online students each week by giving a typed, video, and audio version of the weekly lecture. Within each course section, online learners can come from multiple states with environmental differences as well as have a varying schedule and job-related challenges. When the factors mentioned above are coupled with students' personal learning preferences, it is apparent why the provisions of options for receiving information personalized by the instructor are vital.

Next, instructors need to consider the element of convenience for the student. The data is clear as the pre-recorded video domain was rated as valuable with the highest mean value (M=4.40) because "…I have access to it when I need it," and typed, audio-recorded messages were also deemed as valuable for the same reason. Students preferred techniques that were convenient and accessible. So, in the asynchronous environment, instructors and designers must take into consideration whether the technique(s) that are incorporated will be convenient and accessible to all students. Also, many online students may find it hard to participate in synchronous activities due to limited technology capability, work schedules, and other family commitments, which contribute to why the students chose to attend school in the online modality (Evans et al., 2014).

Furthermore, while students seemed to prefer asynchronous techniques to that of synchronous techniques, some of their differences in value may also be due to how they are used to learning in the asynchronous classroom and how much exposure they have had to some of the techniques. A Falloon (2011) study found that phone calls and live video conferencing were a great way to break down the psychological and physical barriers that interrupt interaction and participation. However, the current research demonstrates that though the phone calls and live video conferencing are indeed valued, there are several more convenient asynchronous instructor presence techniques that can break down these barriers and increase instructor presence that students with limited time may instead gravitate to when offered. Additionally, incorporating fancy new technologies or video conferencing may be a great way to provide instructor presence to students, but also may limit the number of students who are able to engage with it. Thus, instructors must consider the population of students when incorporating or creating content. The sample in study was limited to online students. With this in mind, traditional students or students in a hybrid program may have different preferences.

It is also important to note that the school can only provide the virtual environment of the classroom. When considering this, though students may state they want/prefer something like a video lecture because "…the tool promotes a deeper understanding," restrictions in the student's physical environment may impact their likelihood of choosing to learn or connect with those resources. For example, a student may have time for class while driving to work in the mornings, but this then would negate the ability to read written text or watch a video. In another example, a student

may only have time for class after kids are put to bed and prefer reading material to limit noise.

The examples as mentioned earlier introduce additional study implications for faculty and institutions. If instructors can provide students with multiple medium options to receive and engage in content it offers greater student accessibility. For example, if an instructor creates a lecture and provides it in all three mediums (video, audio, and text-based), the student has multiple ways to receive the content. Consequently, many instructors may not have time to create a resource through multiple mediums. Finding multiple mediums is where it can be prudent for instructors to select a tool that can allow the co-creation of a resource through multiple mediums. For example, the record feature on Zoom automatically creates both audio-only and video with audio files. That said, Zoom does not create a transcript, so the written version would either need to be scripted out beforehand or transcribed afterward either by the instructor or through a transcription service such as Rev.com. Any additional support that an institution can provide instructors to help make integrating their presence through multiple mediums is helpful.

While faculty have differences in their preferences in student-valued teaching presence tools, so too is there variance in school standards of practice, faculty expectations, and support resources for faculty between universities. It is the marriage of these factors that need to be considered. Instructors and institutions need to consider the audience, course, the tool being used, and the content when using various communication mediums to build instructor presence. Instructor presence levels in the online classroom can also be throttled or catalyzed by the learning management system (LMS) in regards to how easy it is to insert additional material and/or how involved the instructors are allowed to be in the process of content creation and delivery. Additional considerations are whether students can see that some aspects of classroom design, management, and grading are personalized by the instructor (Milman, 2016). These last points raise limitations for the present study.

Limitations and Recommendations

From a research standpoint, it is vital to consider circumstantial differences within a particular course or LMS designs. For example, text-only (personal responses from the instructor within the individual forum) was most valuable because "…it aligns with how I am used to learning." Data for the study was only pooled from a sample of students within two undergraduate courses within one private university in the Southwest. Other courses, degree programs, learning management systems, or even institutions may have small differences in the way they run and thus change how/what learners value.

The creation of the survey to measure students perceived value of varying instructor personalization techniques was also a component of the study. This was the first use of the survey. No standardized baseline for each mean value has been determined. Further research to establish a baseline and complete a factorial analysis of the tool would be helpful.

Furthermore, the study was created to be posted within a course in "parts" in an attempt to reduce survey fatigue. Though parts 1 and 2 had completion rates of 500+

participants, only 111 participants and their responses could be utilized after the matching of participant codes across all four parts of the survey and are noted as a limitation of the study. Though the survey was divided into parts in an attempt to reduce survey fatigue, it may have still occurred and may have been the cause for less participation in the later two parts of the survey. Survey fatigue may have been avoided with a shorter survey. Thus, future studies could focus on revising the tool into a more concise, one-time survey.

There is value in personalizing content for students through instructor presence techniques, but how breakdown the themes and determine the value can be explored further. Future research could delve deeper into the different themes listed below:

- Public interaction (Example: Whole class instruction) versus private interaction (Example: Individualized to one student). While it was clear that the students value instructor personalization, it was not clear if they valued private interaction or public interaction.
- Generic content (Example: Curriculum created video that is placed in each course) versus Instructor generated (Example: Instructor created YouTube video lecture). It may not have always been clear to students what was generic or instructor generated content. Again, there was no differentiation as to whether or not students valued one over the other.
- Teaching (Example: providing assignment direction clarifications, additional examples, or asking follow up questions to assess student learning) versus design (Example: Creation of assignments, determination of participation expectations, placement of other resources in the course).

The objective of the study was to pinpoint some of the most valuable areas in each dimension or most valuable dimensions where instructors can add their presence into the online classroom with instructor presence techniques to get the biggest benefit. The researchers ponder if some of the lower scores were because students did not realize that these instructor presence techniques are personalized by the instructor because they are based on a program outside of the classroom or whether students thought the institution designed them. It would be of interest to find out why students rated the synchronous techniques with the lowest values. Regardless, of the technique that is applied including any instructor presence techniques appear to add value to the online classroom.

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Appendices

Appendix A

Matrix Example

Table 1

Instructional Resource	**Indicators of Value or Importance**								
(dimensions of tool)	Provides Immediate Feedback	Provides value to me (I like it)	Makes me feel connected to the instructor	Makes me feel connected to the content	Makes me feel connected to my classmates	Makes learning easier for me	I have access to it at any time	It is what I am used to	It is easy to print out and have on hand if needed
	This resource provides immediate feedback to foster my understanding.	I like utilizing this type of resource to support my learning.	This resource helps me feel more connected to my instructor.	This resource helps make course content more interesting.	This resource helps me connect with my classmates.	This resource makes it easier for me to understand course material.	I like this type of resource because I have access to it when I need it.	I like this resource because it aligns with how I am used to learning.	I like this resource because it is important for me to be able to print out instructional material.
Visual static (Pictures, diagrams)									
Static general (Text direction)									
Text only (Regular Additional Posts)									
Text only (personal responses from instructor within the individual forum)									
Interactive audio (Phone call)									
Audio (Instructor audio feedback)									
Audio									

Appendix B

Value of Personalization Survey (Part 1)

Demographics

* 1. Please create a special code word for yourself that you can remember.Type it below. Save this code as this will be your way of identifying yourself in future surveys within the course. Example: **Skittles23**

* 2. What is your age?

* 3. What year were you born?

* 4. Please specify your ethnicity.

- [ ] White
- [ ] Hispanic or Latino
- [ ] Black or African American
- [ ] Native American or American Indian
- [ ] Asian / Pacific Islander
- [ ] Other

* 5. What is your marital status?

- ( ) Single, never married
- ( ) Married or domestic partnership
- ( ) Widowed
- ( ) Divorced
- ( ) Separated

* 6. What is your current employment status? Please select all that apply.

- [ ] Employed for wages
- [ ] Self-employed
- [ ] Out of work and looking for work
- [ ] Out of work but not currently looking for work
- [ ] A homemaker
- [ ] A student
- [ ] Military
- [ ] Retired
- [ ] Unable to work

Instructor personalization dimension 1: Static Visuals

The following questions ask you about your instructor's use of static visuals in the online classroom. Static visuals refer to things such as diagrams or pictures. These may include diagrams, images, educational cartoons, photographs and graphics that the instructor adds to the resources, announcements, discussion or feedback areas of the course. Static just means there are no moving or live parts to the image.

* 7. Static visuals such as diagrams or pictures of my instructor within the classroom help me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 8. Static visuals such as diagrams or pictures the instructor incorporate into the classroom help me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 9. I like utilizing static visuals such as diagrams or pictures the instructor incorporates into the classroom to support my learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 10. Static visuals such as diagrams or pictures the instructor incorporate into the classroom help make course content more interesting

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 11. Static visuals such as diagrams or pictures the instructor incorporates into the classroom help me connect with my classmates.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 12. Static visuals such as diagrams or pictures the instructor incorporate into the classroom make it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 13. I like static visuals such as diagrams or pictures the instructor incorporates into the classroom because I have access to it when I need it.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 14. I like static visuals such as diagrams or pictures the instructor incorporates into the classroom because it aligns with how I am used to learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 15. I like static visuals such as diagrams or pictures the instructor incorporates into the classroom because it is important for me to be able to print out instructional material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

Value of Personalization Survey (Part 2)

Dimension 2: Text

The following questions ask you about your instructor's use of written text in the online classroom. Text refers to typed out directions, lectures, feedback, personal responses and more that the instructor adds to the resources, announcements, discussion or feedback areas of the course.

* 1. Please enter the identification code previously created in the course.

* 2. When the instructor creates written direction clarifications in class it provides me immediate feedback to foster my understanding.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 3. Additional written posts that an instructor creates and incorporates into the discussion forum (such as added forum participation options) provide immediate feedback to foster my understanding.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 4. Personal written messages from an instructor (examples: embedded feedback on an assignment and personal replies within the individual forum) provides me with immediate feedback to foster my understanding.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 5. I like to use written direction clarifications created by my instructor to support my learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 6. I like to utilize additional written posts that an instructor creates and incorporates into the discussion forum (such as added forum participation options) to support my learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 7. I like to utilize personal written messages from an instructor (examples: embedded feedback on an assignment and personal replies within the individual forum) to support my learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 8. When the instructor creates written direction clarifications in class, it helps me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 9. Additional written posts that an instructor creates and incorporates into the discussion forum (such as added forum participation options) help me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 10. Personally written messages from an instructor (examples: embedded feedback on an assignment and personal replies within the individual forum) help me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 11. When the instructor creates written direction clarifications in class, it helps make course content more interesting.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 12. Additional written posts that an instructor creates and incorporates into the discussion forum (such as added forum participation options) help make course content more interesting.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 13. Personally written messages from an instructor (examples: embedded feedback on an assignment and personal replies within the individual forum) help to make course content more interesting.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 14. Additional written posts that an instructor creates and incorporates into the discussion forum (such as added forum participation options) help me connect with my classmates.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 15. Personal written messages from an instructor (examples: embedded feedback on an assignment and personal replies within the individual forum) help me connect with my classmates.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 16. When the instructor creates written direction clarifications in class, it makes it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 17. Additional written posts that an instructor creates and incorporates into the discussion forum (such as added forum participation options) make it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 18. Personally written messages from an instructor (examples: embedded feedback on an assignment and personal replies within the individual forum) make it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 19. I like when the instructor creates written direction clarifications in class because I have access to it when I need it.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

20. I like additional written posts that an instructor creates and incorporates into the discussion forum (such as added forum participation options) because I have access to it when I need it.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

21. I like personally written messages from an instructor (examples: embedded feedback on an assignment and personal replies within the individual forum) because I have access to it when I need it.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

22. I like when the instructor creates written direction clarifications in class because it is important for me to be able to print out instructional material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

23. I like additional written posts that an instructor creates and incorporates into the discussion forum (such as added forum participation options) because it is important for me to be able to print out instructional material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

24. I like personally written messages from an instructor (examples: embedded feedback on an assignment and personal replies within the individual forum) because it is important for me to be able to print out instructional material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

25. I like when the instructor creates written direction clarifications in class because it aligns with how I am used to learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

26. I like additional written posts that an instructor creates and incorporates into the discussion forum (such as added forum participation options) because it aligns with how I am used to learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

27. I like personally written messages from an instructor (examples: embedded feedback on an assignment and personal replies within the individual forum) because it aligns with how I am used to learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

Other (please specify)

Dimension 3: Audio

The following questions ask you about your instructor's use of audio in the online classroom. Audio refers to phone calls, audio lectures, voice-recorded feedback, podcasts and more that the instructor adds to the resources, announcements, discussion or feedback areas of the course. GCU created learning material includes things like the module lectures, extra readings and course materials.

* 1. Please enter the identification code previously created in the course.

* 2. Audio feedback on assignments from my instructor provide immediate feedback to foster my understanding.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 3. Audio lectures with an instructor's voice provide immediate feedback to foster my understanding.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 4. GCU created learning material (such as the module lectures, extra readings, and other course materials) in audio format provide immediate feedback to foster my understanding.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 5. I like utilizing phone calls with an instructor to support my learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 6. I like utilizing audio feedback on assignments from my instructor to support my learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 7. I like utilizing audio lectures with an instructor's voice to support my learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

Other (please specify)

* 8. I like utilizing GCU created learning material in audio format to support my learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree
○	○	○	○	○

* 9. Phone calls with an instructor help me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 10. Audio feedback on assignments from my instructor helps me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 11. Audio lectures with an instructor's voice help me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 12. GCU created learning material in audio format helps me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 13. Phone calls with an instructor help make course content more interesting.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 14. Audio feedback on assignments from my instructor helps make course content more interesting.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 15. Audio lectures with an instructor's voice help make course content more interesting.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 16. GCU created learning material in audio format helps make course content more interesting.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 17. Phone calls with an instructor make it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 18. Audio feedback on assignments from my instructor makes it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

19. Audio lectures with an instructor's voice make it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

20. GCU created learning material in audio format makes it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

21. I like audio feedback on assignments from my instructor because I have access to it when I need it.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

22. I like audio lectures with an instructor's voice because I have access to it when I need it.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

23. I like GCU created learning material in audio format because I have access to it when I need it.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

24. I like phone calls with an instructor because it aligns with how I am used to learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

25. I like audio feedback on assignments from my instructor because it aligns with how I am used to learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
◯	◯	◯	◯	◯	◯

26. I like audio lectures with an instructor's voice because it aligns with how I am used to learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
◯	◯	◯	◯	◯	◯

* 27. Phone calls with an instructor provides immediate feedback to foster my understanding.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
◯	◯	◯	◯	◯	◯

* 28. Were there any phrases or questions that were unclear? If so, what question(s) were unclear and why?

Value of Personalization Survey (Part 4)

Instructor personalization dimension 4: Video

The following questions ask you about your instructor's use of videos in the online classroom. Videos refer to either live or record video lectures, feedback, announcements, and more that the instructor adds to the resources, announcements, discussion or feedback areas of the course.

* 1. Please enter the identification code previously created in the course.

* 2. Live video conferences with myself and an instructor provide immediate feedback to foster my understanding.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

Other (please specify)

* 3. Live video conferences with my classmates & instructor provide immediate feedback to foster my understanding.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 4. Video lectures an instructor has made provide immediate feedback to foster my understanding.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 5. Video feedback an instructor has made provides immediate feedback to foster my understanding.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 6. Content videos the instructor has made but is not visible in provides immediate feedback to foster my understanding.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 7. I like live video conferences with myself and my instructor to support my learning. (An example would be Zoom).

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 8. I like live video conference with my classmates and instructor to support my learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 9. I like video lectures an instructor has made to support my learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 10. I like video feedback an instructor has made to support my learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

Other (please specify)

* 11. I like content videos the instructor has made but is not visible in to support my learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 12. Live video conferences with myself and an instructor help me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

Other (please specify)

* 13. Live video conferences with my classmates and instructor help me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 14. Video lectures an instructor has made help me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 15. Video feedback an instructor has made help me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

Other (please specify)

* 16. Content videos the instructor has made but is not visible in help me feel more connected to my instructor.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 17. Live video conferences with myself and an instructor help make course content more interesting.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 18. Live video conferences with my classmates and instructor help make course content more interesting.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

* 19. Video lectures an instructor has made help make course content more interesting.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

Other (please specify)

20. Video feedback an instructor has made help make course content more interesting.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

21. Content videos the instructor has made but is not visible in help make course content more interesting.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

22. Live video conferences with my classmates and instructor help me connect with my classmates.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

23. Live video conferences with myself and an instructor make it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

24. Video lectures an instructor has made make it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

25. Video feedback an instructor has made make it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

26. Content videos the instructor has made but is not visible in make it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

27. I like video lectures an instructor has made because I have access to it when I need it.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

Other (please specify)

28. I like video feedback an instructor has made because I have access to it when I need it.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

29. I like content videos the instructor has made but is not visible in because I have access to it when I need it.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

30. I like live video conferences with myself and an instructor because it aligns with how I am used to learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

23. Live video conferences with myself and an instructor make it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

24. Video lectures an instructor has made make it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

25. Video feedback an instructor has made make it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

26. Content videos the instructor has made but is not visible in make it easier for me to understand course material.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

27. I like video lectures an instructor has made because I have access to it when I need it.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

Other (please specify)

28. I like video feedback an instructor has made because I have access to it when I need it.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

29. I like content videos the instructor has made but is not visible in because I have access to it when I need it.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

30. I like live video conferences with myself and an instructor because it aligns with how I am used to learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

31. I like live video conference with my classmates and instructor because it aligns with how I am used to learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

32. I like video lectures an instructor has made because it aligns with how I am used to learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

33. I like video feedback an instructor has made because it aligns with how I am used to learning

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

34. I like content videos the instructor has created even if they are not seen video because it aligns with how I am used to learning.

Strongly disagree	Disagree	neutral	Agree	Strongly agree	N/A
○	○	○	○	○	○

Appendix C

Means per Communication Medium Sub-Sections and Perceived Value

Means provided below are the mean Likert-score across all participants per survey question. An X represents a survey question that was thrown out during the survey creation stage.

Table 2

Communication Medium (Example of instructional resource)	**Indicators of Value or Importance – Means**								
	Provides Immediate Feedback	Provides value to me (I like it)	Makes me feel connected to the instructor	Makes me feel connected to the content	Makes me feel connected to my classmates	Makes learning easier for me	I have access to it at any time	It is what I am used to	It is easy to print out and have on hand if needed
	This resource provides immediate feedback to foster my understanding.	I like utilizing this type of resource to support my learning.	This resource helps me feel more connected to my instructor.	This resource helps make course content more interesting.	This resource helps me connect with my classmates.	This resource makes it easier for me to understand course material.	I like this type of resource because I have access to it when I need it.	I like this resource because it aligns with how I am used to learning.	I like this resource because it is important for me to be able to print out instructional material.
Visual static (Pictures, diagrams)	X	4.31	4.21	4.41	3.86	4.40	4.37	4.15	4.14
Static general (Text directions)	4.50	4.50	4.36	4.39	X	4.50	4.59	4.25	4.02
Text only (Regular Additional Posts)	4.48	4.49	4.37	4.45	4.26	4.44	4.54	4.25	4.00
Text only (personal responses from instructor within the individual forum)	4.61	4.58	4.52	4.44	3.95	4.47	4.52	X	3.94
Interactive audio (Phone call)	X	3.43	3.63	3.33	X	3.50	X	3.24	X
Audio (Instructor audio feedback)	3.97	3.91	3.86	3.80	X	3.82	3.91	3.62	X
Audio (Instructor audio lecture)	4.09	4.07	3.98	3.93	X	4.00	4.01	3.79	X
Generic non-synchronous audio (Lecture without your instructor's voice)	4.18	3.89	3.98	3.93	X	3.89	4.04	X	X

Table 2 Cont.

Communication Medium	Indicators of Value or Importance – Means								
Interactive synchronous video with instructor (Zoom call)	3.71	3.53	3.62	3.55	X	3.56	X	3.42	X
Interactive synchronous video with instructor and classmates (Zoom call)	3.48	3.48	3.51	3.55	3.52	X	X	3.32	X
Non-synchronous lecture video with instructor	4.05	4.10	3.99	4.07	X	4.08	4.24	3.76	X
Non-synchronous video feedback with instructor	4.00	3.98	3.83	3.89	X	3.95	4.07	3.71	X

John Steele is an Associate Professor at Grand Canyon University who teaches University Introduction, Education, and Psychology classes. He is also certified K-12 School Counselor, certified elementary teacher, with adjunct teaching experience at Phoenix Community College and GCU with 10 years of experience in higher education. He is a GCU alumnus and is currently pursuing his doctoral degree in General Psychology with an emphasis in Integrating Technology, Learning, and Psychology at GCU. John's professional interests include research in online learning and academic integrity.

Sarah Robertson is an online instructor who teaches full time at Grand Canyon University for the College of Humanities and Social Sciences. With more than 13 years of experience in education and a PhD in psychology, her professional pursuits include action research efforts to further improve student engagement, teaching presence, student and teacher motivation, and information retention/application within both online and traditional courses.

B. Jean Mandernach, PhD, is Executive Director of the Center for Innovation in Research and Teaching at Grand Canyon University. Her research focuses on enhancing student learning in the online classroom through innovative instructional and assessment strategies. She explores strategies for integrating efficient online instruction in a manner that maximizes student learning, satisfaction, and engagement. In addition, she has interests in the development of effective faculty evaluation models, perception of online degrees, data analytics, and faculty workload considerations.

Service Learning: A Multidimensional Approach to Meaningful Learning Outcomes in a Practice Profession

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Abstract. A service learning project was used to encourage social work student engagement with older adults, support a community need, and meet the course objectives, one being conducting a social work assessment. Paired with an older adult resident, students applied theoretical concepts to a practice experience to meet student learning outcomes and expand comfort levels. Fourteen students participated in the convergent-mixed methods study. Assessment scales regarding bias and knowledge were administered and written reflections were recorded. Findings suggest students experienced deeper learning from applying theory and skills and had a positive shift in perspectives of older adults through the service-learning experience.

Globally, a demographic milestone is currently in progress, and adults aged 65 years or older will shift to outnumbering young children. One major challenge this demographic shift presents is the care of older adults, which will cause a complex nature of health issues to rise and make the management of care across health and social service arenas critically important (World Health Organization, 2018). Social workers focus on the holistic care of others and possess competency in navigating complex health and social service systems (Australian Association of Social Workers [AASW], 2015). Thus, social work will be one of the integral disciplines needed in the health care arena to work with the aging population.

Although the majority of social workers report that they serve older adults, a very small number identify the aging field as their primary practice area (The George Washington University Health Workforce Institute, 2017). To address this gap, social work programs have an integral responsibility to prepare students to work with older adults upon their graduation; although, working with the aging population still remains an unfavorable option for practice settings among students due to a lack of familiarity and bias of older adults (Masciadrelli, 2014).

Performing a comprehensive social work assessment is a fundamental task in social work practice (AASW, 2015). Assessment occurs in all practice settings with all populations. Mastery of social work assessment is a core competency in the 2015 Educational Policy and Accreditation Standards (EPAS) of the Council on Social Work Education (CSWE); therefore, it is embedded in the core social work curriculum (CSWE, 2015). The purpose of this study was multifocal. The first goal was to enhance undergraduate students' comfort level with older adults. The second goal was to assess undergraduate students' bias and knowledge related to aging. The third goal was to provide undergraduate students with an early opportunity to use social work skills in practice through the implementation of a service-learning project with older adults to achieve course learning outcomes of performing the bio-psycho-social-spiritual assessment.

Literature Review

Aging Population

The population of older adults is projected to double by 2050 based on the number of older adults in 2012 (Ortman et al., 2014). By 2050, it is estimated that 83.7 million individuals will be aged 65 and over. The aging of the population will significantly affect the delivery of health care in the United States. The compilation of advances in medical interventions and an increase in life expectancy have shifted previously fatal diseases to lifelong conditions (Spitzer & Davidson, 2013). Experiencing multiple medical conditions simultaneously becomes more common as individuals age (World Health Organization, 2018). Although much of the focus resounds on the management of medical care in late adulthood, addressing social factors are as integrally important (Kotwal & Perissinotto, 2019). Fundamental social roles change in older adulthood; changes involving retirement, death of family/friends, and widowhood can place older adults at risk for developing loneliness and isolation. For older adults over 60 years of age living in communities within the United States, the rate of loneliness was reported to be as high as 43%. Studies have revealed an association between loneliness and isolation with worsened chronic healthcare conditions (Kotwal & Perissinotto, 2019). Therefore, physical as well as psychosocial needs increase in older adulthood.

Student Interest in the Aging Population

Due to a youth-oriented culture and devaluation of older adults, students in social work select working with the aging population as their least favored choice. Social work with the aging population is not viewed as exciting or interesting, which influences the students' perceptions (Masciadrelli, 2014). Students' negative attitudes toward older adults were associated with a lack of exposure to this population (Wang & Chonody, 2013). Research has demonstrated that direct interaction between students and older adults can increase their interest in this population and decrease aging biases (Borrero, 2015; Masciadrelli, 2014). One finding consistent in the literature indicates that experience with the older adult population is one of the most significant predictors of future work in the field of aging (Wang & Chonody, 2013). Another key finding in the literature suggests students did not feel adequately prepared to work with the older adult population; a lack of adequate course work and training existed (Wang & Chonody, 2013). The conclusion can be drawn that practical experience is essential for increased self-efficacy especially with regard to populations and topics students prefer to evade.

Service-Learning Pedagogy and Social Work

Based on the CSWE 2015 Educational and Policy Accreditation Standards, the expectation for generalist social work students is to not only demonstrate knowledge of the social work competencies but also to demonstrate their ability to perform the competencies upon degree completion (CSWE, 2015). Therefore, the earlier undergraduate students are provided hands-on opportunities within the curriculum

to practice their skills and professional behaviors before entry into the social work capstone, the higher the likelihood that they will be able to demonstrate competence upon graduation. Because service learning is a type of high impact practices (HIP), it is promoted in higher education due to its impact on educational outcomes and personal development (Kinzie, 2012). Based on the literature, through the use of service-learning pedagogy, two primary purposes can be attained, 1) students have the opportunity to apply learning to real community issues and reflect on these service experiences in the classroom setting "through the interplay between theory and practice" and 2) students provide deliberate service to address a community problem that is of benefit to the community itself (Bringle et al., 2004, p. 4; Kuh, 2008).

Facing the reality of living in a skilled nursing facility is a significant transition for older adults. This transition can create isolation and loneliness from social interaction and support (Adams, 2013). Individuals can experience social loneliness from lack of companionship, loss, or transition. In review of studies conducted with older adults, women over age 80 and those with lower incomes were more likely to experience loneliness, which can be a risk factor for depression (Adams, 2013). Skilled nursing facility residents are at a higher risk for decreased social engagement, which has an impact on medical, psychological, and social well-being. As a result, increasing social engagement is a vital focus of care (Bliss et al., 2017). Within skilled nursing facilities, friendly visitor programs have been initiated as a strategy to ease loneliness in older adults (Adams, 2013).

Participants in this service-learning project had the opportunity to provide support to the skilled nursing facility. Due to the nursing facility's location in a rural community, many of the residents are disconnected geographically from family and friends, resulting in little to no interaction except for facility staff. Through this pedagogy, participants provided a service to the older adult residents by offering interaction and ongoing visits from a new individual from the community, in an effort to prevent loneliness. In addition, students benefited by applying social work engagement and assessment skills to assist in addressing and understanding an actual community need within the older adult population. The facility employs one social worker for 100 residents, which causes the social worker difficulty in being able to meaningfully communicate with every resident daily. Thus, through students using their assessment knowledge and skills, they were able to share information with the social worker to better help address resident needs. The students were able to identify areas of need that the staff was unable to observe in their brief interactions. This service aided in the ongoing continuum of care of residents. Using service learning with students of helping disciplines and older adults has resulted in successful outcomes of changes in perceptions and attitudes toward this population (Augustin & Freshman, 2016; Kanenberg et al., 2014).

Scholarship of Teaching and Learning (SoTL)

The practice of our academic disciplines is constantly evolving to maintain relevance in a changing societal context. Therefore, as academic educators preparing students for these diverse fields, continuing professional development becomes vital and the scholarship of teaching and learning (SoTL) serves as a systematic method

toward maintaining this responsibility. Employing SoTL can add value to the overall university's academic mission, further the knowledge of our academic fields, and promote engagement within the context of our university communities (Yusoff et al., 2013). It provides a "framework for engaging in scholarship that informs our teaching and energizes our service" by integrating the holistic roles of educators, including scholarship, research, and service (Grise-Owens et al., 2016, p.10). For social work educators, it also promotes our ethical responsibility of competence in practice (National Association of Social Workers, 2018). As indicated in previous literature, the most effective way for adults to learn is through their active involvement in the process of learning; thus, as educators, Elton (2009) poses that this would be best accomplished by educators using reflection of their own teaching practice to find continuous solutions. According to Bowen's (2010) analysis of peer-reviewed journal articles, which focused on service learning in the scholarship of teaching and learning among a variety of disciplines (hard sciences, human services, humanities, and education), four themes emerged: real-world application, collaboration and interaction, meaning making through reflection, and enhancement of the course content. These emerging themes reflected the nature, experiences, and outcomes of service-learning-based SoTL projects. Each of these themes was used in this service-learning project with older adults. Student participants addressed an actual community need, collaborated and interacted with older adults, skilled nursing facility staff, and faculty, used ongoing reflection to deepen their learning, and, ultimately, improved the content of the course.

Purpose

The study's purpose was three-fold. The first goal, with undergraduate students, was to increase their comfort level with the older adult population. The second goal was to discern any biases related to older adults among undergraduate students and their level of knowledge related to aging. The final goal aimed to attain the course learning objective of completing a bio-psycho-social-spiritual assessment, by providing opportunities for undergraduate students to apply their social work skills in an actual practice setting through a service-learning project with older adults.

RQ1: What biases toward older adults changed from the beginning to the end of the course?

RQ2: What knowledge on aging changed from the beginning to the end of the course?

RQ3: Through the service-learning experience in this course, how were knowledge and skills of social work applied to achieve learning outcomes and how was the comfort level with older adults changed?

Methods

The Council on Social Work Education (CSWE) adopted a competency-based educational framework in 2008. As an accredited program of CSWE, this approach requires social work faculty to assess students' abilities to demonstrate these competencies within their curriculum (CSWE, 2015). Within a core undergraduate course of social work, Human Behavior in the Social Environment (HBSE), students are

required to demonstrate the generalist competency of assessment with individuals of any age as they learn the human developmental lifespan. Assessments are an essential practice activity in social work and require the collection of past and present biological, psychological, social, and spiritual information using an intergenerational lens. This project was a catalyst for simulating the course content by establishing a relationship and understanding a different generational perspective (Bostrom & Schmidt-Hertha, 2017).

Procedures

In the Human Behavior in the Social Environment (HBSE) undergraduate social work course, students have been required to complete a bio-psycho-social-spiritual assessment assignment to demonstrate mastery of the social work competency of assessment. Historically, students viewed a video and were instructed to select a character in the video to represent their client for the assessment assignment. To implement a new teaching strategy, service-learning pedagogy was embedded to complete an existing bio-psycho-social-spiritual assessment assignment and move away from using a video to achieve the student learning outcome; however, the grading rubric remained the same. Students were paired with an older adult in a skilled nursing facility in the local community to conduct their bio-psycho-social-spiritual assessment assignment.

The facility was located in the local community off the campus site and certified as a skilled nursing facility (SNF) by Medicare. Skilled nursing facilities provide skilled nursing or skilled therapy to help treat and manage patients' health care needs (United States Centers for Medicare and Medicaid Services, 2021). The social worker employed by the facility determined which residents were able physically and cognitively to interact with the students for this purpose. The facility social worker discussed the assignment with the residents to garner their permission for students to be paired. The ages of the residents ranged from 60 to 85. The majority of the residents were female and long-term care residents. The majority of the older adults had multiple chronic health conditions consisting of diabetes, chronic obstructive pulmonary disease, depression, hypertension, heart disease, and cerebrovascular accidents.

After obtaining a letter of support from the local skilled nursing facility, approval was received from the university's Institutional Review Board. A convergent mixed-methods design was used for this study; both quantitative and qualitative data were collected to obtain different forms of information for confirmation (Creswell, 2014). The aim was not only to assess participants' biases and knowledge of older adults through the collection of quantitative data. It was also to better understand the possible underlying reasons for these biases, how the participants applied social work knowledge and skills to meet the course learning outcomes, and whether participants enhanced their comfort level with older adults through the service-learning project from the qualitative data. Thus, a convergent mixed-methods design was selected. At the start of the academic semester, the course syllabus was reviewed and each assignment was explained in detail. Students were informed about being paired with an older adult in a skilled nursing facility to complete the assessment assignment. At the conclusion of the first class day, students were informed about the research project

and were provided the opportunity to voluntarily participate. No incentives were provided for participation. Students who did not want to participate in the study were not required to complete the two pre- and post-assessment scales, but they were still required to participate in the service-learning project as it was being introduced as a new pedagogy for this course, in spite of the study. Students were made aware that if they had any external barriers (i.e. transportation issues, employment conflicts) participating in the service-learning project, an alternative assignment could be offered; however, visits to the facility occurred during the assigned meeting time for the course. Students choosing to participate in the research study signed an informed consent form after the first class session was dismissed; the students choosing to participate in the study were asked to complete two pre-/post-assessment scales outside of the regularly assigned course assignments. A random identification number was provided to each student to use when completing the pre-/post-assessment scales online in the Qualtrics system, as the participants' signed consent forms were not connected to the pre-/post- data. Students participating in the research project completed the pre-assessment scales during the first week of the 16-week course and the post-assessment scales in the final week of the course. The skilled nursing facility provided a brief orientation with the students prior to interaction with the residents.

Participants

Although all of the students enrolled for the course were required to complete the bio-psycho-social-spiritual assessment and corresponding reflection assignments with an older adult to meet the course expectations, only the data from the students who consented and chose to voluntarily participate in the research study were included. Of the 20 undergraduate students enrolled for the course, 17 students voluntarily chose to participate in the research project. Of the 17 student participants, 10 were Caucasian females, six were Hispanic females, and one was an African American female. The median age was 21.65 (range 20-28). Fifteen students were junior social work majors, one student was a junior child and family studies major, and one student was a senior psychology major. Of the 17 students who consented to participate in the research study, only 14 students completed both the pre- and post-assessment scales but all 17 students completed the reflection questions.

Materials

Pre/Post Scales

Kogan (1961) developed the Attitudes toward Old People Scale, which was used to assess the students' personal attitudes and outlook toward the older adult population. This scale was used at the onset of the course and at the conclusion of the course. The scale items were listed in pairs, a negatively worded form and a positively worded form of the 17 paired statements. Each statement could be answered using six response categories on a Likert scale from strongly agree to strongly disagree. The Attitudes toward Old People Scale's Spearman-Brown reliability coefficients range from 0.66 to 0.85 (Kogan, 1961).

Students also completed the Facts on Aging Quiz, developed by Palmore (1977) and revised by Breytspraak and Badura (2015), to assess students' knowledge level on aging in older adulthood at the beginning of the course and at the conclusion of the course and service-learning experience. Palmore's (1977) original Facts on Aging Quiz included 25 items; Breytspraak and Badura (2015) added an additional 25 items to address more contemporary issues garnering attention in the aging field since the quiz was originally developed. Palmore's (1977) original measure had no reported reliability measures; however, discriminate validity of the instrument was documented. The quiz completed by participants was a 50-item, true/false questionnaire used to measure aging knowledge or bias (Breytspraak & Badura, 2015). According to Davis et al. (2019), the revised Facts on Aging Quiz developed in 2015 reached satisfactory reliability levels in three of four age groups (18-34, 35-49, and 50-64), but remained inadequate among 65 and older. The participants completing this quiz were between the ages of 20 to 28.

Student Reflections

At the conclusion of each monthly visit with each student's assigned resident at the senior care facility, students reflected in writing on their experiences. The reflection prompts were provided by the instructor to assess students' level of understanding of the human behavior course content, integration of the assigned CSWE competencies in the practice setting, and professional development. Throughout the semester, students responded to prompts such as "What did you learn about aging and older adults from this experience?", "What are you seeing in your interactions or experience that is connected with the content in this course?", and "What can you learn from this experience to promote personal and professional growth?". An evaluation of the service-learning project was also garnered through reviewing the student reflections. Using Stringer and Dwyer's (2005) data analysis process, the author read and reread the student reflections that were typed by the students in order to gain an overall understanding of the data. Then units of meaning (codes) were identified. NVivo qualitative software was used to organize the data. After units of meaning were identified, categories were designated. Outcomes were based on the themes that emerged from all data collection methods (pre- post-scales and reflections), allowing for triangulation of the data. In addition, peer debriefing was used; a professional colleague provided a peer review of the study. Participant quotations were selected to reflect the emerging themes; accuracy of the quotations were verified by the original reflections submitted by the participants.

Results

Kogan's Attitudes toward Old People Scale

A paired-samples t-test was conducted to compare social work students' attitudes toward older adults prior to the service-learning engagement project and following the service-learning engagement project. The pre- and post-test consisted of an attitude scale of 17 paired questions for a total of 34 questions. As displayed in Table 1, the results suggest that students shifted their attitudes significantly on seven scale

items. These items were related to attitudes surrounding older adults' communication patterns, mood, ability to adjust, work habits, and living environments. The scale items were presented in question pairs, one question representing the negatively worded form of the question and the other question representing the positively worded form of the question. Based on the negatively framed questions, students significantly changed their attitudes from disagreement to strong disagreement. Based on the positively framed questions, students shifted their attitudes from slight disagreement to slight agreement or from agreement to strong agreement.

Table 1

Kogan's Attitudes Toward Old People Scale Items with Significant Attitude Shifts Pre/Post

Kogan's Scale Item	Pre-test		Post-test		t	p	Cohen's d
	M	SD	M	SD			
Most old people are capable of new adjustments when the situation demands it	3.85	0.94	4.42	0.64	-2.280	*0.040	-0.716
Most old people would prefer to continue working just as long as they possibly can rather than be dependent on anybody	5.00	0.78	5.50	0.51	-2.463	*0.028	-0.767
Most old people tend to keep to themselves and give advice only when asked	3.00	1.10	3.64	1.15	-2.385	*0.032	-0.568
In order to maintain a nice residential neighborhood, it would be best if too many old people did not live in it	2.14	1.23	1.57	0.64	2.280	*0.040	0.608
Most old people are irritable, grouchy, and unpleasant	2.42	0.93	1.92	0.61	2.463	*0.028	0.643
Most old people are constantly complaining about the behavior of the younger generation	3.64	1.21	2.71	0.99	2.329	*0.036	0.840
One seldom hears old people complaining about the behavior of the younger generation	2.42	0.75	3.50	1.45	-3.018	*0.009	-0.969

Note. *p≤ .05

Facts on Aging Quiz

Pre- and post-test results of the Facts on Aging Quiz revealed significant changes on two of the 50 items on the questionnaire following the service-learning project. Results indicated a significant increase in students' knowledge from the pre- to post-test scores for the questionnaire item that older adults are at risk for HIV/AIDS (Pre-test: M = 1.50, SD = 0.52) (Post-test: M = 1.21, SD = 0.43). In addition, results indicated a significant increase in students' knowledge from the pre- to post-test scores for the questionnaire item that most old people are set in their ways and unable to change (Pre-test: M = 1.57, SD = 0.51) (Post-test: M = 1.93, SD = 0.27).

Student Reflection Themes

As reflection is an essential component of service learning, reflection questions were assigned by the instructor to coincide with students' experiences. The goal of the reflection prompts were to assess students' level of understanding of human behavior content, integrate the related CSWE assessment competencies in the practice setting, identify perceptions, and evaluate professional development.

Theme 1 – Practice Experience

Practice experience emerged as a theme in thirteen student reflections. Students valued being provided a hands-on learning opportunity to practice their micro social work skills. This experience afforded students the chance to employ the skills and knowledge that they had learned in the classroom setting. Students highlighted the use of confidentiality in an actual client situation, conducting a micro client assessment, identifying non-verbal cues, attending, and maintaining their professional role. Examples of statements that illustrated the value of the practice experience theme follow:

> This assignment made me more aware of my abilities as a future social worker to work with the elderly population on a micro level, keep information confidential, complete an assessment over a client's lifespan while integrating scholarly references and theories used in the social work profession.
>
> It has made known to me that body language is a key factor on how the client is feeling, even if they are not speaking verbally to me, and it is important to be able to assess non-verbal behavior, just as well as verbal.
>
> I will have clients that I will get along with and want to be their friend, but as a social worker if I was only there to be in the friendship role I would not be helping the client. I need to make sure I am always practicing social work skills and the social work code of ethics. Each client and situation is going to be different, I have to make sure I am always adapting to help my client in the best way possible.

Theme 2 – Use of Social Work Skills

The use of social work skills emerged as a theme in thirteen student reflections. Students were able to recognize, identify, and use the social work skills in a practice setting that were previously introduced in the program's curriculum content. Students specifically identified skills such as active listening, building rapport, applying critical thinking, conveying empathy, using non-verbal skills, and using questioning. Based on the reflections, the most common skill used was practicing different types of questioning. Students reported the need to modify and shift the types of questions being asked while in the midst of the interaction with the client. Examples of statements that illustrated the theme of the use of social work skills follow:

> I had to use the skills of asking specific questions. When I would ask my patient broad questions, she did not give deep responses, so I had to ask multiple, specific, questions.
>
> I had to plan ahead, of how I was going to ask questions as well as knowing other ways to ask the same question because sometimes the residents would not understand.
>
> Empathy was portrayed when she talked about difficult topics, because I wanted her to know that I understood and could share what she was feeling.

Theme 3 – Student Observations

A variety of observations, which were revealed through this experience, emerged as a theme in thirteen student reflections. The two most common observations were related to professional awareness and the exposure of the experience. Students shifted their ideas and beliefs and assumed recognition of professional awareness through their engagement with the older adult population in this experience. Examples of statements that illustrated the theme of student observations follow:

> I believe personally and professionally this experience will help me to be perfectly comfortable with the elderly population.
>
> I did learn older adults are open and willing to discuss their life story to a stranger. They are also joyful to visit with a younger person. My client invited me to visit her any time after the assignment process ended.
>
> I quickly realized not to make assumptions about clients, as you never know what they will be like.
>
> I have learned it is important to include the client in the decision-making process and make them feel important and that they have a voice.
>
> I learned that aging and older adults are in need of services just like any other population, and I should not feel afraid to work with this population.

Theme 4 – Social Work Course Content

Application of social work content to this experience was a theme that emerged in fourteen reflections. Students were able to make specific connections with content from the HBSE course as well as other courses in the social work program's curriculum. Examples of the reflection statements noted by students for this theme are as follows:

> I learned that the human development over the lifespan is far more than what a textbook can define for you.
>
> Through this assignment, I was able to learn about human development across the lifespan by gathering information from my partner's life and her personal experiences. By doing so, I was able to connect her experiences to specific developmental stages.
>
> I learned that with human development in this assignment that there is never a point where someone is not changing whether that be physically, mentally, or emotionally. Human development is crucial throughout the lifespan and it never becomes unimportant. I learned that older adults and aging is different for everyone.
>
> I learned about resilience, increasing age, health problems, and many other things that are beneficial to learning. I think it was helpful to learn about someone in a lifespan we may not be able to listen to and learn about.
>
> We have talked about death and end of life in the classroom and a lot of the time my partner talked about death and how she has had so much of that in her life.

Theme 5 – Student Strengths

A theme that emerged in fourteen reflections was that student's self-assessed strengths about their experience interacting with their older adult partner for this assignment. Students recognized a variety of different strengths in their skill use such as recalling information, expressing empathy, listening, adapting, being open-minded, and building rapport. Examples of the reflection statements shared by students to illustrate this theme are as follows:

> My strength during the assignment was that I was able to retain a lot of the information.
>
> A strength of the interviewer was the ability to connect with the client quickly so that the client felt comfortable to share her life stories and life challenges with the interviewer.
>
> I adapted to meet the client's needs. I had to change the speed and pitch of my voice. This way, the client could understand what I said.

Theme 6 – Student Growth Areas

The students identified areas for growth that emerged as a theme in thirteen student reflections from this experience. Students shared the growth areas of transitioning to different topics, decreasing nervousness, improving documentation, and remaining objective. Examples of the statements shared by students to demonstrate this theme are as follows:

> I learned I will need to improve my focus when holding conversations with clients as a practitioner. There were times I could not recall information the client had shared with me. It will be important for me to remember information shared and topics discussed in sessions with my clients as a social worker.
>
> I found that I need to work on becoming more comfortable when speaking with clients. I have a bad habit of freezing up when speaking with a client, especially one who is older than I am. I do not feel that I am competent yet and rather than working on it and practicing, I let it consume me.
>
> I also need to practice boundary setting, I had difficulties sometimes mixing personal and professional boundaries.
>
> I felt it was a struggle for me to transition topics or had trouble responding to difficult answers the client would disclose.

Theme 7 – Overall Takeaway

Ten students reflected on their overall takeaway from this experience. Students shared feedback on how this experience provided them with deeper meaning with regard to the older adult population, their perspectives on life, information on human development, hands-on experience in social work, and personal confidence. Examples of the statements reflecting this theme are as follows:

> This assignment was a learning experience and helped myself broaden my options with populations to work with in the future. Personally having a bad experience with the older population within my family concerning the elder population and care centers, but the opportunity to work with the older population was a positive experience and changed my opinion on this population.
>
> I learned human development never stops, regardless of age. My patient is 99 years old and is still developing. Although she is getting closer to death, she is still constantly changing and growing. I learned aging and older adults still enjoy playing games and making jokes. They do not sit around all day doing nothing, they are very active considering their age.

> From this experience I learned that I have the ability to do far more than I think I am capable of. I stretched myself further than my comfort zone and I learned so much.
>
> I learned that I am a little stuck in my thoughts when it comes to the way that people should welcome you into their lives. I also learned that I truly need to improve on my skills of speaking to people about all aspects of their life. I was very surprised how similar the beginning of life is to the end of life.

Converged Data

Through convergence of the quantitative and qualitative data, outcomes indicated participants shifted their bias in specific areas toward older adults that were noted on the scale. The data also provided further meaning for the underlying explanations for these biases toward this population, as many students had not had previous experience interacting with older adults. In addition, the qualitative data revealed other biases toward older adults that were not captured on the pre- and post-assessment scale. As a result, this information provided a more holistic participant perspective from the beginning of the course until the end. Although quantitatively it may have appeared that participants' knowledge of older adults did not change extensively from course beginning to end, the qualitative data provided a comprehensive viewpoint about the depth of knowledge gained. In particular, participants experienced the human behavior course content demonstrated through the service-learning project and the direct interaction with older adults. Overall, the data indicated that students had the opportunity to build their confidence levels in their application of social work knowledge and skills with the older adults they were paired with. This experience enhanced their comfort levels and decreased the biases they had with interacting with this specific population. Participants were able to make connections between theory and practice through the real-world application of a practice-based simulation. Students were faced with the true intricacies of meeting the client where they are and navigating ongoing communication with regard to interpreting body language, using clarification, rewording questions, using active listening, setting boundaries, and practicing recall for documentation purposes. The aggregate of the quantitative and qualitative data revealed a more accurate representation of the true learning outcomes that students mastered.

Participants were able to make connections between theory and practice through the real-world application of a practice-based simulation.

Discussion

Based on the information collected from the social work students in the HBSE course, the service-learning project provided a genuine experience for students to overcome discomfort with older adults and build confidence in their ability to perform social work skills necessary to complete the assessment course competency. Although students' results on only two of the items on the Facts on Aging knowledge assessment

questionnaire significantly changed, it appears that the service-learning experience increased students' comfort levels, deepened their application of assessment, and changed biases and considerations for working with older adults. Younger students, like the sample of students for the study, often do not always have a personal experience of interacting with older adults. This finding is consistent with previous research that positive interactions with older adults can improve their attitudes toward this population (Hash et al., 2017).

Assessment is a universal skill that is necessary in all settings of social work practice (CSWE, 2015). Through this service-learning experience, students encountered the true reality of a practice situation where the information needed from a client was not automatically provided to the practitioner. In previous courses, this assessment assignment was based on a movie character using only the information provided in the movie. However, this service-learning project provided students with an in vivo learning experience to encounter the true ebbs and flows of performing an assessment. Students had to apply the social work skills they had previously learned in other classes in order to retrieve the information necessary to successfully complete the course objectives. Student outcomes on the grading rubric for the assessment assignment remained consistent to the previous semesters' outcomes when students used a video for their assignment. The difference from using the service-learning experience as opposed to the video came from the deepening of students' application of social work skills. These skills included: building rapport, implementing active listening, using appropriate questioning, recalling information shared, and documenting the assessment with an actual person. This advanced their educational learning to a higher level than classroom instruction could provide. In addition, self-reflective practice was used in real-time in order to modify, adapt, and learn new ways to engage with their resident partners. Students demonstrated the ability to overcome personal discomfort both with the population of older adults as well as with the implementation of social work skills to perform an assessment. This had previously only been learned in a classroom setting using a textbook. Overcoming both areas of discomfort elevated students' confidence in their own abilities as well as altered preexisting perceptions, beliefs, and myths about older adults and the actual practice of social work.

Limitations and Challenges

There were limitations present for this study. One limitation was that this study was carried out in only one undergraduate social work course in the curriculum. This impacted the sample size of the study and its ability to be generalized. Although 17 students consented to voluntarily participate in the study, only 14 students followed through with completion of both the pre- and post- assessment scales. Fourteen students is a small sample size for quantitative data collection; however, it is a reasonable number for a qualitative data sample. Another limitation was that although the sample was varied in some demographic characteristics, it was not in others, such as gender and age. In addition, the majority of the students were social work majors, and all students participating were exclusively seeking an undergraduate degree in a helping profession. Limitations with regard to validity involved the absence of testing

with a control group. Threats of history and maturation were also present as 16 weeks transpired between completion of the pre-test and post-test assessment scales. External events, experiences, or individual maturation could have been an attributor to the results.

The service-learning project also presented challenges to consider with regard to implementation. Although the majority of the nursing facility residents were long-term care residents, two residents paired with students were transferred from the facility mid-semester and one died. Therefore, this abrupt change for the students could have impacted their perspectives in the reflections. Another consideration of implementing a similar service-learning project is the semester's season. This service-learning project was performed during a spring academic semester; however, considerations for the risk of health exposure is important as older adults are a vulnerable population to recovery from illness. When students were ill on a scheduled day to meet their resident, they were asked to reschedule rather than expose the resident to potential illness. Although these issues presented unique challenges for consideration, they also provided a rich integration of course content to process in class about the aging population.

Implications

Social work is a practice-oriented profession; therefore, faculty assume a major role in preparing social work students to successfully demonstrate the competencies of the profession upon their transition into practice. To address the issues that the aging demographic will present, an array of professionals in the health care arena will be needed. By 2028, health care occupations are estimated to increase 14 percent, adding 1.9 million new jobs (United States Bureau of Labor Statistics, 2019). Therefore, the implications from this study are broader than the discipline of social work alone. All students pursuing healthcare related fields need to be prepared for working with older adults and performing discipline-specific evaluations and assessments of this population. Being able to formulate a multi-dimensional assessment is a key tenant of social work practice. In order to perform this competency, students must engage in direct communication and develop rapport with individuals. Increasing opportunities to validate students' comfort, confidence, and competence continues to be necessary for effective preparation, especially with an expanding older adult population. Unlike previous studies, this service-learning project was multifocal. Not only did it aid in increasing students' comfort levels and shifting biases, but it also incorporated students' hands-on application of deepening their assessment knowledge and skills with older adults This experience increased their confidence and competence with this population in practice, which can be transferred to other populations as well. Students also realized the value of service to a population served by the profession of social work and the value of a communicative team to the ongoing care of others.

Engagement is necessary in helping professions, and students need opportunities to practice these skills in a learning environment. Having had volunteer experiences with the older adult population has shown to be a stronger indicator of interest in working with older adults than paid experiences (Wang et al., 2013). Previous research has demonstrated that students in social work as well as other healthcare fields have discomfort and unfamiliarity in engaging with older adults. In

the future, creative ways to implement universal practice skills should be cultivated by faculty as students express discomfort and avoidance from working with certain populations. Hands-on, service, and experiential learning opportunities can be delivered to meet various learning styles (Maschi et al., 2012). These experiences can be implemented across any discipline to achieve the student learning outcomes while simultaneously building students' confidence in applying this knowledge in their future career. Difficult course concepts or specific populations that students struggle to comprehend are prime areas to target to enrich the integration and mastery of student learning outcomes through this type of endeavor. By implementing service learning, the learning gained was not just read or heard within a classroom. The learning was experienced and practiced with the support of a faculty member for discussion and guidance, which provided increased confidence and repetitive learning to secure mastery. Older adults will interface with numerous professions. For example, grandparents are raising grandchildren and will need to interface with educators as well as learn new technology in order to assist their grandchildren with meeting these responsibilities. Although this project focused on older adults, other disciplines could integrate these techniques that have the potential to achieve student learning outcomes through service learning. Engineering students may be able to partner with the community to identify solutions to flooding in particular areas of the town. Mathematic students could partner with the transportation department or parking office at the university to analyze the most efficient traffic patterns, mutually employing a service and also applying learning concepts.

Future research could explore participants' attitudes and biases toward older adults on scale items that, although not statistically significant, the outcomes were close to being significant. These biases included older adults prying and providing unsolicited advice, taking care of their homes, talking about their past and it boring others, and their ability to be understood. These areas could be explored further with future research, especially among a larger sample size. Although older adults are isolated in skilled nursing facilities and need socialization, additional research on the impact of student service-learning projects on the client population is needed. Results from the study indicated, from students' reflections, that the service-learning engagement with older adults was effective in helping students to understand the social work process of assessment and achieve the course learning outcomes on the developmental stage of older adulthood. Future research should also evaluate the effect of the project from the client and community partner perspective.

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"SoTL's challenge and its promise, then, are one: a reconceptualization of relationships between the disciplines, and a widening of the scholarly 'trading zone'" (p. 1).

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The Strategy Project: An Exploration of Enhancing Self-Regulated Learning in an Introductory Psychology Course

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Abstract. College success requires development of self-regulated learning skills. This study describes a self-regulated learning strategy intervention in a large general education Introductory Psychology course, focusing on the second exam. Students' reflection responses across five time periods were compared with exam performance. Increased self-regulated learning strategies usage correlated with decreased passive learning strategies usage, increased hours of study, and increased academic performance. Strategy project interventions can be effective for introductory courses. However, because students may revert to passive strategies that worked in the past, strategy instruction should be extended throughout a course.

Many beginning students enter college expecting they will perform well, yet enter with the skills and mindset of high-school students (Balduf, 2009; Erickson & Strommer, 2005; Pintrich, 2002; Weinstein et al., 2011) with misunderstandings about the way people learn (Bjork et al., 2013; Park et al., 2012). For college success, students must engage in higher-level learning, take ownership of their own learning, use the best resources and strategies for the task, and reflect on their own learning. In essence, they must enter college as self-regulated learners (Zimmerman, 2000).

Students entering college differ in the quality and quantity of their self-regulatory and metacognitive processes (Cohen, 2012; Geller et al., 2018; Kitsantas, 2002; Zimmerman, 2000). Self-regulators set clear and realistic goals, use strategies, self-monitor, evaluate their processes, and complete tasks on time with high levels of motivation. Many students enter college convinced they are prepared for college level work but quickly discover skill deficits. Many also *believe* they are using effective strategies despite contrary evidence (Bjork et al., 2013). These skill deficits are not limited to poor performing students. Although some high-achieving students use more effective strategies (Geller et al., 2018), high-achieving high school students can struggle when they reach college because of their misunderstandings about learning (Bjork et al., 2013) and their reluctance to relinquish the strategies that have worked for them for years (Balduf, 2009). Thus, self-regulated learning skills are important to teach all college students at all achievement levels.

Self-regulated learning and behaviors are predictors of academic learning success (Cohen, 2012; Dunlosky et al., 2013; Pintrich & Degroot, 1990). High performing students are more accurate in self-assessments of their knowledge (Hacker et al., 2000),

and low performing students often show overconfidence, resulting in inaccurate self-assessments of their knowledge (Cohen, 2012; Dang et al., 2018; Geller et al., 2018; Hartwig & Dunlosky, 2012; Kitsantas, 2002). Those students who choose appropriate strategies are the ones who are most successful (Brown-Kramer, 2020), which is partially influenced by how the course instructor treats the strategy in class (Bartoszewski & Gurung, 2015). Fortunately, self-regulated learning and metacognitive strategies can be taught successfully (Cohen, 2012; McCabe, 2011; Paris & Paris, 2001), especially to first-year college students (Rosario et al., 2010; Tuckman & Kennedy, 2011) in introductory college-level courses (Brown-Kramer, 2020).

The strategy project, which was conceptualized by Steiner (2016), is an assignment that focuses students on enhancing their self-regulated learning skills. The strategy project assumes that self-regulation is best learned in an authentic context that is meaningful to students (Simpson et al. 1997; Sternberg & Martin, 1998) and is a multistep project requiring students to plan, monitor, and evaluate newly learned strategies as they prepare for an exam in a course. Students are directed to complete several activities that promote self-regulated learning, including creating a study plan, using metacognitive study strategies, and reflecting on exam performance. In Steiner's study the strategy project was implemented in five sections of a first-year seminar course where students selected another course in which they were enrolled for the project. Since students were in their first year of college, courses selected were introductory general education courses in the arts, business, humanities, health, mathematics, social sciences, and natural sciences. End-of-semester reflection papers indicated the project raised awareness of and encouraged the use of self-regulated learning and metacognitive strategies and increased self-reported test scores for the selected exam. The strategy project was then implemented in thirty-three sections of a first-year seminar course matched with control sections (Steiner et al., 2019). Again, students selected another general education course in which they were enrolled for the project. The strategy project increased use of self-regulation skills as measured by the Motivated Strategies for Learning Questionnaire (Pintrich et al., 1991) and self-reported use of metacognitive strategies for the treatment group.

The current study expands previous studies by adapting and implementing the strategy project in a large general education Introduction to Psychology course. The project was implemented in the course where students used it. Thus, rather than examining students' self-reported exam performance, we were able to assess whether use of self-regulated learning strategies impacted students' actual performance throughout the course. We hypothesized that as students increased use of active learning strategies, engaged in self-reflections of their learning, and increased their study hours, their exam performance would increase.

Method

Participants

This exploratory study examined the implementation of a strategy project in an Introductory to Psychology course at Kennesaw State University (KSU) during fall, 2019. KSU is a large public university near Atlanta, GA, and is a Carnegie-designated R2 institution. Class enrollment was 111 students. The course is one of seven courses

required in KSU's social science general education core and is required of psychology majors and several other majors within the university. Mean age of participants was 18.4, *SD* = 1.3. The majority of students were female (76.6%). Approximately half (51.4%) were White, 29.7% were Black/African American, 10.8% were Hispanic/Latino, and other races/ethnicities (8.1%) made up the remainder of students.

An Introductory to Psychology course at KSU during spring 2020 without the strategy project intervention served as the control group. The control group had a similar class enrollment and time of day; the teaching modality (face-to-face), instructor, and course materials were identical to the experimental group aside from the absence of the strategy project and exam wrappers.

Procedures

During the first week of class for both the experimental and control groups, the second author requested the consent of students enrolled in classes taught by the first author to participate in the study. Students were made aware that the study was approved by KSU's Institutional Review Board. The strategy project was explained to students in the experimental group. For exam 2, students would develop a study plan, use a variety of test preparation strategies to study for the exam, and complete written reflections of their learning and the experience. They understood that the strategy project assignments were expected of all students in the course and were designed to enhance learning and academic performance, but students who did not consent to participate would have their data excluded from further analysis. Students were told there would be five exams during the course, each containing 50 multiple-choice questions (assessing remembering, understanding, applying, and analyzing course material) worth 100 points, and that the strategy project was designed to improve their self-regulated learning and student performance in the course. The first four exams covered two chapters, and the fifth exam covered three chapters. The control group received the same exams 1, 2, and 3 (worth 100 points each). However, due to the unexpected pandemic-related conversion to remote instruction mid-semester, the control group did not receive exams 4 and 5; instead, they completed five online quizzes from the textbook.

During week four (immediately after exam 1) for the experimental group, the instructor used a class period to provide instruction on the strategy project and associated assignments, effective reading of the textbook and notetaking, metacognition, and self-regulated learning, all of which were connected to coverage of the memory (encoding, storage, retrieval, and improving of memory) and cognition (language, problem solving, decision making, and intelligence) chapters. In preparing for the second exam, students selected four metacognitive strategies with one of the first two required: 1) active reading of the textbook, 2) active notetaking, 3) flashcards, 4) concept maps, 5) study groups, 6) tutorial sessions, and 7) self-developed quizzes. Appendix A provides an outline of class coverage of the seven metacognitive strategies.

For weeks five and six, students completed a two-week strategy project plan of study for the second exam using the four selected strategies. The plan of study encouraged distributed practice of the material, a strategy that is more effective than

massed practice (Dunlosky et al., 2013; Putnam et al., 2016). For week seven, students took the second exam. For week eight, students submitted electronic assignments to the instructor in the learning management system demonstrating that they followed their plan of study to prepare for the second exam. The plan of study and the electronic evidence assignments were each worth 75 points out of a semester total for the class of 1,000 points; the instructor allowed students one week to submit the work in the correct electronic formats for evaluation. During the remainder of the semester, the instructor encouraged students to continue using the metacognitive strategies though announcements during the class lectures. At the beginning of the class period after each exam, the instructor distributed graded exams back to students and reviewed and discussed exam questions and answers with the class. Students then completed a paper exam wrapper in class (see Appendix B), adapted from Lovett (2013) and Soicher and Gurung (2017). Exam wrapper questions asked students to reflect on their exam performance. This strategy increased response rates and immediacy of the self-reflections. Though the control group did not complete exam wrappers, the instructor distributed graded exams back to students and reviewed and discussed exam questions and answers with the class at the beginning of the class period after each exam.

Exam wrapper question 2 responses (study strategies used by students) were coded into categories by the first author (see Table 1). The second author then coded a random set of student responses (11.2%) with all identifying information removed. Interrater reliability (a measure of agreement between two raters on the assignment of categories to a categorical variable) was $k = 0.90$, $p < .009$, 95% CI (confidence interval) [0.95, 0.85]; k values of 0.80-1.00 are considered almost perfect (Landis & Koch, 1977). Participating in study groups and tutoring sessions were combined into one category because students conflated these categories. Exam wrapper question 3 (reflecting on exam errors) was not coded and analyzed since some percentages did not total to 100%. Finally, exam wrapper question 4A (for exams 1-4: "Name three things you plan to do differently in preparing for the next exam") and question 4B (for exam 5: "In what ways have you used these strategies in other courses?") were analyzed qualitatively for recurring themes using thematic analysis (Braun & Clarke, 2006; Nowell et al., 2017), a method which involves flexible and open coding that allow for themes to emerge. Analysis of wrapper question 4A was completed by the first author and wrapper question 4B was completed by the second author; however, both authors reviewed and agreed upon coding procedures and informally reviewed both sets of data. The results of this analysis are presented along with the quantitative data analysis below.

Table 1

Coding of Students' Learning Strategies

Active self-regulated learning strategies	• Active reading, annotating, or outlining of the textbook material

Table 1 Cont.

Active self-regulated learning strategies	• Reorganizing, annotating, or summarizing class notes • Developing and using one's own flashcards or using the textbook's flashcards • Creating concept charts, diagrams, or concept maps • Participating in study groups or tutoring sessions • Developing and taking one's own quizzes or taking the textbook's quizzes • Distributed studying • Teaching material to oneself or to someone else • Identifying and applying concepts and terms • Asking questions in class about unclear material
Passive learning strategies	• Reading or rereading the textbook • Taking notes in class, reading, or rereading class notes • Watching videos of concepts found online • Reading the textbook chapter review or summary • Reading the study guide provided by the instructor

Note. These data were collected from the exam wrapper assignments and coded as either active or passive learning strategies.

Results

Exam Scores

First, for the experimental group, we wanted to determine if exam performance increased with the implementation of the strategy project intervention

which occurred in preparation for exam 2, so a within-subjects ANOVA comparing students' scores on the five exams was performed. It revealed a significant effect, and the effect size (magnitude of the differences among the scores) was large, Wilks' Lambda = .76, F (4, 97) = 7.50, p = .001, η_p^2 = .24. Bonferroni post-hoc tests for multiple comparisons indicated which set of scores differed from one another. There was significantly higher performance for exam 2 compared to exams 1, 4, and 5; there was also significantly higher performance for exam 3 compared to exam 4.

Second, we analyzed exam performance for the control group, which did not complete the strategy project and only completed the first three exams. A within-subjects ANOVA (Wilks' Lambda = .74, F (2, 101) = 17.83, p = .001, η_p^2 = .26) on students' three exam scores was performed, and it revealed a significant effect and a large effect size. Bonferroni post-hoc tests indicated significantly higher performance for exam 1 compared to 2 and higher performance for exam 3 compared to 2. Table 2 shows the exam scores means and standard deviations for the experimental and control groups.

Table 2

Exam Scores Means and Standard Deviations for the Experimental and Control Groups

Measure	*M*	*SD*	95% CI
Experimental Group			
Exam #1	73.01_{af}	10.80	[70.88, 75.14]
Exam #2	76.63_{bc}	12.06	[74.25, 79.01]
Exam #3	74.40_{bdf}	12.21	[71.99, 76.81]
Exam #4	69.50_{ae}	12.74	[66.98, 72.01]
Exam #5	72.83_{af}	11.96	[70.47, 75.19]
Exam grade average	73.27	9.32	[71.19, 74.90]
Control Group			
Exam #1	72.93_{a}	10.80	[70.82, 75.04]
Exam #2	67.88_{b}	12.68	[65.40, 70.35]
Exam #3	74.45_{a}	14.26	[71.66, 77.34]

Note. N = 101 for the experimental group and N = 103 for the control group. Scores with different subscripts differ at the p =.01 levels by Bonferroni post-hoc tests for multiple comparisons. CI = confidence level.

Third, we compared exam performance between the experimental group and the control group for exam 2 and for exam 3 using an independent-samples t-test. For exam 2, there was a significant difference and a moderate effect size (t (210) = 5.38, p < .001, two tailed, η^2 = .12) with higher scores for the experimental group (M = 76.63, SD = 12.06, 95% CI [74.31, 79.05]) than the control group (M = 67.88, SD = 12.68, 95% CI [66.31, 68.39]); for exam 3, scores for the experimental (M = 74.40, SD = 12.21) and control group (M = 74.45, SD = 14.26) were not significantly different from each other.

In summary, while scores for the experimental group increased, especially on exam 2, scores for the control group decreased from the first to the second exam.

Active Self-Regulated Learning Strategies

We were interested in examining the experimental group's choice of strategies, as well as the change in these choices over time. Table 3 presents the self-reported use of active self-regulated learning strategies for each exam and collapsed across all exams.

Table 3

Self-Reported Use of Active Self-Regulated Learning Strategies to Prepare for Exams

Strategies	Use of strategy	Exam #1	Exam #2	Exam #3	Exam #4	Exam #5	Total Use
Active reading, annotating, or outlining of textbook material	Yes	5	25	19	21	18	88
	No	86$_a$	62$_b$	65$_b$	63$_b$	74$_b$	350
Reorganizing, annotating, or summarizing class notes	Yes	12	39	14	12	16	93
	No	79$_a$	48$_b$	70$_a$	72$_a$	76$_a$	345
Developing and using own flashcards or using textbook's flashcards	Yes	25	67	28	31	27	178
	No	66$_a$	20$_b$	56$_a$	53$_a$	65$_a$	260
Creating concept charts, diagrams, or concept maps	Yes	0	21	2	2	3	28
	No	91$_a$	66$_b$	82$_a$	82$_a$	89$_a$	410
Developing and taking quizzes or taking textbook quizzes	Yes	40	59	34	36	45	214
	No	51$_a$	28$_b$	50$_a$	48$_a$	47	224
Participating in study groups or tutoring sessions	Yes	5	28	13	16	15	77
	No	86$_a$	59$_b$	71	68	77$_a$	361
Distributed studying	Yes	2	2	2	6	4	16
	No	89	85	82	78	88	422
Teaching material to oneself or someone else	Yes	2	0	1	1	5	9
	No	89	87	83	83	87	429
Identifying and applying concepts and terms	Yes	1	1	0	0	0	2
	No	90	86	84	84	92	436
Asking questions in class about unclear material	Yes	0	0	0	0	0	0
	No	91	87	84	84	92	438

Note. Numbers in this table reflect frequencies of reporting presence (yes) or absence (no) of strategy use. Frequencies with different subscripts differ at $p < .05$ level.

The most frequently used active self-regulated learning strategies across all exams were flashcards (n = 178) and quizzes (n = 214). We also wanted to examine frequencies of the presence or absence of each active learning strategy on each exam. The data was categorical, so a Cochran's Q test was used. There were significant results for six strategies: 1) use of active reading, annotations, or outlines of the textbook (χ^2 (4) = 24.93, p < .001); 2) reorganizing, annotating, or summarizing class notes (χ^2(4) = 36.07, p. < .001); 3) developing and using flashcards or using the textbook's flashcards (χ^2 (4) = 62.32, p < .001); 4) creating concept charts, diagrams, or concept maps (χ^2 (4) = 33.88, p < .001); 5) developing and taking quizzes or taking the textbook's quizzes (χ^2 (4) = 19.39, p < .001); and 6) participating in study groups or tutoring sessions (χ^2 (4) = 28.40), p < .001). Bonferroni post-hoc tests indicated which set of scores were different from each other. There were significantly more usages of active reading, annotations, or outlines of the textbook for exams 2, 3, 4, and 5 compared to exam 1; significantly more usages of reorganizing/annotating/summarizing class notes, flashcards, and concept charts/diagrams/maps for exam 2 compared to exams 1, 3, 4, and 5; significantly more usages of self-quizzing for exam 2 compared to exams 1, 3, and 4; and significantly more usages of participating in study group or tutoring sessions for exam 2 compared to exams 1 and 5 . In summary, after learning about and practicing effective strategies, students increased their use of those strategies; however, by the end of the semester some students had returned to prior low levels of active self-regulated learning strategy use.

Passive Learning Strategies

Table 4 presents the self-reported use of passive learning strategies for each exam and collapsed across all exams.

Table 4

Self-Reported Use of Passive Learning Strategies to Prepare for Exams

Strategies	Use of strategy	Exam #1	Exam #2	Exam #3	Exam #4	Exam #5	Total Use
Taking notes in class or reading or rereading class notes	Yes	63	32	48	46	56	245
	No	30$_a$	55$_b$	38	38	36$_a$	197
Reading the study guide provided by the instructor	Yes	28	5	14	13	25	85
	No	63$_a$	82$_b$	70	71	67$_a$	353
Reading the textbook chapter review or summary	Yes	5	0	0	3	7	15
	No	86$_a$	87$_b$	84$_b$	81	85	423
Reading or rereading the textbook	Yes	43	27	35	28	46	179
	No	48	60	49	56	46	259
Watching videos of concepts	Yes	6	3	2	3	2	16
	No	85	84	82	81	90	422

Note. Numbers in this table reflect frequencies of reporting presence (yes) or absence (no) of strategy use. Frequencies with different subscripts differ at p < .05 (significant) and p < .07 (marginally significant) levels.

The most frequently used passive learning strategies across all exams were taking/reading/rereading class notes (n = 245) and simple reading/rereading of the textbook (n = 179). Again, we examined frequencies of the presence or absence of each passive learning strategy on each exam using a Cochran's Q test. There were significant or marginally significant results for three strategies: 1) notetaking in class, reading, or rereading class notes (χ^2 (4) = 15,38, p < .004*);* 2) reading the textbook chapter review or summary (χ^2 (4) = 10.59, p = .032); and 3) reading the study guide provided by the instructor (χ^2 (4) = 16.63, p < .002). Bonferroni post-hoc tests indicated significantly more uses of taking notes in class/reading/rereading class notes and for reading the study guide provided by the instructor for exams 1 and 5 compared to exam 2. There were marginally more uses of reading the textbook chapter review or summary for exam 1 compared to exams 2 and 3. Thus, immediately after exposure and practice of active self-regulated learning strategies, students' use of less effective strategies decreased.

Student Reflections on their Study Habits

For the first four exams, the final question on the exam wrapper was an open-ended question asking students to list three things they planned to do differently in preparation for the next exam. This question was designed to encourage strategy planning based on the experience of the current exam. While many students listed active, self-regulated learning strategies such as self-quizzing, appropriate use of flashcards, and teaching the content to others on the very first exam wrapper, they also mentioned time-consuming passive learning strategies such as rereading the textbook and rewriting notes. As the strategy project intervention was introduced, students mentioned fewer passive learning strategies and became more specific in their descriptions of the more frequent active strategies they listed. For example, rather than simply listing "flashcards" as on exam wrapper 1, in later exam wrappers they indicated, for example, they would "change the way I do flashcards and go over the things I struggle with more." In later exam wrappers, many also listed goals to create a supportive learning environment, including changes of environment to reduce distraction and more advance planning, "[using] methods from the strategy project" as a guide. Perhaps most striking was the increase during the semester of references to distributed practice, an idea that was rarely mentioned on the first exam wrapper. Beginning with exam wrapper 2, many students detailed their plans for spreading out their studying in a pre-determined schedule (e.g., "studying for at least 20 minutes for the next exam on the days we have class"), a strategy that was encouraged during the project.

The final question on the last exam wrapper asked students to reflect on what ways they have used the strategies learned from the project in other courses. Many of the students made general statements about how the strategies helped them learn in all their courses (e.g., "I have learned so much about the way I learn and how to study best… I will carry that through college."), but others mentioned applying the strategies to specific courses, including art, religion, history, economics, government, communication, math, Spanish, chemistry, and exercise science. For example, one student outlined what strategies applied to her particular courses: "I use flashcards in human communication; active notetaking helped in US History; active reading helped

in art." By far the most common strategies mentioned were active reading and notetaking, flashcards, and quizzing. And as with exam wrappers 2-4, many mentioned the importance of creating a study plan for distributed practice, despite the challenge of doing so: "Spreading out my time has been a difficult task that I need to work on."

Hours Studied

Exam wrapper question 1 asked students to report how much time they spent preparing for this exam. Hours studied for each of the five exams was on a continuous scale, so a within-subjects ANOVA was performed. It revealed a significant effect, and the effect size was large, Wilks' Lambda = .53, F (4, 59) = 13.19, $p < .001$, $\eta_p^2 = .47$ (see table 5). Bonferroni post-hoc tests indicated which set of scores differed from one another. There was a significantly lower number of hours studied for exam 1 compared to exams 2, 3, 4, and 5, and significantly lower number of hours studied for exam 4 compared to exams 2 and 5. Table 5 shows the means and standard deviations for hours studied for each exam.

Table 5

Exam Scores Means and Standard Deviations for Hours Studied for Five Exams

Measure	*M*	*SD*	95%CI
Exam #1 hours studied	3.37_{ac}	2.15	[2.82, 3.91]
Exam #2 hours studied	5.89_{b}	3.47	[5.02, 6.76]
Exam #3 hours studied	5.07_{bd}	4.07	[4.05, 6.10]
Exam #4 hours studied	4.46_{d}	2.72	[3.77, 5.14]
Exam #5 hours studied	6.33_{b}	4.77	[5.13, 7.54]
Average hours studied	5.02	3.72	[4.00, 6.08]

Note. These exam wrapper data are self-reported number of hours studied for exams (N=63). Scores with different subscripts differ at the $p = .05$ levels by Bonferroni post-hoc tests for multiple comparisons. CI = confidence level.

Summary

Participant's total use of active self-regulated learning strategies ($M = 8.02$, $SD = 3.88$, $n = 64$) and participant's use of passive learning strategies ($M = 6.66$, $SD = 2.84$, $n = 64$) were calculated. Exam scores ($M = 73.27$, $SD = 9.33$, $n = 103$) and hours studied ($M = 5.02$, $SD = 3.72$, $n = 103$) were averaged. A Pearson product moment correlation coefficient was performed to describe the strength and direction of the relationship for these continuous variables. There was a strong, negative relationship between use of active self-regulated and passive learning strategies (r (62) = -.53, $p < .001$, 95% CI [-.68, -.32]); as use of active learning strategies increased, use of passive learning strategies decreased. There was a moderate, positive relationship between use of active learning

strategies and students' average exam scores (r (62) = +.33, p < .001, 95% CI [0.10, 0.54]); as active learning strategies increased, exam scores increased. There was a moderate, positive relationship between average number of hours studied and students' average exam scores (r (61) = +.33, p < .001, 95% CI [0.09, 0.53]); as number of hours studied increased, exam scores increased. Use of active learning strategies and number of hours studied accounted for 22% of the variance in students' exam scores.

Discussion

Study findings indicate the strategy project positively impacted students' use of metacognitive and self-regulated learning strategies and exam performance; however, some of the positive impact seemed to be temporary. For the experimental group, the strategy project was implemented before the second exam, allowing students to connect the strategies to evidence-based instruction on their effectiveness. It is important to note that course material became more difficult after the introductory chapters of exam 1, so the students' performance increase after exam 1 may be even more impressive. Students in the experimental group began to use effective strategies on exam 2 not used on the first exam and indicated they planned to do so on exam wrapper 1, perhaps prompted by the exam wrapper itself. As time went on, plans for using appropriate strategies became more frequent and detailed on the exam wrappers.

There were also higher scores on exam 2 than 4 and 5, but exam score 4 was lower than exam 3. For exam 2, students had to submit graded assignments that demonstrated they were using the self-regulated learning strategies from the project. Therefore, although students indicated their intent to use good strategies on subsequent exam wrappers, students seemed to use the strategies on exams 2 and 3. Despite the better academic performance that was tied to the strategy project, and although they indicated their intent to use good strategies in wrapper 3, students may have gradually slipped back to old patterns by exam 4 of not studying actively, especially as demands on their time increased without the graded incentives to continue using the active learning strategies. Also, the chapters associated with exam 4 were short, and some students indicated that exam came quicker than they realized. For the control group, exam 2 scores were lower than exams 1 and 3. The experimental group had higher scores than the control group for exam 2 as expected. Unexpectedly, there was no difference in the exam 3 scores for the two groups. The increased performance on exam 3 for the control group is difficult to explain, but the timing of the exam for this group (March 5) corresponded with increases in COVID cases and uncertainty around the rest of the semester.

In the experimental group, students studied fewer hours on exam 1 compared to exams 2, 3, 4, and 5. Thibodeaux et al. (2017) found students plan and actually spend less time on academics versus socializing and work obligations in their first semester of college, despite the higher academic expectations and demands of college. By second semester in Thibodeax's study, time spent on obligations was still higher than time spent on academics, but academic time use (planned and actual academic hours) related to higher self-regulated learning and higher academic performance. In our own study, we found students increased their study hours in the two exams following the

strategy project intervention, temporarily decreased them for exam 4, then increased them again for the last exam. This again may be due to exam 4 sneaking up on students.

Students used little active textbook reading on the first exam, but increased its use for exams 2, 3, 4, and 5 with the implementation of the strategy project. Simpson and Nist (1990), Simpson et al. (2004), Nash-Ditzel (2010), and Putnam et al. (2016) point out that active reading and the practice of textbook annotations encourages elaborative interrogation, paraphrasing, and deep learning. Self-regulated learning also applies to social behavior such as using academic support services and seeking help from the instructor (Zimmerman, 2008). Students did not participate in study groups or attend tutorial sessions for the first exam but increased participation for exam 2 with a decline on exam 5. Flashcards and quizzes had a high usage compared to other active learning strategies; Miyatsu et al. (2018) reported flashcards is a popular study strategy for students. We suspect that the focus on developing quizzes for the strategy project and the textbook quizzes that were available for students led to the high quiz usage in this study. Students further increased their use of flashcards and quizzes for exam 2 but declined to original levels by exam 5. The intervention also led to greater use of active notetaking and creating concept charts/diagrams/maps for exam 2 with a decline by exam 5. Research pointed to the effectiveness of flashcards and self-testing for promoting engagement with material (Dunlosky et al., 2013; Putnam et al., 2016; Rodriguez et al., 2018; Senzaki et al., 2017) and active notetaking for promoting organization, self-quizzing, and reflection (Dunlosky et al., 2013; Putnam et al., 2016). The data points to the need for students to continue using these active learning strategies.

Simply taking, reading, or rereading class notes and reading or rereading of the textbook (without deep processing) were passive strategies with high levels of usage, a finding substantiated by Miyatsu et al. (2018). Students in our study decreased use of taking, reading, or rereading class notes and reviewing the study guide provided by the instructor for exam 2 compared to exam 1 but increased by exam 5. Dembo and Seli (2004) and McDaniel and Einstein (2020) pointed out that despite negative feedback and poor grades, many students are reluctant to change their learning strategies because they are unable to appropriately judge whether they are learning and/or overconfidence in their knowledge (Cohen, 2012; Dang, 2018; Geller et al., 2018; Hartwig & Dunlosky, 2012; Kitsantas, 2002). Unfortunately, many students "often find themselves making study decisions by triage instead of trying to maximize long-term learning" (Kornell & Bjork, 2007, p. 223), and this may be even more true at the end of the semester when students are overburdened and ready for a break. Thus, the interventions introduced in this course should not be promoted as one-time events but skills to be developed over time as students integrate the phases of the self-regulatory cycle with their learning activities.

As predicted, as students used more active learning strategies, they used fewer passive learning strategies. This observation was exhibited in their planning and reflection on open-ended exam wrapper questions as well. As students used more active learning strategies and as their number of hours studied increased, they scored higher on exams. On the last exam wrapper, students reported applying these strategies to other courses, many of them matching specific strategies to specific courses. This was encouraging, as one of the goals of this project was to encourage

metacognitive reflection about the use of specific strategies for specific tasks. The strategy project may be a worthwhile assignment for introductory or general education courses if it is adapted to specific course goals, outcomes, and content. In the Steiner (2016) and Steiner et al. (2019) studies, students implemented the strategy project in a general education course in a variety of disciplines; completing practice problems was an active learning strategy option for those students who selected a mathematics-based course for the project. Elaborative interrogation and self-explanation are also active learning strategies demonstrated to be effective in a variety of disciplines (Dunlosky et al., 2013). Elaborative interrogation involves asking "why" questions as one is learning factual information. Self-explanation involves integrating new information with prior knowledge. Data has shown the use of elaborative interrogation and self-explanation is related to higher academic performance in a variety of courses, for example, computer science (Gurung et al., 2020).

There are limitations to our study that necessitate caution in interpreting the findings. First, the experimental group data was collected in fall, 2019, and the control group data was collected in spring, 2020. Though all aspects of the course aside from the intervention were virtually the same, student populations in the course may differ by semester. Additionally, the COVID-19-related transition to remote instruction occurred during the middle of spring semester for the control group, so exams 4 and 5 were not given. The strategy project was implemented for exam 2 for the experimental group, so we were able to compare performance on exams 2 and 3 between the two groups. Future studies should examine several full semesters of data. Additionally, the strategy project required students to develop their own flashcards and self-developed quizzes for exam 2 as graded assignments. If students' exam wrappers indicated they used flashcards and quizzes as a study strategy for the other exams, it was not clear if they were the textbook's, self-developed, or some combination of the two. This response was coded as an active strategy, but this distinction should be addressed in future studies.

…as self-regulation is not a one-time transformation but a collection of skills developed over time, we also recommend that instructors …promote its use throughout the course so that students do not return to old learning habits.

In conclusion, as with previous studies (Steiner, 2016; Steiner et al., 2019), the strategy project had some positive impacts on student's use of self-regulated learning strategies and on student performance, and therefore, we recommend instructors use an authentic, embedded assignment like the strategy project, perhaps as a companion to instruction on cognitive principles. However, as self-regulation is not a one-time transformation but a collection of skills developed over time, we also recommend that instructors find ways with graded assignments to promote its use throughout the course so that students do not return to old learning habits.

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Appendix A

Outline of Class Coverage of the Seven Metacognitive Strategies

1. Active Reading of the Textbook

Preview the chapter

- Read and chapter headings, learning objectives, tables, graphs, and charts and think of questions you have about material
- Consider what is said in class
- Read and the chapter summary and any questions at the end of the chapter and think of questions you have about material

Reading of the chapter

- Thoroughly and actively read the material in its entirety
- Annotate the textbook and/or take notes
    - Locate the topic sentence in each paragraph
    - Locate key terms in the reading
    - Ask questions that make you think about the material
    - Connect the material to what you already know
    - Review the examples provided to illustrate key concepts and think of your own examples
    - Closely examine footnotes, tables, charts, diagrams, and other illustrations

2. Active Notetaking in Class (Using the Cornell Method)

- After each class, summarize your notes by taking out a sheet of paper
    - Middle of the paper: Summarize your notes in paragraph form with general ideas
    - Left side of the paper: Note key words and questions that you have
    - Bottom of the paper: Provide a summary of your summary of your notes

3. Use of Flashcards

First set of cards

- Develop your own flashcards by writing the name of the concept on the front of each card
- Write the definition of the concept on the back of the card

Second set of cards

- Again, develop your own flashcards by writing the name of the concept on the front of each card
- This time, provide an example of the concept, indicate how you would teach the concept to someone else, or indicate how the concept is useful in your life on the back of the card

Both sets of cards

- Select cards from each stack of cards
- Use the concept on the front of the card to see if you can provide definitions, applications, elaborations from the back of the card without looking

4. Use of Concept or Mind Maps

- Write the central concept in the middle or top of the page
- Use lines to connect main ideas to the central concept
- Add branches off the main points to add detail
- Use images and color, if possible, and consistent coding

5. Use of Study Groups

- Introduce yourselves to your classmates sitting next to you, if you have not already done so
- Exchange email addresses and set up days and times to study together for the exam

6. Use of Tutorial Sessions

- The Department of Psychological Science holds tutoring session for this course
- Tutors are undergraduate students who have taken this course and you can schedule a tutoring session(s) to assist you in the course

7. Use of Self-Developed Quizzes

- Create your own multiple-choice test using your textbook and class notes
- After your active reading of the textbook and/or active notetaking in class, answer your self-developed quiz questions without using the textbook or your class notes
- Use the textbook and your notes to grade yourself
- Focus on the questions you got wrong, analyzing where you went wrong and reaching out to me to clarify any issues

Appendix B

Exam Wrapper Questions

1) Approximately how much time did you spend preparing for this exam? Please give a best estimate in hours, do not use ranges (e.g., 3.5, not 3-4) _____

2) What strategies did you use preparing for this exam?

_____
_____
_____

3) After looking over your exam, estimate the percentage of points you lost due to each of the following (make sure the percentages total to 100%)
   - Lack of understanding of the concept ____%
   - Not understanding what the question was asking ___%
   - Careless mistakes ____%
   - Not being able to apply concepts in new contexts ____%
   - Not recognizing that information or ideas were important ____%
   - Other (please specify): ____%

4) A) (Exams 1-4): Based on your responses, name at least three things you plan to do differently in preparing for the next exam.

_____
_____
_____

   B) (Exam 5): In what ways have you used these strategies in other courses?

_____
_____
_____

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Teaching Rhetorical Praxis in a Post-Truth World: An Undergraduate Course on Detecting and Analyzing Bullshit, Fake News, and Alternative Facts

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Abstract. We are living in an era where reality, truth, and facts are being turned upside down and inside out. Fake news and falsehoods are being spewed out in increasing exponential rates. I was prompted to do something about the propensity of fake news through post-truth discourse and designed an undergraduate course that I titled: Bullshit, Fake News, and Alternative Facts. In this piece, I critically reflect on and share my theoretical frames for constructing the course, the design of it, my experience in teaching it, and report on a survey about the class—and I call all of you to work at least some material on post-truth into your classes or into a full course as I have.

> [A]s the vilest writer has his readers, so the greatest liar has his believers; and it often happens, that if a lie be believed only for an hour, it has done its work, and there is no farther occasion for it. Falsehood flies, and the truth comes limping after it; so that when men come to be undeceived, it is too late; the jest is over, and the tale has had its effect.
>
> --Jonathan Swift (1710)

We are living in an era where reality, truth, and facts are being turned upside down and inside out. One of the signs of this dizzying state is the increasing use of two neologisms: fake news and alternative facts. They join with an early 20th century term, bullshit. We can think of these and other terms as moving along a continuum from truth to an ambivalence to truth to mainly falsehoods to outright lies. Along this continuum we find everything from satires to hoaxes to misinformation to counterfeit news stories to propaganda to alternative facts. Satires, which range from Jonathan Swift's "A Modest Proposal" to Onion stories like "NFL to Curb Excessive Celebrations by Removing Areas of Players' Brains Responsible for Emotions" to episodes of The Daily Show, offer humorous exaggerations to expose and criticize people and governments. Counterfeit news stories, though, are malicious fabrications created usually for political ends. Nazi propaganda of WWII and fraudulent stories such as "Pope Francis Endorses Donald Trump," a story that went viral on Facebook, are intended to mislead readers. Although counterfeit news has been around since ancient times (Octavia used disinformation to win over Marc Anthony in the last war of the Roman Republic), the internet and social media have led to a huge increase in false news, seriously challenging and muddying "real" news. Each fake story can rapidly multiply over social media sites such as Facebook and Twitter and through email, sometimes with devastating effects. Consider the Pizzagate shooter in Washington, DC

in December 2016, [1] for instance. As readers, students need to be able to detect whether or not a story or an argument is fake. As writers, if they cite a counterfeit story as evidence, they risk harming their credibility. And if they are taken in by a fake story, they can risk so much more. Given the current precarious state of truth, I was prompted to do something about the propensity of fake news through post-truth discourse and designed an undergraduate course that I titled Bullshit, Fake News, and Alternative facts. In this piece, I critically reflect on and share my frame for constructing the course, the design of it, and my experience in teaching it, and report on a survey students filled out after the completion of the course—and I call all of you to work at least some of this type of material on post-truth into your classes or into a full course as I have.

Post-Truth

As Swift (1710) observed three centuries ago, lies hold sway before truth can be released. Post-truth promulgates various levels of mistruths. After much research and debate, the Oxford English Dictionary selected "post-truth" as the word of 2016. Post-truth (Oxford English Dictionary, 2019) relates to or denotes "circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief." Rhetoricians, like myself, might interrogate this definition arguing that "objective facts" are illusionary and all rhetoric contains emotional appeals no matter how reasoned it may be. Pathos and ethos are inescapable. We can recuperate the definition by arguing that post-truth is a statement that rests on a lopsided rhetorical triangle—mostly absent of logos or reasoning, of facts as well as of ethos or ethical positioning, of ethical discourse, to rely primarily on a skewed pathos. In short, post-truth discourse is best understood as unethical, as falsehoods absent of facts, and as prejudiced pathos. Why is this important? It demands critical reflection to detect such falsehoods.

I teach and engage in critical reflection—a "meaning-making process"—that allows me to set goals to use what I've learned in the past to inform what I do in the future. As John Dewey (1929) taught us, it is the link between thinking and doing. Maura Sellars (2013) also grapples with Dewey's theory of reflection; in it she turns to the theory on reflection developed by Schon (1983) to argue he

> introduces some new ideas on the reflective process itself, most especially on the implication in Dewey's (1933) theory that reflection is necessarily a process embarked on after the event, is a long, ponderous undertaking and also on the content of reflection itself. Schon (1983, 1987, 1991) suggests two levels of reflection: (i) reflection in-action and (ii) reflection-on-action, partly based on Dewey's (1933) work. … Schon (1983) offers an interesting departure

[1] Pizzagate was a conspiracy theory that alleged Hillary Clinton and other democrats operated a child sex and sacrifice ring out of Comet Ping Pong Pizza's shop in Washington D.C. The conspiracy went viral in 2016. A young man, Edgar Maddison Welch, answered Alex Jones's impassioned pleas that someone personally investigate this story; he did more than investigate. He entered the pizza shop on December 4, 2016 armed with a loaded AR-15 style rifle at about 3:00 pm and shot three rounds off in the pizza shop. He was apprehended shortly afterwards.

> from the perception that problems for reflection are necessarily reflected upon after the event. He suggests that reflection-in-action is a concept that celebrates the art of teaching, in that it allows for continual interpretation, investigation and reflective conversation with oneself about the problem while employing the information gained from past experiences to inform and guide new actions. (pp. 4-5)

In this piece, I focus on reflection-on-action though, while I was teaching the course, I certainly performed reflection-in-action during and after every class. And to teach critical reflection, I drew on two theoretical frames as I outline below. These gave me goals to reach for and substance to reflect on as I thought about the class both during its run and afterwards.

Workplace Success and Framework for Success in Post-secondary Writing

I used two frameworks as the theoretical grounding for the course: Top Ten Skills for Workplace Success (Curtin, 2017), and the Framework for Success in Post-Secondary Writing (Council of Writing Program Administrators [CWPA], National Council of Teachers of English [NCTE], & National Writing Project [NWP], 2011). The first frame offers the following ten habits of mind based on a survey of 350 executives across 9 industries worldwide that are predicted to be necessary by 2020 for all kinds of careers:

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinatizing with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

What is clear in this ten-point list is that course content knowledge—the kind dispensed in specific disciplines such as business or engineering or sciences—did not make the list. Instead these habits are critical thinking and reflection skills typically taught in the humanities courses. For me, these habits of mind are also critical for solving all kinds of challenges beyond the workplace, and, most importantly, those that contribute to a critical democratic citizenship. For as John Dewey (1954) taught us, the concept of critical democracy engages the interdependent relationship among democracy, the state, and the public. Critical thinking skills—those at the center of humanities classes—are necessary to fully engage in these three.

The second theoretical frame, The Framework for Success in Post-Secondary Writing "describes the rhetorical and twenty-first-century skills as well as habits of mind and experiences that are critical for college success" (CWPA, NCTE, & NWP, 2011, p. 1). The framework was developed by two-year and four-year college instructors as well as high-school English teachers from around the country. Although the habits of mind are intended primarily to develop student success in college, I find the framework also crucial for developing critical democratic citizen success—something necessary within and beyond college.

The framework distinguishes 8 habits of mind for student success:

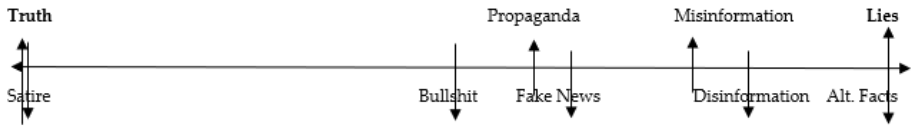
1. Curiosity: the desire to know more about the world.
2. Openness: the willingness to consider new ways of being and thinking in the world.
3. Engagement: a sense of investment and involvement in learning.
4. Creativity: the ability to use novel approaches for generating, investigating, and representing ideas.
5. Persistence: the ability to sustain interest in and attention to short- and long-term projects.
6. Responsibility: the ability to take ownership of one's actions and understand the consequences of those actions for oneself and others.
7. Flexibility: the ability to adapt to situations, expectations, or demands.
8. Metacognition: the ability to reflect on one's own thinking as well as on the individual and cultural processes used to structure knowledge. (CWPA, NCTE, & NWP, 2011, p. 1)

These habits of mind resonate with the Top Ten Skills for Workplace Success and were central to the reading and writing assignments I designed as well as a range of in-class activities in my course. Although the Framework for Success was designed primarily for writing classes, I found it rich and powerful for my rhetorical analysis class, and indeed worthy for any humanities course. I informed students of the recommended workplace skills and habits of mind, explaining how they guided my creation of the course and how both were heuristics for critical democratic citizenship beyond school. I will return to these in my description of the class and the assignments to show how they informed what I did.

…the concept of critical democracy engages the interdependent relationship among democracy, the state, and the public. Critical thinking skills—those at the center of humanities classes—are necessary to fully engage in these three.

Truth-Lie Continuum

I designed the topics of the course around what I called and touch on above, a Truth to Lie continuum of rhetorics:



These seven rhetorics fall along the continuum according to their concern for truth moving from absolute truth to flat out lies. The continuum begins with satire, a genre that must be close to truth to be successful. Satirist Jon Stewart explains of his experience in the *Daily Show* "We don't fact check, look into context, because of any kind of journalistic criterion that we feel has to be met; we do that because jokes don't work when they are lies" (qtd. in Duffy, 2014 p. 75). As William Duffy (2014) points

out, "*The Daily Show* might be a "fake" news show, but to echo Jeffrey Jones, 'being fake does not mean that the information it imparts is untrue. Indeed, as with most social and political satire, its humor offers a means of reestablishing common-sense truths to counter spectacle, ritual, pageantry, artifice, and verbosity that often cloak the powerful'" (p. 183). Truth is the soul of satire.

As we move along the continuum, Bullshit, according to Harry Frankfurt (2005) who wrote the book on bullshit, is indifferent to truth and lies and so resides in the middle.[2] In Frankfurt's (1986) words, "It is just this lack of connection to a concern with truth — this indifference to how things really are — that I regard as of the essence of bullshit." (p. 8-9). The liar cares about deflecting from truth whereas the bullshitter cares less about truth or lies. The BS artist also cares little for the audience in the crafting of the bullshit. As Frankfurt (1986) points out, "bullshit itself is invariably produced in a careless or self-indulgent manner, that it is never finely crafted, that in the making of it there is never the meticulously attentive concern with detail" (p. 5). Moving along the continuum, propaganda—as biased information issued to promote a particular stance—can be issued for both good and bad ends. Think of WWII propaganda that denigrates and dehumanizes the enemy at one end and propaganda such as Uncle Sam's "I want you" posters that call to its citizens to join the war efforts at the other end. Fake news can be totally or partially false or ignorant of truth. Although fake news has been around at least since ancient times, it has spiked in usage with the various technological inventions of communication throughout history. The invention of the printing press was the first technology that spurred false news but the internet and social media have led to a huge increase in false news, seriously challenging and muddying "real" news. The lightning speed and global breadth of fake news today is simply mind boggling. Misinformation pieces generally are mistakes (e.g., errors the press prints and then tries its best to correct). Disinformation is purposeful falsehoods issued to sway folks, what authoritarians and kleptocrats typically engage in. Alternative facts, a phrase coined by Kellyanne Conway (2017), is a lie. Let me explain that I don't mean the discourses along the continuum as static points but as those that move and hover around the various relations to truth. In my class, I introduce these concepts and then the class explores, and writes on each of these rhetorics.

Pedagogical Moves

The assigned reading consists of three books and scholarly/newspaper/ magazine articles:

Daniel J. Levitin, *Weaponized Lies: How to Think Critically in the Post-Truth Era* (NewYork: Dutton, 2017). *Weaponized Lies* originally appeared a year earlier but with the election, it was renamed and reissued. It addresses strategies for reading and thinking about both numbers and verbal texts.

[2] For a thoughtful critique of Frankfurt's definition of bullshit and its role in academic writing, see Eubanks and Schaeffer (2008). It is a piece I assign to students in this course.

Bruce McComskey, *Post-Truth Rhetoric and Composition* (Boulder: University of Colorado, 2017). *Post-Truth* covers a range of distorted discourses and calls for us to address these directly in rhetoric and composition courses.

Ryan Skinnell, ed., *Faking the News: What Rhetoric Can Teach Us About Donald J. Trump* (Exeter, UK: Imprint Academic, 2018). *Faking the News* is an edited collection on Donald Trump's use of slippery language and symbols.

Students were responsible for four assignments as well as attendance/participation: a BS Inventory and Reflection; ten quizzes; an oral team presentation; and a final exam. I have space to discuss only two of these assignments. (For more details, see the syllabus in the Appendix.) Before I go into each assignment, I would like to include a brief word about the class atmosphere and activities: I put a great deal of weight on attendance and participation because the course is structured around discussions and in-class activities. This course is meant to develop a critical conscious so that students can become—as Quintilian taught in *circa* 95 AD—good people speaking well, and, in a word, critical democratic citizens. To develop these citizens, I followed John Pell and William Duffy's (2013) advice that I treat the classroom like an *agora*, a public open space for assemblies. In their words, "In order to be a place for civil discourse, . . . the public sphere also needs to be a place where differences are not only recognized but allowed to flourish. Disparity in attitude and belief, in other words, *is* the reason for discursive interaction" (p. 99). Indeed, as rhetorician Kenneth Burke (1969) argued, the reason we need discourse is precisely because we are divided; if we all thought exactly alike, there'd be little need for discourse. For this reason, we need and use rhetoric. Kenneth Burke (1969) defined rhetoric as the "use of words by human agents to form attitudes or to induce actions in other human agents" (p. 41). In other words, rhetoric is meant to move people or encourage action to bring about change in situations and in people. This change can be evident through attitude, motives, or intentions but it can also be physical. Calling for aid is rhetorical, a means for calling for action. From the very small to the very large, rhetoric is social action that leads to social and political change.

To get students to understand Burke's rhetoric requires a pedagogy of civil discourse, one that looks to unity and identification rather than division and disjointed relations. In a pedagogy of civil discourse, "civility starts when students learn how to orient themselves toward one another *with* instead of *through* discourse itself" (Pell and Duffy, 2013, p. 96). Thus, students were encouraged to be aware and allow for difference to flourish by respecting all differences. Such pedagogical spaces don't prevent disagreements "but what we can do is allow students to *experience* the sociality of discourse by providing them the opportunity to act justly toward one another by recognizing that differences are not the evidence of lack, but of different material conditions" (Pell and Duffy, 2013, p. 104). This means being explicit in calling attention to differences inside and outside the class. It means teaching and heeding three of the habits of mind: Openness, Engagement, and Responsibility. As Pell and Duffy (2013) observe, "if we want an *agora* for actual civic space for deliberation and critical engagement with the ideas of others, we must invent it" (p. 102-03). In inventing it, we

need to foster respect for varying perspectives and engagement with the discursive materials, texts, visuals, and videos.

To help students get there, whole class discussions emerged out of small group discussions about the readings, during which students generated prompts and questions for the whole class that they placed on a white board. This move to write down questions made students responsible for considering how the talk might flow. Individuals from the small groups led the whole class discussions—most of which were lively, vibrant, and boisterous. In fact, I spent most of my time in class as an active rhetorical listener—adopting Krista Ratcliffe's (2006) approach to listening rhetorically and pedagogically—rather than as a speaker. The students engaged with each other in both small and large groups and grappled with differences with care and respect, an attitude I taught and insisted on. We held several discussions about how best to exhibit care and respect when we speak with each other. Students were instructed to listen carefully and fully to another student's point before entering their own. They were also taught to repeat what was being said to make sure they had understood and affirmed the discussion point before offering their response. Occasionally the discussions went off on tangents of personal experiences rather than issues raised by the readings, but these tangents sometimes were good teachable moments when the result veered toward disagreement. Overall the classroom discourse was cordial and respectful.

The assignments were equally successful, and, let me say, exhilarating, but I have space to write about just two: the BS Inventory and Reflection,[3] and the Oral Team Presentation. For the first, students were to conduct a "bullshit inventory" of all the BS they encountered and created in the course of one week. They were to conduct a critical rhetorical analysis of what they gathered. I introduced them to Raymie Mckerrow's (1989) explication of critical rhetorical analysis. As he points out, "In practice, a critical rhetoric seeks to unmask or demystify the discourse of power. The aim is to understand the integration of power/knowledge in society—what possibilities for change the integration invites or inhibits and what intervention strategies might be considered appropriate to effect social change" (p. 91). In other words, the critique has as its end action, the hallmark of all good rhetorics. He goes on to write, "the telos that marks the project [of critical rhetoric] is one of never-ending skepticism" (p. 96); he goes further, "skepticism is a healthy response to a society which takes universalist dogma and the 'truths' it yields for granted" (p. 96). Students were open to being skeptical, something many said was how they approached digital rhetorics. Now they were asked to do the same with spoken rhetorics of BS. I explained that rhetoric (critical rhetoric and the rhetoric they were to analyze) deals with *doxa* (opinion). That is to say, rhetoric deals with ephemeral truths that need to be reargued again and again rather than certain knowledge (something rhetoricians find little faith in). In other words, rhetoric deals with the contingent. Yet while rhetoric is ephemeral its ends can be long lasting, so they were to consider that as they analyzed the BS they gathered.

[3] This assignment was adapted from one Carl T. Bergstrom and Jevin West (2018) created. The adaptation held onto the frame and purpose of the assignment along with the relevant wording. It changed to meet specifics of how to do the assignment. See http://callingbullshit.org/exercises_inventory.html.

Mckerrow turns to Wander's (1981) analysis of media as a praxis to use in critical rhetorical analysis. Wander points out:

> Most characters on prime time conform to conventional standards of beauty—they tend to be white or near white, fine-featured, young, well proportioned, and of average height. NEGATION: Few characters appear on prime time who are fat. Not many have scars, limps, or protruding lips. Few adult characters are under five feet or over six feet, four inches tall. Not many characters appear to be over 65. When physically 'deviant' characters do appear, they tend not to be cast as intelligent, strong, or virtuous. (p. 518-19)

Thus, I encouraged students to look for what was not there along with what was. And to consider what the absences taught them about the power and reach of the BS they gathered.

I encouraged them to be creative in how they displayed their data: using for instance, an interactive applet, data visualization software, PowerPoint, a stack of 3x5 cards, a song, a cartoon, a Venn diagram, text, or in any way that caught their fancy. And creative they were; students produced a chap book, a diary, a poem, cartoons, a game (with game board and pieces), a digital representation, to name a few. Each rendition was different from the next. They were also asked to critically reflect on the experience of collecting data, on the display type they chose, and what they learned through this assignment. We went over three timeframes for critical reflection: "reflection-on-action" (past experience), "reflection-in-action" (as the incident of BS happens), and "reflection-for-action" (actions one may want to take in the future when being confronted by BS). They were to work these into their own critical reflections.

In relation to the two frameworks I used (Top Ten Skills for Workplace Success [Curtin 2017], and the Framework for Success in Post-Secondary Writing [CWPA, NCTE, & NWP, 2011]), this assignment ticked five workplace skills: critical thinking, creativity, emotional intelligence, judgment and decision making, and cognitive flexibility, and six habits of mind boxes: curiosity, openness, engagement, creativity, and flexibility and with the reflection, metacognition. The overall quality of the work, with few exceptions, was outstanding. Students were passionate about their experiences with the frequency of BS, something they had not paid attention to in the past.

The second assignment was a team-developed oral class presentation on one or more practices covered in the class. This assignment gave students an opportunity to share what they had learned in the class and to work as a team member. I reminded them that teamwork is common in virtually all professional fields, whether a project is a collaborative research task, a co-authored work, or a single-researcher and/or author. That is, even if they were to undertake a project for which they are entirely responsible for the research and the writing, they would need to involve collaborators at points in the process (e.g., librarians or archivist to help with locating materials, responders to writing—peer readers, editor reader, reviewer reader of manuscript; copy editor, indexer, proof sheet editor, employers, customers, and so on). I stressed the point that when they do research, they never work in a vacuum or in an empty room in the attic; there are always people involved at certain points in scholarly and professional work.

Thus, teamwork was a critical component in the class. As Duffy and Pell (2013) theorize, "Critically pursued for its epistemological benefits, collaborative writing can result in texts greater than the sum of their individual parts. The reason for this is because the real value of collaborative writing is located in the reflexive work collaborators navigate when communicating with each other about not only what to write, but also how best to write it" (p. 248). Small daily group assignments meant students had practice in negotiating team participation. They also designed a contract concerning expectations for collaboration that members signed; it listed expectations and consequences if the expectations weren't met. I agree with Duffy and Pell's (2013) definition of "collaborative writing [as] an inventive process and reflexive relationship through which two or more writers synthesize their individual perspectives to create a new, shared voice through which to compose texts" (p. 251). The teams worked together on various in-class activities as well as outside of class to create their presentation. Each encounter was an inventive process that yielded impressive ends. Each encounter also helped team members develop relationships with each other.

For their presentation, they were told to show how they had achieved the 7 learning outcomes for the course:

Learning Outcomes

1. Gain knowledge about how counterfeit arguments and stories, as in BS, fake news, alternative facts, satire, and propaganda, are created and circulated.
2. Learn how to recognize counterfeit verbal and visual texts.
3. Strengthen interpretation and critical rhetorical analysis practices, considering how the rhetorical situation is key to these practices.
4. Reflect on diverse interpretations and perspectives that promote understanding of and respect for other perspectives
5. Strengthen research and collaboration skills through activities that require the synthesis of divergent ideas, information, and concepts.
6. Come to understand how changing media and technologies (re)shape information, education, society, and democracy.
7. Gain sensitivity to the ethical responsibilities of being an active citizen and a responsible communicator in the digital age.

They were given free rein on how to do the presentation. And free rein they took; one group constructed a fake news video, another filmed a fake-news event at our university (designed to see how susceptible students are to fake news; during that event, random students on campus were told that there was a petition to sign if they agreed with prop 202—a made-up prop that read "University of Arizona, our state rival, needs to return to Mexico"—some students took it seriously and signed the fake petition), still others used video clips from satires, another used visuals from current propaganda movements, and so on. This assignment ticked all the habits of mind boxes (CWPA, NCTE, & NWP, 2011) and nine of the workplace skills (Curtin, 2017): complex problem solving, critical thinking, creativity, people management, coordinatizing with

others, emotional intelligence, judgment and decision making, negotiation, and cognitive flexibility.

Survey and Interview Results

I wanted to find out whether students felt they had achieved the course goals and felt as positive about the class results as I did. Since the class was over, I contacted all the students via email to ask them to respond to a survey about the course. I promised them confidentiality in the letter of consent. Out of 38 survey requests, 14 responded. Although the response is limited (only 37% responded, but that is within typical response rates) and is colored by self-selection (respondents chose to answer), I was heartened by the number of students who did respond even though the semester had well passed.

The survey had ten Likert-scale questions that ranged from strongly agree (SA), agree (A), neutral (N), disagree (DA), and strongly disagree (SD). The response rate was small and so should be taken cautiously. Nevertheless, I was encouraged by the responses as they upheld to a large degree my own assessment of the course.

Survey

Respond to the following statements in terms of agreement or disagreement: strongly agree (SA), agree (A), neutral (N), disagree (DA), strongly disagree (SD).

	SA	A	N	D	SD
1. I learned strategies for detecting bias in a story.	85.7%	14.3%			
2. I learned how to recognize counterfeit verbal texts.	85.7%	7.1%	7.1%		
3. I learned strategies for analyzing visual material.	85.7%	14.3%			
4. I learned how media and technology shape messages.	92.8%		7.1%		
5. I learned how to write a fair and balanced argument.	78.5%	14.2%	7.1%		
6. I learned how to listen fairly to an argument in which I hold a differing point of view.	85.7%		14.3%		
7. I learned how to introduce differing points of view.	78.5%	7.1%	14.2%		
8. The materials and activities we engaged in were designed to achieve the course goals.	71.4%	12.5%	12.5%		
9. I learned the civic value of detecting fake news and BS.	85.7%		14.3%		
10. I would recommend this course to other students.	85.7%	7.1%	7.1%		

As the survey results show, the majority were highly positive in their responses but three questions (question 5, 7, and 8) yielded results worth pursuing as students seemed less prepared for writing fair and balanced views than they felt critically analyzing texts and were less enthusiastic with some of the in-class activities. These results flagged that I need to spend more time on teaching the writing of critical arguments to help students feel confident in generating such texts. I also need to take stock of the kinds of activities I introduce into the class and make clear when I assign them the relevancy of them. If students understand the purpose of an activity, they can see it as a positive experience.

Conclusion

As Swift 1971/(1710) taught us in the eighteenth century, "Falsehood flies, and the truth comes limping after it" (p. 82). Today that lesson is especially poignant as we are confronted—even bombarded—daily with political falsehoods and powerful customized advertisements. We are in a discursive war where we need to create armor around ourselves as we seek out the truth of events and talk. The theoretical frameworks I draw on offer ways of devising that armor that free critical democratic citizens need. In this way, we can detect, deflect, and challenge falsehoods that are swung at us online and in person.

Let me end with a call that one of my students issued in the evaluation of the course:

> I know this course was probably a temporary thing, but it needs to be available for at least two or preferably more semesters. I learned how to engage with news better than I ever have before and have respectful conversations about it without getting angry and rude. There's a lot of students who NEED this course to make them into better academics and better people in general, because above all, this course was an exercise in critical thinking and that's valuable beyond words.

This passionate attitude was shared by others. Some students told me it was the most engaging class they had ever had while at college. I'd like to take full credit, but the class was successful largely because of the frameworks in which I situated it: The Top Ten Workplace Skills, the WPA framework for Success, critical reflection, and critical rhetoric, along with my efforts to create an environment of acceptance, trust, and engagement. It was also successful because of the hard work of the students. That hard work has generated material I can use in future classes (e.g., sample BS Inventories and Reflections, and sample oral presentations). I am looking forward to teaching it again. And I urge all of you to make space in your classes for work on post-truth discourse.

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Appendix
Syllabus

Analyzing BS, Fake News, And Alternative Facts

Truth matters. A post-truth era is an era of willful irrationality, reversing all the great advances humankind has made.

--Daniel J. Levitin

Whatever its other cultural and social merits, our digital ecosystem seems to have evolved into a near-perfect environment for fake news to thrive.

--Mark Thompson

We are living in an era where reality, truth, and facts are being turned upside down and inside out. One of the signs of this dizzying state is the creation of two neologisms (new terms): *fake news* and *alternative facts*. They join with an early 20th century term, *bullshit*. This semester we will analyze the use, meaning, and etymology of these three terms and others. We can think of them along a continuum moving from truth to an ambivalence to truth to mainly falsehoods to outright lies. Along this continuum, we find everything from satires to hoaxes to misinformation to counterfeit news stories to propaganda to alternative facts. Satires, which range from Jonathan Swift's "A Modest Proposal" to *Onion* stories like "NFL to Curb Excessive Celebrations by Removing Areas of Players' Brains Responsible for Emotions" to episodes of *The Daily Show*, offer humorous exaggerations to expose and criticize people and governments. Counterfeit news stories, though, are malicious fabrications created usually for political ends. Nazi propaganda of WWII and recent fraudulent stories such as "Pope Francis Endorses Donald Trump," a story that went viral on Facebook, are intended to mislead readers. Although counterfeit news has been around since ancient times (Octavia used disinformation to win over Marc Anthony in the last war of the Roman Republic), the internet and social media have led to a huge increase in false news, especially during the 2016 presidential election, seriously challenging and muddying "real" news. Each fake story can rapidly multiply over sites such as Facebook and Twitter and through email, sometimes with devastating effects. As a reader, you need to be able to see whether or not a story or an argument is fake. As a writer, you risk harming your credibility if you cite a counterfeit story as evidence. Thus, we will study how to detect bullshit, fake news, and alternative facts in this course.

Learning Outcomes

1. Gain knowledge about how counterfeit arguments and stories as in BS, fake news, alternative facts, satire, and propaganda are created and circulated.
2. Learn how to recognize counterfeit verbal and visual texts.
3. Strengthen interpretation and critical analysis practices, considering how the rhetorical situation is key to these practices.

4. Reflect on diverse interpretations and perspectives that promote understanding of and respect for other perspectives
5. Strengthen research and collaboration skills through activities that require the synthesis of divergent ideas, information, and concepts.
6. Come to understand how changing media and technologies (re)shape information, education, society, and democracy.
7. Gain sensitivity to the ethical responsibilities of being an active citizen and a responsible communicator in the digital age.

Required Texts:

Daniel J. Levitin, *Weaponized Lies: How to Think Critically in the Post-Truth Era* (NewYork: Dutton, 2017).

Bruce McComskey *Post-Truth Rhetoric and Composition* (Boulder: University of Colorado, 2017).

Ryan Skinnell, ed., *Faking the News: What Rhetoric Can Teach Us About Donald J. Trump* (Exeter, UK: Imprint Academic, 2018).

Other Readings on Blackboard (BB) or Online with URL provided in syllabus.

Recommended Readings: *The Debunking Handbook* and *The Alt-Right on Campus* on BB

Assignments [Detailed instructions will be handed out]:

- BS Reflection 20%
- Quizzes 20%
- Presentation 20%
- Final exam 25%
- Attendance and participation 15%

Syllabus

ENG 494 **Note:** Assignments due on date listed.

Week 1 **Introduction**

Class 1: Introduction to course

Class 2: Read "The Long and Brutal History of Fake News" and "Post-Truth Named 2016 Word of the Year by Oxford Dictionaries" on BB. "Post-Truth" and "Bullshit" in *Post-Truth Rhetoric and Composition* pp. 3-13

Week 2 **BS**

Class 1: Read "On Bullshit" on BB "A Kind Word for Bullshit: The Problem of Academic Writing" on BB

Class 2: Read "Donald Trump is BS" and "Bullshit is a Greater Enemy than Lies" and "The Bullshitter-in-Chief" on BB

Week 3 **Keepin' it Real: spotting BS**

Class 1: Martin Luther King Holiday--No Class

Class 2: Read "The Fine Art of Baloney Detection" and "How to Detect Bullshit" on BB

Week 4 **Misinformation: Zooming in on Words**

Class 1: Read "Thinking Critically" (pp. xiii-xxii), "How Do We know?" (pp. 123-128) in *Weaponized Lies*

Due: BS Reflection and data inventory

Class 2: Read Identifying Experience" (129-151), "Overlooked, Undervalued, Alternative Explanations" (152-167), and "Counter Knowledge" (168-177) in *Weaponized Lies*

Week 5 **Misinformation: Zooming in on Numbers**

Class 1: Read "Plausibility" (3-10), "Fun with Averages" (11-25), and "Axis Shenanigans" (26-42) in *Weaponized Lies*

Class 2: Read "Hijinks with How Numbers are Reported" (43-74) in *Weaponized Lies* and "Storks Deliver Babies ($p = 0.008$)" in BB

Week 6 **More Numbers and Science**

Class 1: "How Numbers are Collected" (75-96) and "Probabilities" (97-120) in *Weaponized Lies*

Class 2: Read "How Science Works" (181-197), and "Logical Fallacies" (198-210) in *Weaponized Lies*

Week 7 **Thinking Through Information**

Class 1: Read "What You Don't Know" (211-215), and "Thinking in Science and in Court" (216-221) in *Weaponized Lies*

Class 2: "Four Case Studies" (222-250), and Conclusion (251-254) in *Weaponized Lies*

Week 8 **Satire: Trouble when Jokes Taken at Face Value**

Class 1: Read "On Satire" and "On Satire in the Arts" on BB

Class 2: Read "The Limits of Satire" and "The Abuse of Satire" on BB

Week 9 **SPRING BREAK—NO CLASSES**

Week 10 **Propaganda**

Class 1: Read: "Teaching about Propaganda" on BB

Class 2: Read "The Power of Visual Material" on BB

Week 11 **Fake News**

Class 1: Read "A Peek Inside the Strange World of Fake Academia" on BB and "Fake News" pp. 13-20 in *Post-Truth Rhetoric and Composition*

Class 2: Read "Ethos" and "Pathos" pp. 20-33 and "The Trump Effect" pp. 33-37 in *Post-Truth Rhetoric and Composition*, and "Introduction to *Faking the News*" pp. 1-6 in *Faking the News*

Week 12 **Fake News**

Class 1: Read "What Passes for Truth in the Trump Era" pp. 76-94, "Donald Trump's Perverse Political Rhetoric" pp. 160-73 and "Demagoguery and the Duplicitous Victimhood" pp. 7-20 in *Faking the News*

Class 2: Read "Charisma Isn't Leadership" pp.95-107, "Great Television" pp. 108-22, and How #Trump Broke/Red the Internet" pp. 123-41 in *Faking the News*

Week 13 **Fake News**

Class 1: Read "Trump's *Not* Just One Bad Apple" pp. 39-52, "Who Owns Donald Trump's Antisemitism?" pp. 53-75, and "Rhetorics of Fear and Loathing" pp. 21-38 in *Faking the News*

Class 2: Read "Putting His Ass in Aspirational" 142-59 and "Afterword" 174-79 in *Faking the News*

Week 14 **Fake News**

Class 1: Read "The Grim Conclusions of the Largest-Ever Study of Fake News" and "How to Spot Fake News" on BB

Class 2: Read: "Can AI Win the War Against Fake News?" on BB and "The Trump Effect" in *Post-Truth Rhetoric and Composition* pp. 33-37

Week 15 **Alternative Facts and Debunking Myths**

Class 1: Read "'Alternative Facts': The Needless Lies of the Trump Administration" and "With 'Fake News,' Trump Moves from Alternative Facts to Alternative Language" on BB

Class 2: Read "Post-Truth Composition" and "Consequences of Neglecting to Act" in *Post-Truth Rhetoric and Composition* pp. 37-45

Week 16 **Sharing our Work**

Class 1: Presentations

Class 2: Presentations

FINAL EXAM DUE

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Collaborative Autoethnography: Best Practices for Developing Group Projects

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Abstract. Collaborative Autoethnography (CAE) is an emerging practice that combines group interaction with qualitative research. Group projects are often deployed in course design to maximize the value of collaborative learning environments. Using existing scholarship, we describe best practices for group projects that apply principles of CAE. To advance the premise of the paper beyond descriptive summaries of pedagogical inquiry, we utilize a best practices mechanism to present a coherent guide for project collaborators to use in various classroom settings. The best practices proposed are research validated by existing CAE and project management literature.

Group projects and presentations are often included in coursework as student learning activities and assessments. Group projects and presentations provide students with the opportunity to refine their communication, problem-solving and management skills within the context of a shared goal. This skill is useful not only in their academic development but also in preparing them for their future careers. Cohen and Mule (2019) discuss the effective intersection of design thinking and collaborative pedagogy in coursework. Allan (2016) reviews the Scholarship of Teaching and Learning (SoTL) literature regarding approaches to small-group learning, small-group instruction and addresses some of the resistance to group pedagogical practices. Finally, Minei (2016) outlines the "Do Good Project", a semester long small-group assignment that displays impactful pedagogy "by bridging the gap between theoretical concepts articulated during lecture and real world application of those concepts in practice" which means that "students can focus their skills through the lens of social awareness" (p. 74). Clearly the literature reflects the notion that effective facilitation of group assignments and projects is an integral pedagogical tool for instructors.

Collaborative Autoethnography (CAE) is an emerging practice that combines group interaction with qualitative research. At the heart of CAE is collaboration or the "ensemble" which allows for varied perspectives to collect and analyze data (Chang et al., 2013, p. 24). Using group project management and small-group communication literature, we aim to describe best practices for learning CAE in an academic classroom venue using the small-group construct, affording an ideal platform to pedagogically apply the principles of CAE. As such, we first provide background information about CAE as method and then broadly discusses how to apply CAE as a best practices model

within a classroom setting. A CAE project is suitable for a wide variety of courses ranging from general education to upper-level social science and humanities as most topics are conducive for learning activities that include group assignments.

What is Collaborative Autoethnography?

Collaborative autoethnography (CAE) is a multivocal methodology that supports a shift from an individual to a collective agency, thereby offering a path toward personally engaging, non-exploitative, accessible research that enhances the reflexive method (Lapadat, 2017). CAE is a qualitative research method "that focuses on self-interrogation but does so collectively and cooperatively within a team of researchers" (Chang et al., 2013, p. 17). The process involves writing reflexive narratives, employing open coding (Tracy, 2013) and then repeating the process to find points of connection and disconnection in experience (Chang et al., 2013). CAE is a response to credibility challenges in that it "presents itself as an alternative to single-authored self-narrative research such as autoethnography in which the credibility of a one-person act is often challenged in social science spaces where objectivity is still dominant" (Hernandez et al., 2017, p. 252). Simply stated, CAE is a "pedagogy of mutuality" (Taylor and Coia, 2009, p. 61). Hernandez et al. (2017) suggest CAE "holds potential for engendering power-sharing in the research process" and works to dismantled hierarchal power structures often associated with collaborative endeavors (p. 253). Thus, utilizing CAE to design group projects allows students to develop and apply CAE skills and methods to their coursework while fostering a richer and deeper learning experience.

CAE Best Practice Framework for Group Projects

We propose the following best practice framework that incorporates CAE into a group project format. At the beginning of the course, we suggest placing students in small groups while 1) learning the course material and 2) learning about CAE. It is at this juncture group members exploratorily begin reflexive work to uncover parts of their experiences that could resonate with their peers. This is also the point in which the group discussions center on how to best use individual experiences to create a collective voice (Tombro, 2016). An important task of the group is to select a group leader who will take hold of the course and assignment guidelines and assign segments as they deem fitting certain members (Hackman, 2011). This allows each member of the group to have a clear idea of the overall assignment goals and objectives and facilitate a fixed collaborative mentality which transitions into project engagement. Having students complete the initial portions of the course in groups is essential in cementing their understanding of CAE as an applied exercise as well as preparing them for a later course assessment.

Because group assignments have all the underpinnings of a project (and the assignments in this case are indeed referred to as projects), we will treat an assignment as a project. A project may be defined as temporary work and can be viewed as a journey from start to finish (Morris, 1998). The journey, in project management terms, is known as the lifecycle (Westland, 2007). Intertwined throughout our proposed best

practice framework are features of a project lifecycle along with key disciplines of project management, each with a brief overview of function and purpose. Integrating principles of CAE and group project components of leadership, decision-making, and planning into course objectives and outcomes allows for a self-reflexive process that can be effectively applied, practiced, and managed. Certified project management professionals have a much more granular perspective of project execution (Richman, 2002). For the purposes of small groups conducting CAE-driven works, rudimentary project management knowledge will be sufficient. Group leaders and members will be exposed to the basic elements and not expected to become project management experts. The purpose is to acquire the project management mindset of process.

Group projects that employ CAE as a guiding framework are collaboratively constructed, thus allowing effectiveness, transparency, and most importantly accountability. Guidance derived from CAE as a methodology and best practices for successful project management forms the basis of our framework proposal. We suggest that an effective collaborative project must contain four primary elements: cognition, group construct, project construct, and communication. Emphasis on these factors cannot be understated. Adherence to these primary building blocks is instrumental to a successful and meaningful collaborative venture.

Group projects that employ CAE as a guiding framework are collaboratively constructed, thus allowing effectiveness, transparency, and most importantly, accountability.

Cognition

Perhaps the most important aspect that each small group must grasp is that this method of learning CAE reinforces the intrinsic elements by first learning the subject matter and reflecting on its impact within group members' own culture (Hee, 2008). By contextual investigation within the group, students can conduct ethnographic research enabling them to break down the topic into concise and meaningful segments (Stahl, 2010). Additionally, awareness exposes each group member to core dynamics as they simultaneously witness and engage first-hand the elements in action within their own group. For students, the exposure itself is a reinforcement apparatus, and they can now present a more qualified perspective on the topic.

Group Construct

Harvard professor Richard Hackman (2011) outlines key conditions that benefit group construct and includes a contractual instrument:

Group Contract

A group contract (see example in Figure 1). This is the vehicle through which the small group leader and members agree to charter their operation. It is a collaborative effort to define and refine roles and responsibilities.

Figure 1

Sample Student Group Contract

Student Group Contract

Team Values and Goals

- What are our shared team values?
- What is our team goal?

Team Roles and Leadership

- Who does what within this team? (Who takes notes at the meeting? Who sets the agenda? Who assigns tasks? Who runs the meetings?)
- Does the team have a formal leader?
- If so, what are their roles?

Team Decision Making

- How are minor decisions made?
- How are major decisions made?

Team Communication

- Who do you contact if you cannot make a meeting?
- Who communicates with whom?
- How often will the team meet?

Team Performance

- What constitutes good team performance?
- What if a team member tries hard but does not seem to produce quality work?
- How will poor attendance/work quality be dealt with?

Note. Bauer, T. N., & Erdorgan, B. (2012). *An introduction to organizational behavior*. https://2012books.lardbucket.org/pdfs/an-introduction-to-organizational-behavior-v1.1.pdf

Group Dynamics

The group cannot be a group in name only with uncertainty about who is engaged. The contract vehicle provides a tangible step to assign and document tasking for each group member and more efficiently negotiate dialectical tensions (Young & McKibban, 2014, p. 370). The right number and the right mix of people collectively assigned the right tasks is important in maintaining a healthy group dynamic.

Concise Purpose

Develop a concise purpose. Ensure each member understands what the group is to achieve, similar to a project mission statement. Clearly articulating the purpose early on is important in aligning future activities to avoid unproductive tasks.

Group Leader

An effective group leader interfaces with supportive organizational elements that provide resources, information, and coaching to ensure the group is on track.

Although this information seems intuitive, it is important to outline this step as it grounds the whole project within a CAE framework.

Project Construct

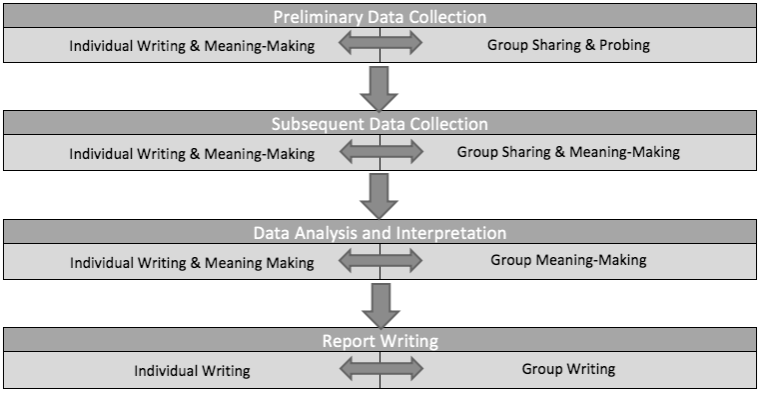
This element is a critical factor as it provides an essential structure for group members to operate in and guides members to the goal using components such as time, quantity, and quality. Collaboratively contrived, agreed upon, and with a defined monitoring methodology, each element is assigned corresponding tasks and responsible group member(s). The group leader ensures each task is on track and the elements of the project are implemented and adhered. Components of the project construct should include at minimum:

Compliance

It is important the students understand and comply to CAE data collection process. As seen in Figure 2, this methodology provides a pathway for collaborators to engage in the iterative process of collaborative autoethnography. Group leaders should familiarize themselves with the process then convey the mechanics to group members.

Figure 2

The Iterative Process of Collaborative Autoethnography



Note. Figures 1-3 in Chang, H., Ngunjiri, F. W., Hernandez, K. C. (2012). *Collaborative autoethnography*. Routledge.

Scope

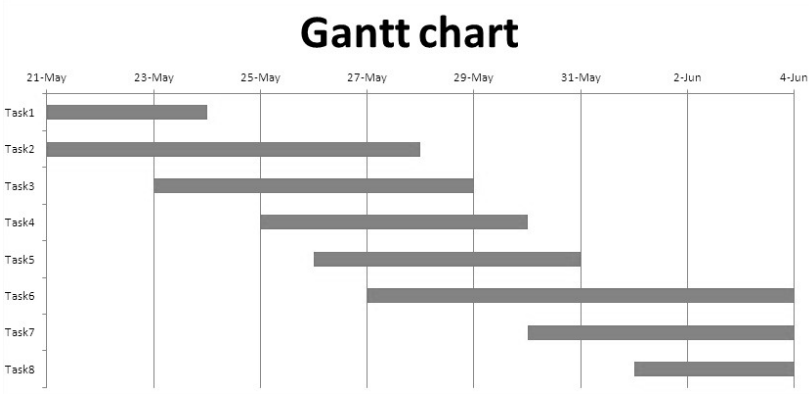
Much like a mission statement, a well-defined scope outlines the goals of the project. The group leader must ensure the scope is in alignment with the assignment, and that all members understand.

Achievable Schedule

Time is perhaps the most critical factor to any project. The schedule should display the tasks that must be performed, when the tasks commence and conclude and who is responsible to meet the requirements of each task. This can be the most complex part of the project. A Gantt chart (see Figure 3), which is a time-based visual representation that shows the amount of work done or production completed in relation to the project plan, is the most appropriate tool for project schedules, but a simple calendar will do just fine for small projects ("What is a Gantt Chart", n.d.). A Gantt chart provides a visual presentation of the progress of assigned tasking over a course of time. It shows when tasks are to be started and when they are scheduled to be completed. Beneficial in project management, the Gantt chart should be visible for all group members to clarify their individual responsibilities, with whom they share tasking, and to provide an overall assessment of project health.

Figure 3

Gantt Chart



Note. What is a Gantt Chart? (n.d.). Retrieved October 10, 2019 from https://www.gantt.com/

Routine to Report Status

Information is a powerful instrument, especially when deadlines are to be met via a defined communication protocol set up in the group contract. The contract ensures that status reports are consistently given through the lifecycle of the project.

Identify Technical Aptitude

Establishing the communication vehicle, the leader and members must demonstrate the ability to effectively present the group project to the intended audiences.

Communication

For effective planning and project execution, there must be a defined and clear line of communication within the group. Grounding the project in CAE as Chang et al. (2013) suggest allows for "deeper learning about self and others" (p. 28). A critical subset of communication is routine interaction. While most communication will take effect during planned and regular meetings, it is prudent for the group to create a vehicle that all members can access to submit and review action items and to keep informed of changes to meetings or other project elements. Furthermore, it is important to define the modes of communication in the group contract so that members may inform the leader of tardiness or absences. This is a courtesy to all group members and allows the leader time to assess appropriate options. Routine meetings must be meaningful, with a set agenda (Creighton, 2009). Record meeting minutes and make available for all members to review. Make sure group members are involved in both the meeting preparation and action items. Meeting times should be used as spaces of individual and group reflection in order to evaluate the project status.

Planning

Thomas, et al. (2008) state "the most effective team cannot overcome a poor project plan" (p. 105). Therefore, it is important to outline roles and responsibilities in the project plan and how each member will attend to their tasks then amend the group contract accordingly. This will provide transparency and keep task assignments on time. A clear plan and detailed goals are critical to the success of the project. If the plan is ambiguous, unrealistic, not agreed upon, or not in writing, the project is in trouble before it begins (Richman, 2002).

Timeliness

The group leader is accountable to meet assignment deadlines. Procrastination can be damaging when a group is depending on individual input, particularly in a linear or dependent scenario. Keeping the project moving along a pre-planned timeline is critical and reduces stress downstream. The timeline should have built in flexibility to accommodate unforeseen events known as "project creep" (Richman, 2002).

Efficiency

Often compared to productivity, this element is worth elevation. According to Shenhar et al. (2001), project efficiency is listed as one of the four levels of project success. Efficiency is a measure of management effectiveness with elements of time and quality. Group projects have time constraints and members must understand the value of time as it is critical to successful execution. The collective project goal can get lost in extraneous and tangential elements; therefore, project oversight is paramount while moving forward. The group's leader is effectively accountable for task completion, and each member is responsible for concise and efficient processing of their assigned tasks.

Delegation

Planning is critical to group success, as the delegations and decisions made at the beginning set the stage for later execution (Morris, 1998). The group leader must balance tasking that takes place within the group to ensure equilibrium. Groups work best when members can equally carry their weight. In delegating project tasks, the leader ensures a somewhat equal distribution of project input by members.

Delivery

By following the previous guidance, the group members are now confidently able to coherently deliver in front of other groups. Deciding who should present what topics depends on the overall objectives of the group and the command of the content each member has. What CAE does in terms of presentation planning is force the students to think about what other experiences outside of speaking does each member contribute to the project (Giuliano, 2005).

Closure

Finally, it is important to take the time to regroup and discuss what could be done differently. An example of this would be to annotate and distribute a collective "lessons learned" summary document to each group member to use in their future endeavors.

Incorporating the Framework into Course Design

For a CAE framework to be effective, it is important to embed the principles into the design of instruction. The collaborative elements should be strategically developed as course objectives, appear in the syllabus, and throughout course assignments' instructions. Cassard and Sloboda (2014) suggest "incorporating [students'] perspectives" when designing courses and CAE allows students some agency in constructing learning activities (p. 45). We suggest introduction to course content be preceded by lecture and reinforcement of the fundamentals of CAE. Once established, the following weeks of instruction should be segmented into meaningful small group discussions connecting CAE principles with course topics. This component of course design is important to help mitigate resistance by helping students "begin to understand, see the value in, and invest energy in small-group learning" (Cooper et al., 2000, p. 26).

Class meetings might be structured to introduce students to a new CAE element via lecture, assigned readings or autoethnographic journaling in concert with the course (Fritson, 2008). Each lesson is strategically integrated into assignments from the previous weeks to facilitate reinforcement. Subsequent class meetings could be structured to assess the understanding of CAE and other course materials through group presentations, which includes oral and visual aids (Hastings, 2003). The ultimate purpose of this exercise is to authentically fold lessons learned into a final assessment using a collaborative framework.

Conclusion

This paper was designed to help instructors facilitate the development of group work within the framework of collaborative autoethnography (CAE) in a variety of courses. Our objective was to present a tactical discussion of group projects using a CAE framework that contributes to best practices discourse and could be deployed course design. The associated and coordinated group activities within a CAE structure have the potential to enhance learning outcomes by immersing students directly within the subject matter through a self-reflexive but shared approach. Group projects of the collaborative autoethnographic nature will certainly remain a part of academic innovation as pedagogical interest in synergic methods continues to grow in popularity. It then becomes clear that by virtue of participation in a group, each member augments their understanding by being an integral part of the very CAE experience about which they are learning.

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"In order to make teaching and learning more equitable, providing opportunities for all students to be included and to be able to express themselves, it is essential that instructors connect with their students, provide structure to intercultural dialogue and model intercultural practices" (p. 14).

Spitzman, E., & Balconi, A. (2019). Social justice in action: A document analysis of the integration of social justice principles into teaching. *Journal of Scholarship of Teaching and Learning*, *19*(5). https://doi.org/10.14434/josotl.v19i5.25071

Fostering Student Awareness of Team Skills: A Participative Team Formation Process for Class Projects

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Abstract. This essay outlines a participative team formation process for class projects with resources to support instructors in implementing this process. This hybrid process, integrating self-selection and teacher assigned methods, includes four touch points that foster students' awareness of effective team behaviors and the presence (or absence) of these behaviors within themselves and in team members. The awareness can provide students the foundation for developing team skills—beneficial in both team projects and in organizational teams.

Teams and teamwork are a key competence in the workplace as many employers value interpersonal skills, teamwork skills, and team collaboration (Baird & Parayitam, 2019; Kruse, 2020). Scholarship of Teaching and Learning (SoTL) research across many academic disciplines highlights the importance of preparing students to work in organizational teams (Burbach et al., 2010; Howe et al., 2001; Nilson, 2010; Stevenson et al., 2012). For example, an increasing number of instructors have undergone programs of instruction in the effective use of teams to achieve significant improvement in their teamwork knowledge, skills, and abilities (Burbach et al., 2010). Schools of social work and clinical sites have made significant efforts to develop educational curricula and clinical programs which prepare social workers to work on interdisciplinary geriatric health care teams (Howe et al., 2001).

Studies of team/group class projects display a variety of approaches to developing effective team skills (DuFrene & Lehman, 1996; Jahanbakhsh, 2017; Opatrny et al., 2014), with many focused on teaching students about teamwork prior to the team experience (Prichard et al., 2004, 2006; Snyder, 2008). We build on the premise that student-centered activities prior to the actual teamwork can lead to an improved team experience and share a refined team formation process that provides multiple opportunities for student awareness and understanding of effective teammate behaviors for the specific class project.

Hybrid approaches to team formation have gained increased attention among SoTL researchers (Barkley et al., 2014). Our proposed process is a new hybrid approach that integrates the two most popular team formation methods—self-selection and teacher assignment (Decker, 1995; Baepler et al., 2016). The process guides students to

identify, understand, self-assess, and rank teammate preferences based on team behaviors specific to the class project—setting the foundation for learning and development (Nilson, 2010). Informed by the student survey data and teammate preferences, instructors then create the student teams.

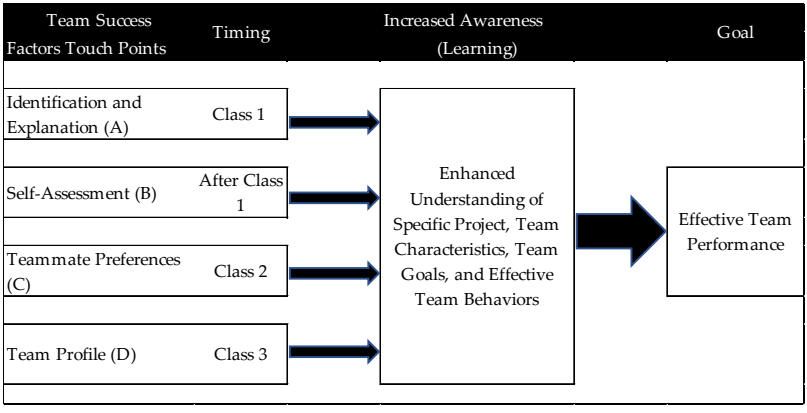
The process is designed to create an effective learning experience for students through enhanced understanding of the specific class project, their teammates' characteristics, the goals, and overall effective team behaviors. It also encourages self-regulation, which can increase a student's awareness of, and motivation for, effective project-related behaviors (Weimer, 2010). The significance of our approach is well supported by the existing literature. First, research indicates both goal and process clarity in conjunction with team potency, or team members' shared beliefs about their collective capabilities (Campion et al., 1993), are associated with increased team effectiveness and team-level organizational citizenship behaviors (Hu & Liden, 2011). Second, studies on shared mental models in teams, or mutual understanding of team/member characteristics and goals, display positive association with effective team processes and team performance (DeChurch & Mesmer-Magnus, 2010; Edwards et al., 2006). To the contrary, a lack of awareness of team goals and collective understanding of capabilities can lead to poorer team performance. Last, an understanding of team goals and capabilities can positively influence student performance (Turan et al., 2009).

Participative Process for Team Formation Overview with Authors' Reflections

The participative process for forming student teams prompts students to identify and consider the key factors contributing to effective teams for the specific class project. The process design is customizable to any group project—forging multiple opportunities (or touch points) to prompt awareness regardless of discipline, content, duration, and deliverables. See Diagram 1 for a summary of the four touch points, the estimated timing, and posited outcomes of the process.

Diagram 1

Participative Team Formation Process



Identification and Explanation (Touch Point A)

As displayed in Diagram 1, students begin by collectively identifying and explaining key team success factors (i.e., behaviors, characteristics, skills, and abilities) that aid effective teamwork for the specific class project. To help students focus on the specific class project, the instructor can introduce and explain the project prior to initiating this activity. Based on our experiences, there are often factors (e.g., communication, shared software, availability) that are important for most team projects. If instructors desire to tie these factors specifically to the class project, they can ask why the factor is relevant for this team project. In addition to helping students understand the project, explanations and examples foster clarity regarding what the team will need to do for an effective experience.

Prompting students to identify and explain team success factors for the specific project is foundational to the process, and likely, the most important part. In a class discussion (in-person or synchronous online), small group discussion can effectively prepare a large class conversation. Each small group may generate three or four key success factors to share. In an asynchronous online course, an online discussion forum can be configured requiring students to post before seeing others' posts—potentially facilitating increased quantity of ideas. In addition, requiring replies to peers' posts can deepen students' understanding of the factors.

A significant issue associated with team projects across all disciplines is students misunderstanding integral aspects of the project. All course modalities provide instructors an opportunity to clarify expectations, requirements, or key details associated with the team project if they notice confusion or incorrect information surfacing.

Self-Assessment (Touch Point B)

After the team success factors are identified and understood in Touch Point A, students consider their proficiency across all those factors via a self-assessment survey. Depending on the class and project, the questions on the self-assessment survey can vary greatly. We provide an example survey in Table 1 that was used for a team project requiring a presentation. Creating surveys may sound cumbersome, but after the process is initially completed, the base survey design and questions can be repurposed with small edits for future classes. Googleforms.com is an easy resource to build quick surveys with downloadable data.

While teaching an Introduction to Statistics course in Sociology, one author found it beneficial to design a few survey questions with students as this helped them to understand the concept of operationalizing the factors (variables) discussed in class. See Appendix A for a pool of sample survey questions generated by students. When creating or adapting a full survey for a class project, instructors may seek to limit the survey to the questions most valuable for team formation.

Table 1

Example Survey Questions and Response Options

	Example Questions	Sample Response Options
1	What is your skill level in team presentations?	1 to 10 scale

Table 1 Cont.

	Example Questions	Sample Response Options
2	What is your skill level in writing?	1 to 10 scale
3	How close to the deadline do you get work completed? 1 is well in advance and 10 is right before it is due	1 to 10 scale
4	How quickly do you respond to communications (emails, texts, Slack, etc.) from teammates?	Open-ended
5	How many hours per week (on average) do you see yourself working on the team project?	Open-ended, or ranges provided
6	What is your skill level in creating PowerPoint slides?	1 to 10 scale
7	What roles would you like to play in/on the team for this project?	Open-ended, or options if they exist
8	Please share your relevant strengths and weaknesses (opportunities for improvement)	Open-ended

Teammate Preferences (Touch Point C)

After gathering all students' self-assessment results, the instructor shares the responses from every class member with the entire class. The instructor may opt to anonymize responses before sharing or opt to keep the names. If names are retained, students may select based on the specific person and not their ratings. For this reason, we typically recommend removing names and assigning an anonymous letter or number to each student. However, many students have shared—leading to a great discussion—that having names is valuable as sometimes self-assessments do not align with actual behaviors/performance. Based on the authors' experience, including names can help if students do not want to be paired with a specific person based on a difficult prior experience. Alternatively, instructors can provide a way for students to submit names of classmates with whom they specifically do not want to be paired; this way, instructors can maintain anonymity with the data while honoring students' wishes.

Whether the instructor chooses anonymity or not, students may inflate their responses. In Psychology courses, the phenomena of students inflating their self-assessments can lead to a discussion of self-serving attributes and associated biases (i.e., social desirability) (Karpen, 2018). We recommend instructors include a discussion in the beginning of the process regarding accountability and team profiles. A student's team members will be provided with that student's survey answers with the team profile (see Touch Point D), creating an element of accountability. If the student does not possess the skills or characteristics they claimed, the team will discover the inconsistency and realize that the student did not tell the truth. This is typically not a scenario in which a student wants to find themselves.

After all student survey responses are shared with the class, instructors can either create an assignment where students submit their teammate preferences with rationales or create another survey asking students to rank their top five or six teammate options. We encourage instructors to have students submit more than the minimum required for a team to create more options when forming teams. As this submission is only shared with the instructor, we require students to provide a written explanation for each teammate preference indicated. The explanations provide the student insights into how and why they select teammates. These explanations and associated insights can provide for a future learning opportunity if an assignment is

created later that asks students to reflect on their teammate selections and consider what worked/did not work and why.

Diagram 1 indicates Touch Point C occurring during class two. The authors found it works effectively for students to complete the preference ranking during the class meeting, if in-person or synchronous online, to ensure timely completion. Allocating a few minutes of class time provides the instructor all the information needed to create teams after class two.

Team Profile (Touch Point D)

After all teammate preferences are submitted in Touch Point C, the instructor can use different approaches to form teams. Using Excel functionality on downloaded data, like sorting, highlighting with different colors, and moving data among cells, can be helpful in building teams. Pairing students who picked each other can be a nice place to start building teams. When possible, we suggest each person receives at least one to two people they requested on their team to evidence their participation in the team formation process.

After the instructor creates the teams, the teams' initial activity is to evaluate their collective profile on the team success factors. The instructor can create the team profiles in Excel using the survey data. See Appendix B for an example team profile. As an initial team activity, each team can review their profile to identify strengths as well as potential issues that could hinder success for the specific class project based on the team profile. For example, if the team project requires a specific skill like building a website and no one has experience with website design, then this is brought to everyone's attention at the start of the project. The team can generate a plan to address these specific areas. Teams can verbally report out in class and synchronous online meetings or submit their plans to the instructor as an initial team assignment.

Our process can be followed by or paired with other team activities to foster effective dynamics in class project teams. Options include a team charter or team ground rules, peer ratings based on the identified criteria (Aaron et al., 2014), and a textual mapping of member skills relevant to the project criteria (Goltz, 2017). In an interdisciplinary Creativity course, an author found that developmental non-graded peer assessments tied to the factors on the team profile aided students in providing peer feedback.

By the time teams begin project work, students have considered the team success factors from Touch Point A (individually or collectively) at least four times. These touch point opportunities facilitate increased student awareness and set the foundation for learning, self-improvement, team and individual goal-setting, and effective team performance.

The Participative Process and Course Modalities

The participative team formation process can be facilitated (1) in-person/face-to-face, (2) virtually/synchronous online and/or (3) asynchronous online class formats. For hybrid formats, instructors can select the parts to be delivered in person and online. See Table 2 for the differences in the processes based on the class format.

Table 2

Participative Team Formation Process Across Course Modalities

Touch Point	Face to Face Learning	Synchronous Online	Asynchronous Online
Identification and Explanation (A)	• Introduce project • Capture student ideas on team project effective behaviors a board/display	• Introduce project • Live virtual session, with potential break out groups to discuss and generate effective team behaviors	• Introduce project via video • Discussion posts or activity assignment where student will submit effective team behaviors after learning about project
Self-Assessment (B)	• Instructor creates survey in software (i.e. Google Forms), all students complete • To achieve quicker completion rates, this can be facilitated during a class session in in-person and synchronous formats		
Teammate Preferences (C)	• Instructor distributes entire classes survey results to the class, option to include or disguise names • Students rank teammate preferences via assignment, email, or an additional survey • Based on student submitted rankings, instructor begins forming teams • Different approaches can be used to form teams, but starting with people who select each other can be helpful		
Team Profile (D)	• Assemble teams in class • Create and distribute team profiles • Students meet new team members and review team profiles to identify potential obstacles to success	• Create and distribute team profiles via email or online learning platform • Create online breakout sessions for groups to identify potential obstacles • Instructor can toggle between groups	• Create and distribute team profiles via email or online learning platform • Form groups through online learning system. Students can meet though video or though written posts to identify potential obstacles to success

Student Feedback

The process has been facilitated across in-person and online courses. Student feedback from a fall 2019 in-person class, captured via an anonymous survey, was mostly positive. The negative feedback was associated with students who already knew their classmates, indicating this process may be more effective in lower-level courses.

- Really good, a "smart" process to find team members for a project. I thought that the survey we formed <u>together</u> was the best part.
- I was a huge fan of the team formation process. I have never had this done before and have at times not been satisfied with my team. It has been very clear in our performance that it was a good match.

- I really enjoyed the process because it forced us to reflect on ourselves and get to see how others answer about themselves.
- I believe it will be more effective in classes where you do not know anyone and thus, have not formed any previous biases.
- The team formation was a good experience. Should I not have known most of my classmates, I believe I would have benefitted more from the experience.

Conclusion

The participative team formation process provides opportunities for students to both participate in and learn from each touch point in the process. Based on our experiences across multiple classes, the process can foster increased awareness of effective team characteristics via consideration of the team's profile (or the foundation of a team mental model), set clear team goals or visions, expand understanding regarding one's own developmental needs (or self-regulation), as well as help to foster a valuable and successful class project team experience (or group/team potency). The process can provide a foundation of awareness and understanding to support team skill development in future class team projects. As team skills are desired by employers, students can leverage key learnings from this process in job interviews when asked to share experiences of effective teamwork.

As team skills are desired by employers, students can leverage key learnings from [the participative team formation] process in job interviews when asked to share experiences of effective teamwork.

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Appendices

Appendix A

25 Sample Survey Questions and Response Options

	Sample Questions	Sample Response Options
1	What is your skill level in team presentations?	1 to 10 scale, 10 is highest
2	What is your skill level in writing?	1 to 10 scale, 10 is highest
3	How close to the deadline do you get work completed? 1 is well in advance and 10 is right before it is due.	1 to 10 scale
4	In project groups, are you more of a leader (10), follower (1), or somewhere in-between?	1 to 10 scale
5	What grade do you desire to earn on this project?	A, B, C or below
6	What is your class year standing?	First-year, sophomore, junior, or senior
7	What is your major?	Open-ended or list of major options
8	What is your minor (if applicable)?	Open-ended or list of minor options
9	How important is it to you to have fun with the project/team?	1 to 10 scale, with 10 as most important
10	How often do you desire to meet (either virtually or in-person) with your team?	Open-ended
11	How many hours per week (on average) do you see yourself working on the team project?	Open-ended, or ranges provided
12	What days and times are you available to meet with teammates?	Open-ended
13	How quickly do you respond to communications (emails, texts, etc.) from teammates?	Open-ended
14	How quickly do you expect teammates to respond to communications (emails, texts, etc.) from you?	Open-ended
15	How many years of real-world working experience do you have?	Open-ended
16	If prior class project teammates rated you on your overall performance, what rating would they assign? 10 is highest, and 1 is lowest	1 to 10 scale, with 10 as highest or best rating
17	What is your skill level in creating PowerPoint slides?	1 to 10 scale, 10 is highest
18	What is your skill level in conducting financial analysis?	1 to 10 scale, 10 is highest
19	What experience or knowledge do you have with the subject area of the project?	1 to 10 scale, 10 is highest
20	What is your interest level in the project?	1 to 10 scale, 10 is highest
21	What roles would you like to play in/on the team for this project?	Open-ended, or options if they exist
22	Please share your relevant strengths and weaknesses (opportunities for improvement).	Open-ended
23	My biggest potential obstacle with this project is…	Open-ended
24	I will feel good at the end of the project if…	Open-ended
25	Is there anything else you would like to share with potential teammates?	Open-ended

Appendix B

Example of Team Profile (based on individual survey results)

Survey Question / Teammate Name	Marcus	Jasmyn	Chloe	Craig
What is your skill level in team presentations? 10 is highest	4	8	9	5
What is your skill level in writing? 10 is highest	8	7	10	4
How close to the deadline do you get work completed? 1 is well in advance and 10 is right before it is due	5	4	7	2
How quickly do you respond to communications (emails, texts, Slack, etc.) from teammates?	2 to 3 hours	4 to 6 hours	Within a day	An hour or so
How many hours per week (on average) do you see yourself working on the team project?	4	1 to 2	4 to 6	2 at most
What is your skill level in creating PowerPoint slides? 10 is highest	5	6	2	9
What roles would you like to play in/on the team for this project?	Anything other than presenting	Open to everything	Leader	Compiling presentation
Please share your relevant strengths and weaknesses (opportunities for improvement)	I meet all deadlines. I get nervous when presenting.	I enjoy team projects. I think I generally invest a lot of time in them.	I like taking the lead on areas where I am strong. Sometimes I don't listen as well as I should.	I am good at time management, as I play a sport. That also means I am limited in meeting times.

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"What should college mean, in a millennium where knowledge itself is literally everywhere, no longer cloistered, forbidden, or hidden? We're still about knowledge, but in a different way, no longer tasked with simply preserving, curating, and transmitting what's already known. Instead, we need to be mostly about creating more of it" (p. 6).

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Call for *InSight* Papers

Volume 17: *Scholarly Teaching and Learning*

InSight: A Journal of Scholarly Teaching is a scholarly publication designed to highlight the work of postsecondary faculty at colleges and universities across the United States. It is a refereed scholarly journal published annually by the Faculty Center for Innovation (FCI) at Park University that features theoretical and empirically-based research articles, critical reflection pieces, case studies, and classroom innovations relevant to teaching, learning, and assessment.

InSight articles focus broadly on Scholarly Teaching in the higher education environment. Faculty are encouraged to submit original manuscripts that showcase scholarly teaching processes or critically discuss the scholarship of teaching and learning (SoTL) as a scholarship paradigm. While reports of scholarly teaching projects are welcome, *InSight* is also committed to continuing broader conversations about SoTL's value as a tool for advancing student learning and demonstrating faculty commitment to teaching.

Faculty are encouraged to submit manuscripts related to:

- Challenges/Responses to the SoTL paradigm
- Developing institution or discipline-specific understandings/definitions of SoTL
- Status reports of SoTL's role in a particular discipline (and what other disciplines might learn from the report)
- Guidance to faculty new to SoTL (on developing inquiry questions, determining methodologies, making SoTL work public, etc.)
- Examples of SoTL projects at the college/university course or discipline-level
- Intersections of SoTL and service-learning, eLearning, learning communities, and other learning initiatives
- Future directions in SoTL
- Cross-disciplinary and cross-institutional collaborations for promoting SoTL

Submission Requirements

- IRB – Any studies using human subjects or artifacts as examples should submit Internal Review Board (IRB) approval or exemption.
- STYLE – All manuscripts must be formatted in APA style.
- LENGTH – Manuscripts may range from 2,000 – 5,000 words (not including abstract, references or appendices). Authors are encouraged to include appendices that promote application and integration of materials (i.e., assignments, rubrics, examples, etc.).
- ABSTRACT – Each manuscript must be summarized in an abstract of 50 to 100 words.
- AUTHOR – Each author should provide his/her full name, title and departmental affiliation, campus address, telephone number, and email

address. Each author must also include a brief biography (no more than 100 words per author).

- FORMAT – All manuscripts must be submitted in Microsoft Word or Rich Text Format and follow the journal's formatting guidelines (single spaced, justified alignment, 9 pt. font, Helvetica Neue for headings, and Palatino Linotype for the body). Do not include personal identifiers within the manuscript. Include contact information only on a separate cover sheet. Each manuscript will be assigned a unique identifier for blind review processes.

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All submissions must be received by 4:00pm on March 1, 2022 (CST) to be considered for inclusion in Volume 17. However, submissions are accepted on a rolling basis.

Review Procedures

Submissions will be subject to a double-blind peer review. A manuscript is evaluated based on relevance, practical utility, originality, generalizability, clarity, significance and the extent to which the subject matter contributes to the ongoing development of the scholarship of teaching and learning. Review process and publication decisions will require approximately 12 weeks. Referees' feedback and editorial comments will be provided to the author when revisions are requested. For additional information regarding the review process, please visit https://insightjournal.net/peer-review-guidelines/. FCI retains the final authority to accept or reject all submitted manuscripts. The publication will be distributed both in print and online in fall 2022.

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Contact

All inquiries should be directed to: innovate@park.edu.

Please visit our website at: http://insightjournal.net/.

Call for *InStruct* Papers

We invite submissions for *InSight's* new section, ***InStruct,*** that focuses on practical teaching strategies accompanied by short essays associating the instructional material to the scholarship of teaching and learning (SOTL). The purpose of *InStruct* is to showcase the innovation of all higher education faculty (full-time, adjunct, distance, online, undergraduate, graduate, etc.), and to provide a repository of research-based teaching and learning materials that could be used or adapted by instructors from a wide array of disciplines. The goal is to provide a space to celebrate and share pedagogical content that demonstrates the practical application of SOTL principles.

Pedagogical materials might include but are not limited to innovative assignments, lessons, classroom activities, course designs, or service-learning projects. Submissions should include the relevant teaching artifacts such as prompts, lesson plans, any audiovisual materials, etc.

Teaching and learning content needs to be accompanied by or embedded in a short reflective essay (1500-2000 words) that situates the instructional materials in the scholarship on teaching and learning. Given *InSight's* interdisciplinary audience, teaching material should be useful or easily adaptable to other disciplines.

Any inclusion of student artifacts or examples will require proof of IRB approval or exemption by your institution (and we strongly encourage getting student consent to publish student work).

Editorial Process

All submissions to *InStruct* will be blinded, then peer-reviewed by editorial board members based on relevance, significance, originality, clarity, practical utility, generalizability to other disciplines, and grounded in the scholarship of teaching and learning.

More detailed information on our review criteria can be found at: https://insightjournal.net/peer-review-guidelines/.

InStruct uses rolling submissions. Accepted pieces will be published online as soon as they are prepared for final publication. We will also include titles, abstracts, and links to the full online article in *InSight's* annually printed publication, available in early fall. Any *InStruct* articles accepted prior to April 30th each year will be included in that year's volume of *InSight*. Those accepted after April 30th, will be rolled over into the next year's volume of *InSight*.

Submission Requirements

- STYLE – All manuscripts must be formatted in APA style.
- LENGTH – Reflective essays may range from 1500-2000 words (not including abstract, references or accompanying instructional materials).
- ABSTRACT – Summarize your submission in an abstract of 50 to 100 words.
- AUTHOR – Each author should provide their full names, title and departmental affiliation, campus address, telephone number, and email address. Each author must also include a brief biography (no more than 100 words per author).

- FORMAT – Reflective essays should be submitted in Microsoft Word or Rich Text Format. Do not include personal identifiers within the manuscript. For teaching artifacts, examples, or activities, please stick with non-proprietary or easily accessible formats, for example, mp3/mp4 for audio/video, jpeg, gif, or png for images, PDFs /Word documents. For submission of web or other kinds of digital content, contact the editors to discuss the best form of submission.

Submission Process

Manuscripts will be submitted via *InSight's* updated submission/editorial platform, Scholastica. Click on the "Submit via Scholastica" button, located on the InSight website at http://insightjournal.net/, or submit via the Scholastica website at https://submissions.scholasticahq.com.

Copyright

Manuscript submissions are accepted with the assumption that they neither have been nor will be published elsewhere. Authors and FCI will hold joint copyright to all published manuscripts.

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"In terms of making sense of the world, the SoTL movement had already proven itself to be quite resilient, largely because of the deep idealism at its heart, an idealism that was, admittedly, challenged by the previous shift toward institutionalization, but never extinguished" (p. 9).

~Cruz, L., & Grodziak, E. (2021). SoTL under stress: Rethinking teaching and learning scholarship during a global pandemic. *Teaching & Learning Inquiry*, *9*(1), 3-12. https://doi.org/10.20343/teachlearninqu.9.1.2

QUICK TIPS: PREPARING MANUSCRIPTS FOR *INSIGHT*

The following "Quick Tips" provide suggestions and guidance for preparing manuscripts for potential publication in *InSight: A Journal of Scholarly Teaching. InSight* is a peer-reviewed publication highlighting the scholarly contributions of postsecondary faculty. As is the nature of refereed journals, acceptance and publication of original manuscripts is a competitive process. The goal of the following information is to assist faculty in preparing manuscripts in a manner that maximizes the chances of publication.

Preparing the Manuscript

The organization and style your manuscript will be largely dictated by the type of submission (e.g., theoretical, empirical, critical reflection, case study, classroom innovation, etc.). Thus, while guidelines will follow to assist you in preparing your manuscript, the key to successful submission is clear, effective communication that highlights the significance and implications of your work to post-secondary teaching and learning in relation to the target topic. To prepare and effectively communicate your scholarly work, the American Psychological Association (2019) provides the following general guidelines:

- Present the problem, question or issue early in the manuscript.
- Show how the issue is grounded, shaped, and directed by theory.
- Connect the issue to previous work in a literature review that is pertinent and informative but not exhaustive.
- State explicitly the hypotheses under investigation or the target of the theoretical review.
- Keep the conclusions within the boundaries of the findings and/or scope of the theory.
- Demonstrate how the study or scholarly approach has helped to address the original issue.
- Identify and discuss what theoretical or practical implications can be drawn from this work.

There is no mandatory format for *InSight* articles; rather authors should organize and present information in a manner that promotes communication and understanding of key points. As you write your manuscript, keep the following points in mind:

- Title - Generally speaking, titles should not exceed 15 words and should provide a clear introduction to your article. While it is okay to incorporate "catchy" titles to pique interest, be sure that your title effectively captures the point of your manuscript.
- Abstract - Do not underestimate the importance of your abstract. While the abstract is simply a short summary (50-100 words) of your work, it is often the only aspect of your article that individuals read. The abstract

provides the basis from which individuals will decide whether or not to read your article, so be certain that your abstract is "accurate, self-contained, nonevaluative, coherent, and readable" (American Psychological Association, 2020).

- Body - Within the body of a manuscript, information should be organized and sub-headed in a structure that facilitates understanding of key issues. There is not a mandatory format for *InSight* articles; rather authors should use professional guidelines within their discipline to present information in a manner that is easily communicated to readers. For example:
    - *Empirical investigations* should be organized according to the traditional format that includes introduction (purpose, literature review, hypothesis), method (participants, materials, procedures), results, and discussion (implications).
    - *Theoretical articles and literature reviews* should include an introduction (purpose), subheadings for the relevant perspectives and themes, and a detailed section(s) on conclusions (applications, recommendations, implications, etc.).
    - *Classroom innovation and critical reflections* should be organized via an introduction (purpose, problem, or challenge), relevant background literature, project description, evaluation of effectiveness (may include student feedback, self-reflections, peer-insights, etc.), and conclusions (applications, implications, recommendations, etc.). If describing classroom-based work, please include copies of relevant assignments, handouts, rubrics, etc. as appendices.

The limited length of *InSight* articles (manuscript should be no more than 5000 words, not including abstract, references or appendices) requires authors to focus on the most significant, relevant factors and implications.

- References - Select your references carefully to ensure that your citations include the most current and relevant sources. As you select your references, give preference to published sources that have proven pertinent and valuable to the relevant investigations. The goal is not to incorporate ALL relevant references, but rather to include the most important ones.
- Tables, Figures, Appendices & Graphics - Authors are encouraged to include supporting documents to illustrate the findings, relevance or utilization of materials. Particularly relevant are documents that promote easy, efficient integration of suggestions, findings or techniques into the classroom (such as rubrics, assignments, etc.). Supplemental information should enhance, rather than duplicate, information in the text.

The importance of clear, effective communication cannot be highlighted enough. Many manuscripts with relevant, original, applicable ideas will be rejected because authors do not communicate the information in a manner that facilitates easy understanding and application of key points. The value of a manuscript is lost if readers are unable to

overcome written communication barriers that prevent use of the knowledge. With this in mind, authors are strongly advised to seek informal feedback from peers and colleagues on manuscripts prior to submission to *InSight*. Requesting informal reviews from relevant professionals can highlight and correct many concerns prior to formal submission, thus improving chances of publication.

References

American Psychological Association. (2019). *Publication manual of the American Psychological Association* (7th ed.). Author.

American Psychological Association. (2020). *Journal manuscript preparation guidelines*. https://www.apa.org/pubs/journals/resources/manuscript-submission-guidelines

"We can move forward only if we come together to collectively change what kinds of work we respect and revere. There are many ways of knowing and many ways of seeing, and these require us to embrace many forms of expression" (p.222).

~Sheffield, S. L. -M. (2020). Awaking (to all of our SoTL stories). *Teaching & Learning Inquiry*, *8*(2), 221-223. https://doi.org/10.20343/teachlearninqu.8.2.14

"Just because our students of color are linguistically rich does not mean that by default those riches can be exchanged in your classroom economies if the economy is not set up to accept those riches."

~Inoue, A. S. (2019, Mar. 14). *How do we language so people stop killing each other, or what do we do about White language supremacy?* [Keynote presentation]. Conference on College Composition and Communication, Pittsburgh, PA. https://docs.google.com/document/d/11ACklcUmqGvTzCMPlETChBwS-Ic3t2BOLi13u8IUEp4/edit