

# Teaching Note: Bridging Contemplative Social Work Education and Emerging Technologies

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*This paper will describe Dr. Anthony Nicotera's theory of the Circle of Insight and apply it to emerging technology, such as virtual reality and explore why special attention must be paid in this context to integrating immersive contemplative practices with the experience of racialized Black and Brown people in the virtual space. Evidence shows that virtual reality as a tool can increase empathy through virtual body transference and could be an effective teaching tool (Cogburn, 2018). It is theorized herein that if the Circle of Insight is applied accordingly with and through virtual reality, participants may gain a better understanding of their inner core, addressing deep rooted trauma associated with maladaptive thought processes. With this understanding, clinicians can work with individuals toward a more healthy and more comprehensive healing journey. Finally, this article will explore the importance of emerging technology utilizing ethical practices through the lens of a transformative justice framework.*

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Technological advances are making major strides in the social work and contemplative communities, allowing for social workers to use emerging technologies as tools to immerse clients into the healing process. In 2019, my interest in emerging technology reached a new apex when Oculus Go and the TeslaSuit were introduced; both were considered a breakthrough in human technology. The TeslaSuit boasted of being able to read biorhythms, measure heart rate, and inform various data points that can integrate real-time physiological responses in virtual spaces. It not only uses haptic technology but can also generate heat and cold sensations to simulate environmental changes. At that time,

it was exhilarating to learn and anticipate what virtual spaces had the potential to become over the next 5 to 10 years.

As a faculty member in the Seton Hall University Masters of Social Work program, I was intrigued by how this technology could augment social work pedagogy in higher education. Particularly as a racialized Black male, however, I am consistently ambivalent toward the integration of emerging technology provided the disparity of access—both in the creation of its operational software as well as access to the equipment itself in marginalized communities. Furthermore, social workers often enter into these spaces of marginalization utilizing a colonized or colonizing approach to support individuals and a tool in the hand of an oppressor—conscious or otherwise—tends to become a tool of oppression. Therefore, I would suggest that the integration of emerging technology is not necessarily synonymous with the stated aims of the helping profession. Furthermore, social workers generally engage in their professions on the fringes of technology, and are not readily described as “early adapters,” often waiting for other professions to adopt these emerging technologies before doing so themselves. As a result, paper and pens are still nearly ubiquitous within the field. Despite these caveats, potential pitfalls and socio-structural impediments, utilizing virtual reality could be a means for state-of-the-art therapeutic intervention as well as a cutting edge pedagogic tool. Regrettably, the integration of virtual reality as a tool for learning practice-oriented skills is not yet fully emphasized in social work education; nor has virtual reality become as widespread as may prove helpful in therapeutic practice—the two perhaps being not entirely unrelated.

The Council on Social Work Education (CSWE) uses the Educational Policy and Accreditation Standards (EPAS) to accredit baccalaureate and master’s level social work programs. EPAS supports academic excellence by establishing thresholds for professional competence. It permits programs to use traditional and emerging models and methods of curriculum design by balancing requirements that promote comparable outcomes across programs with a level of flexibility that encourages programs to differentiate. According to the National Association of Social Workers (NASW) Code of Ethics, increasing the competency

of our students by using emerging technology is a core value. Other core values of the profession include: social justice, dignity, the worth of the person, the importance of human relationships, integrity, and competence (National Association of Social Workers [NASW], 2018). These principles set forth ideals that all social workers are to adopt and strive toward in order to better align with best professional and ethical practices. Whether fully immersive virtual experiences in social work practice can aid in that alignment and help produce more competent practitioners and better prepared students are questions this paper will address. I would suggest that the profession itself fails to ask and answer these questions at its own peril.

Further, if the goal is to produce future practitioners that can reflect the core values of the profession—especially those that espouse the importance of human relationships and social justice—then educators may best be served by making use of all of the tools at their disposal. Our students by and large are digital natives; our practice, as mentioned, is mired in pencils and notebooks. Although digital aids such as immersive virtual reality should be rapidly adapted within our curriculum, they must also be ethically instituted into the learning process with special consideration for Black and Brown people who both engage with these technologies as professionals and students, but are also affected more widely by their representation within these virtual spaces. Every rendition of a group member serves to perpetuate and/or repudiate a narrative—immersive virtual reality programmers, professors and practitioners must be cognizant of their role in that process.

### **Prevalence of Technology**

Emerging technologies are invading and even dominating nearly every aspect of the human environment. From automation to learning, we see the advancement of both productivity and perceived connectivity that has pivoted many individuals, specifically in social work practice, to embrace these technological advances. Although embrace is an appropriate descriptor, the social work profession has undoubtedly raised questions about whether these emerging technologies are assisting society in becoming more humane or have instead created a false sense

of identity. Thus, increasing the propensity of “othering” and isolation through a lack of interest in obtaining a deeper connection with those outside of their social media group. This phenomenon can be seen as an extension of bias breeding practices that minimize empathy and compassion. In the classroom, students are encouraged to move out of their comfort zones of assumptions as disassociated practitioner-scholars in higher education.

A disassociated practitioner/scholar is a person who is involved in practicing something—that can be an occupation, technique, and/or profession—but is not fully present in the person or process of human interaction. A disassociated scholar focuses mainly on theory-based models to execute their professional functions. Typically, practitioners emerge from scholars and, unfortunately, disassociated scholars tend to produce disassociated practitioners. In higher education, the products of this pedagogy of disassociation are students who remain in their silos, rarely have diverse experiences, and base their assumptions solely on theoretical knowledge, without coming closer phenomenologically to the experiences of others who are outside of their identifiable social demographics.

An important means of breaking down that silo of disassociation could be the ethical utilization of immersive virtual reality, accordingly guided. Through the use of virtual reality an experience perhaps otherwise unavailable becomes possible for students in a visceral way. It can provide an “actual” field experience within a safe environment to challenge the learner’s assumptions. The immersion would also encourage a further move away from disassociation, encouraging students to engage with all of their senses as they look, feel, hear and move within the world of the other as opposed to merely reading about it. Grounded in the moment, through virtual reality the student can be enabled to come to more fully understand the perspective as well as the needs of another. In this more tactile and palpable experience, the student immersed in virtual reality is less likely to lose touch with the humanity of their charge—they are immersed, not disassociated.

## **Integrating Humanity in Technology**

Empathy essentially refers to the innate human ability to recognize, understand, and even feel the emotions of other people—and respond in an appropriate manner. Empathy can be greatly enhanced by purposeful and informed guidance. Empathy is a critical aspect of social work practice. It is often an essential component in professional encounters and in the provision of ethical care (Bellafante, 2019). According to Hao (2017), empathy involves understanding, experiencing, and responding appropriately to the emotional state and ideas of another individual.

A study done by Lee (2014) showed that after participating in virtual reality experiences, students shared that they had increased knowledge and empathetic understanding of discrimination and oppression. They demonstrated a deeper understanding of how discrimination and oppression can impact individuals on both macro and micro levels. In corroboration of the increase in empathy found in the Lee study, researcher and educator Courtney Cogburn (2018) explored the question, “Can Virtual Reality Teach Empathy?” Cogburn demonstrated through groundbreaking evidence that virtual immersive experiences can build empathy in the participant. To demonstrate further, her virtual experience titled “1,000-Cut Journey” shows the protagonist, Michael Sterling, experiencing various racial microaggressions often experienced by African Americans. Specifically, the experiences included racial profiling and slurs (Cogburn, 2018). This experience allowed for the study participant fully immersed in virtual reality to become more exposed to those same risk factors. This was found to have shifted the participant’s schema, challenging his predisposed narrative. This experience can significantly reduce implicit bias and increase empathy, channeling the motivation for change.

This research became the inspiration for my own experimentation, where I collaborated with 23 master’s-level students who each consented to participate. First, I utilized three virtual programs: *Being Homeless* (Virtual Human Interaction Lab, 2017), *We Wait* (BBC, 2016), and *Driving While Black* (Burns, 2020). These films were presented during three separate dates during the academic semester and allowed students the

opportunity to examine elements of homelessness, racial discrimination, and the refugee crisis.

In the first session, students were curious and intrigued by this new technology. They were fascinated by the realness of the experience and were enamored by the details of its life-like features. Students, after experiencing the program, expressed feeling “in awe,” demonstrating a need for deeper self-reflection. Additionally, they felt motivated to create a call to action for change. They were moved by the experiences they encountered and committed to make social and societal changes.

Virtual reality has also shown to be effective as a treatment tool within therapeutic settings (Bordnick et al., 2011). Virtual reality has been employed as a supplemental tool in the treatment of anxiety, attention-deficit disorder (ADD), and post-traumatic stress disorder (PTSD) (Bordnick et al., 2011). Bordnick et al. also completed a systematic review that found that virtual reality has been helpful in behavioral modification related to addictive disorders and obesity. The study in question allowed for participants to enter into potentially triggering environments in a consciously safe manner, and examined how the technology can continue to be beneficial in direct clinical behavioral practice and how it may be utilized to enhance learning amongst professionals so that they can apply these various clinical modalities and techniques to in-person practice.

### **Mindfulness Meets Technology**

According to Hick (2009), mindfulness is essential in every aspect of a social worker. Hick defines mindfulness as paying attention, being available, immersed in the “here and now,” and utilizing a non-judgmental stance. Mindfulness entails working with your mind, shaping it, freeing it, as well as paying attention to various life experiences. Mindfulness meditation is critical because it helps in improving a social worker’s self-care; this can prove particularly important in areas of study and practice, such as the utilization of virtual reality, which have not yet been fully developed in practice and pedagogy. To Davis and Hayes (2011), the effectiveness and efficacy of mindfulness practices help in enhancing the mental health and emotional well-being of clinicians and social workers.

Further, Davis and Hayes explain that practicing mindfulness results in reduced psychological problems such as depression, anxiety, stress, and suicide cases.

Mindfulness as a practice is similar to technology in the sense that it is burgeoning within the social work profession. The emphasis on being grounded, setting an intention, demonstrating gratitude, staying present, and practicing non-judgmental behavior are all critical tenets in mindfulness (Utt & Tochluk, 2020) and social work ethically practiced. Perhaps surprisingly though, the practice of the ancient techniques of mindfulness can also be an effective bridge in ethically engaging virtual and emerging technologies. In coupling this new with the old, we, both as a society and a profession, may address the human experience and simultaneously cultivate compassion and empathy through technology mindfully employed.

Social work educators in higher education can embrace technologies such as immersive virtual reality both morally and ethically by incorporating mindfulness-based approaches and cultivating a classroom dialogue that can non-judgmentally embrace the awareness, diversity, and humanity that should and must be part of the pedagogical conversation.

Programs that address social problems by placing the participant as a first-person protagonist within challenging social issues and situations have demonstrated an increase in empathy-building and recognizing bias in the "other" (Smokowski & Hartung, 2008). However, is that enough? Experiencing technology in a virtual world may leave the user in a state of wonder, but is there true integration? Has a change occurred that may leave the participant with a stayed conviction?

According to Smokowski and Hartung (2008), although there is no great body of research regarding best practices on how to implement a virtual immersion program within the social work educational context, there is some understanding that small groups or teams may be beneficial as they allow some students to observe others' virtual reality experience more closely. Small groups also allow for settings where students can process what they have just experienced, as well as address what was beneficial with the virtual reality experience and what

was not. There must, however, be some better understanding of how virtual reality can be effectively employed pedagogically than just the utilization of small groups.

### **Circle of Insight**

Nicotera presents the Circle of Insight (COI) as a teaching tool: a creative, transformative pedagogical process for promoting and fostering Competency 3 (Advance Human Rights and Social, Economic, and Environmental Justice) of the Council on Social Work Education's Educational Policy and Accreditation Standards for baccalaureate and master's social work programs (Council on Social Work Education [CSWE], 2015). He also professes its efficacy as a means for educators to advance the profession's ethical standards and commitments (NASW, 2008). In addition, he notes that mindfulness practices and meditative reflections can also help students use the Circle of Insight on a more personal level (Nicotera, 2018). The Circle of Insight model for liberation pedagogy posits a See, Reflect, Act model as a learning framework to teach social justice.

"Seeing" in this model is expansive, with the student encouraged to probe and examine the stories of struggle as a reporter or detective, in a manner that utilizes all of the senses. This is done so that *la realidad* (the reality) of what is happening in any given situation and its historical and human context becomes, in a sense, absorbed and thus more clearly known. For social work educators, "reflection" in this context naturally follows seeing in the expansive sense and prompts the student to an examination of the principles undergirding the stories of the justice and peace practitioners with whom we are in dialogue (Nicotera, 2017). "Act," the culminating yet organic step in the cyclical process, invites the student to take what they have learned, or more correctly experienced, in the first two steps and take appropriate action—making choices and living in a manner "that might bring deeper, more lasting peace, justice and liberation (Nicotera, 2017 p. 387)." The process is repeated on both a micro and macro level throughout the semester. The Circle of Insight indicates that participants need a "see, reflect, act" cyclical process that incorporates all domains, including personal, inter-



nal, social and external elements (Nicotera, 2016). In this manner, participants are moved toward a purposeful experience.

In my observation within the classroom setting, students I have educated using the virtual reality tool *without* the Circle of Insight were not kept grounded nor was any conviction realized or concretized into action. In these classes, many of the students would miss the emotional connection and fail to demonstrate empathy, seemingly because they were too much in their “logical minds” rather than noticing what was happening in their bodies.

Clear strategies for implementing and utilizing virtual reality effectively in treatment settings are further along than they are in the field of social work education designed to address issues of social justice (Smokowski & Hartung, 2008), making this work—introducing mindfulness through the Circle of Insight to virtual reality immersion in a pedagogical context—in a sense, pioneering.

By introducing the Circle of Insight and emphasizing the practice of “Feel,” participants now better notice the physiological responses experienced in the virtual moment and with guidance may strive even to maintain a presence in the discomfort. However, teachers utilizing this methodology must recognize the possibility of over-identification with virtual experiences. To that end, an additional modification in the pedagogy is the emphasis of “de-role.” This concept is a process in which the individual methodically separates or is separated from the virtual avatar in order to prevent over-identifying with the experience provided in the virtual world. Importantly, for many these experiences may be triggering and could cause emotional dysregulation if not properly safeguarded. Educators must consider the emotional content and be prepared to implement ethical interventions such as engaging in the de-role process in order to ensure the learner does not integrate unhealthy practices that can emotionally harm them. Providing trigger warnings prior to the engagements, as well as implementing the de-role process are important factors in the Circle of Insight Virtual Reality (COI-VR) framework. Experiences pertaining to police engagements may have more of a somatic trigger for racialized Black people than for those who are not persons of color. Considerations such as these must

be made and adequately provided to students prior to engaging in these virtual spaces.

### **Self-Reflexivity and Virtual Reality Integration**

The process of self-awareness means understanding our personality, strengths, weaknesses, dislikes, and likes. It is regarded as an essential fundamental understanding of our emotional intelligence. Self-awareness helps us to understand ourselves better, to be at peace, and to manage our thoughts, emotions, and behaviors proactively (Yancy, 2019). Self-awareness is an essential and key aspect of social work practice. Integrating self-awareness into social work practice has a significant impact on promoting healthy relationships and interaction between social work professionals and clients. As self-awareness informs the profession in an integral manner, social work students stand to benefit from its classroom integration. The more our students can engage in activities that foster a deeper dive into understanding who they are, the more minimization of implicit bias occurs. After each virtual reality experience, it is good practice to have students complete a process-style reflection piece that can develop critical thinking into their emotional responses. This written form of contemplative work is the explorative or reflective portion of this process of insight. Virtual reality experiences that are created to bring awareness to issues of social justice must have a component of self-reflection and contemplative practice in order to effectively move into conscious, action-oriented convictions.

On a more systematic level, Laszlo (2018) makes the point that in order for individuals to connect within society there must be a deeper understanding of “human thriving.” The notion of human thriving posits that humans strive for flourishing lives for both ourselves and future generations, while also making efforts to enrich and improve current systems in which we are a part. He shares that human thriving is comprised of four key aspects: (a) quieting the “monkey mind” or practicing mindfulness as previously mentioned to allow us to address what systems must be kept in mind for improvement, (b) coming together on an individual and community level to learn from one another’s differing perspectives, (c) conviviality with nature or having a deeper sense of

connection to the ecosystems in which we engage in with regard to all species, and (d) understanding positive change for the evolution of humanity in order to live and leave the legacy of a fulfilling and meaningful life. He argues further that in order for educational tools such as emerging technologies to be usefully engaged in a manner that allows for thriving, these four key aspects must be carefully considered and implemented within the curriculum being provided.

### **Emerging Technology and Transformative Justice**

Transformative justice begins with awareness of one's own biases. In works relating to abolition and reparations, Patrisse Cullors indicates that there are twelve principles necessary to create transformative justice. The twelve principles include the following: having open and courageous dialogue, committing to responses as opposed to reactions, experimenting with different techniques, being open minded to the imagination, forgiving actively, allowing oneself to feel freedom, committing to not hurting others, accountability, embracing non-reformist reforms, building community, valuing interpersonal relationships, and fighting the U.S. state (Cullors, 2019).

Understanding these principles contributes to answering the essential question for educators: *How does one teach them?* One potential modality for doing so resides in the use of virtual reality and the Circle of Insight appropriately tailored. Through the advancement of technology, scholars can help others to effectively *walk* in the shoes of another while providing in-depth and realistic perspectives that highlight the aforementioned principles. A crucial component of the identified principles is community. In order for communities to come together they have to understand one another. People who have lived experiences of specific events can demonstrate these experiences through emerging technology. Technology is essential for communication and information sharing, but emerging technology, such as virtual reality, is critical for promoting emotion-sharing. It has been stated that information and communication technology has the potential to significantly and intensely shift the unconscious paradigm (Berzin et al., 2015). It is believed that not only will technology have the potential to enhance communi-

ty and transformative justice, but increase our capacity to create and hold empathetic, compassionate spaces. If this model is utilized with the conscious, compassionate intention to supplement existing curriculum and learning tools, it has the potential to benefit social work education and provide a deeper process of self-reflexivity for future change agents in the profession. Transformative justice is rooted in eradicating oppression, and this technology can help with dismantling the state of disconnectedness from a lack of empathy precipitated by divisive and fallacious assumptions.

There is some level of confidence that emerging technology can help promote social change. Literature indicates that there is, however, within these emerging technologies such as virtual reality an overrepresentation of “the man;” perhaps akin to television in the early days, there is within the virtual space a dearth of Black and Brown people involved in the creation of programming and the content—with the exception of derogatory depictions. This exclusionary depiction manifests itself in the perpetuation of the narrative that those who are not considered White are deemed in some way underdeveloped, or are overdeveloped in a negative sense. Philosophies and systems are often rooted into this archaic, shocking, and repugnant representation (Stein, 2018). As scholars, however, we have a responsibility to overthrow this ecological catastrophe. Emerging technology merged with contemplative practices can raise awareness, help reconstruct systems and find ways for people to relate to one another in a safe, realistic and human way. Through the combination of virtual technology, therapeutic services and mindfulness, people can begin making the internal shift towards transformative justice perspectives, understanding implicit bias and developing compassion for oneself and others.

### **Understanding Collective Trauma for Change through VR/COI**

Simply understanding inner bias is not enough to make a substantial impact. There needs to be connectivity, spirituality and a deep, inner shift that promotes profound change. Simply put, experiencing the artificial trauma created by virtual reality one time is not going to effectuate the societal shift needed for change. Black and Brown communities are im-

pacted daily and this accumulation of trauma and racism is what creates long term disparities and challenges.

Racism is trauma. To foster recovery, communities often have a shared acknowledgment of the reality of the traumatic event(s), experience shared losses and survivorship, reorganize and plan for the community's well-being, and reinvest in new hopes and aspirations (Walsh, 2007). Understanding this is essential because the purpose of virtually experiencing the same trauma as Black and Brown communities is to have deeper and more personal experience to their trauma. When touched by this trauma there is a greater, emotional, internal shift, helping the participant see, experience and ultimately feel moved by the experience. Without deep seated empathy, participants will struggle in understanding the trauma of racism at a greater level. Therefore, simply experiencing the event through virtual reality is not enough. The experiences, often over time, need to make an emotional impact sufficient enough that it can be a catalyst for advocacy and change. With this, participants then voice their experiences into the community and advocate because they now are a part of promoting social justice and human rights.

The first phase of this process is to recognize *la realidad* of racial trauma through the expansive sense of *seeing* employed by the Circle of Insight. It is an inner city adage that "when people know better, they do better." If people are emotionally aware in nearly full measure of the hurt, pain and damage that comes with violence against Black and Brown melanated people, both verbal, actional and nonverbal, they then are more likely to begin to enact changes. Literature indicates that the process of absorbing struggle and marginalization is essential to knowing it, understanding, and transforming it into healing (Nicotera, 2018).

The second phase in this process of understanding collective trauma to effectuate change is *reflection*. In other studies, spirituality, or the belief in a power apart from one's own existence, often in the universe, is used to heal violent trauma (Conner et al., 2003). As in the Circle of Insight, participants are encouraged to explore inner teachings from childhood and reflect spiritually upon their experiences. Importantly, in this context spirituality does not mean adherence to religious doctrine.

Further, literature has demonstrated that having spiritual connectivity to oneself, others and the universe leads to stress reactivity, a reduction of maladaptive concerns such as alcohol abuse, and the acceptance of new understandings even to the point of “an awakening.” (Conner et al., 2013). The reflection stage of this process enables participants to consider their inherent racism, sexism, privilege, oppression, and other structural injustices and apply reflection, theory, societal values, and ethical principles to delve more deeply into how they are contributing to these larger problems (Nicotera, 2018). Essentially, participants “see” and experience the event and have time then to process their feelings and emotions against their own internal biases. By doing so, participants develop the awareness to become empathetic to these issues. And it is through collective empathy that communities can come together to change. Like a family unit, communities must develop and understand their belief systems, which can be deeply rooted in culture and spirituality, and clinicians in this process help guide the participant to creating meaning from and of the traumatic loss experience (Walsh, 2007). This process further helps participants gain coherence along with meaningful and manageable comprehension of the shared challenge.

Next, participants are invited to act with appropriate action, to make positive choices that bring deeper, lasting peace, justice and liberation (Nicotera, 2018). Spirituality in all of its forms are encouraged, including mindfulness and meditation. Literature indicates that hope and spirituality are both identified when communities begin to heal the trauma of violence, fostering resilience and renewed hope with a connected spirituality to one another (Walsh, 2007). Similarly, virtual reality is encouraging connectivity. If participants can come to understand that their personal actions contribute to the atrocity of racism, become aware of it and deepen their empathy towards the people who suffer from it, then through this raising of internal insight, internal change is promoted.

Professionals are summoned to incorporate a healing paradigm in their work with students, clients, and communities. The open and purposeful Circle of Insight moves participants to a personal and collective healing process. This raises awareness and strengthens insight

into peacemaking strategies against racism and other forms of violence. Black and Brown communities are suffering as generations of trauma and oppression rise to the level of violence within and against the community every day. As social work professionals, there is an inherent responsibility to make the internal and external changes requisite toward healing that trauma. Technology, coupled with mindfulness and spiritual practices can help social workers guide participants in reflecting on what they learned about internal biases and racism while instigating and inspiring change for a better, healthier, and more peaceful tomorrow.

### **Discussion**

Virtual reality refers to the use of computers in establishing a three-dimensional interactive world, particularly in the objects that have a sense of spatial presence (Bailenson et al., 2008). Today, the use of virtual reality is not only about gaming; the technology has several practical applications and virtual reality is extensively used in social work practices. The juxtaposition of these two worlds to effectuate personal and societal well-being is a balance that must be cradled with humanness. The development of *being here now* in the present moment is an essential piece in both the virtual worlds and ordinary reality. The framework of COI-VR provides a model of ethically engaging with these emerging programs and cultivates the competencies of both social work practice and social work education. Virtual reality is a powerful tool when ethically and effectively integrated into the classroom. Educators must consider the impact of student responses both positive and challenging. Therefore, now more than ever, with the emergence of virtual technology, contemplative practices are needed as a framework when developing new courses and curricula in higher education and social work spaces.

Social work education can consider modifications to the EPAS policy in order to include ethical integration with emerging technology as well as critical thinking on the impact they have on society in the forms of equity, service delivery, and narrative storytelling in virtual spaces. For instance, the continued investigation into these practices will benefit social work educators in understanding the various educational needs

of students and also in finding the best strategies to support the overall learning process in social work practices. However, Watson (2016) states that society should be careful when utilizing such technology to ensure it does not become a tool that is relied upon versus connecting authentically on a human level.

### **Implications for Further Research**

Further research is needed in the area of long-term determinism on the process of change for future practitioners. Further research should consider looking at various interventions, both at the micro and macro continuum, that can help in enhancing social work practices with emerging technology including augmented reality, as well as extended reality. Some other barriers that should be taken into consideration include skepticism of technology to teach human concepts, safety procedures, and financial constraints, as well as accessibility (Smokowski & Hartung, 2008).

Further studies should look at the extent to which field agencies currently offer virtual “communities of practice,” and how such agencies organize various learning model activities. They should also consider how they can provide opportunities for students to practice their profession as social workers in virtual spaces. Extending the framework of COI-VR in-field practices can assist with the integration of student learners in the field and create continuity of self-reflexivity from theory to practice.

Also, on a technical level, it is important that students are oriented and become familiar with technology and that there is a standardization of technical proficiency as students all come into spaces with varying technological starting points (Huttar & BrintzenhofeSzoc, 2018). According to Wilson et al. (2013), students who utilized virtual reality expressed that they found increased effectiveness when they were allowed more time to get familiar with the technology. Perhaps this is something to consider for future implementations.



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