

The Future of Social Work Education: A Guide to Developing, Implementing, and Assessing e-Simulations

Samantha N. Wolfe-Taylor

Khadija Khaja

David Wilkerson

Christian K. Deck

Abstract: *Advances in technology, an increase in non-traditional students, a new generation of e-learners, the COVID-19 pandemic's impact on education and practice, and the emergence of greater practitioner and client adoption of telebehavioral health present opportunities and challenges for curricular innovation in schools of social work. e-Simulations are reliable, valid, authentic high impact practices that address these challenges and prepare students for a future where social workers are called upon to adopt telebehavioral practice. Although there is literature on the development, implementation, and assessment of simulation-based learning in social work education, much of the literature explores the use of simulations in face-to-face social work education. Provided is a guide for educators and administrators on developing, implementing, and assessing online simulations (e-simulations) in social work education.*

Keywords: *e-Simulations, high impact practices, social work education, telebehavioral health training*

The American Academy of Social Work and Social Welfare's [AASWSW] (2015) Grand Challenge to *Harness Technology for Social Good* calls for social work educators to reexamine their role in technology-innovated education, tools, and practices (Berzin et al., 2016). There are a variety of challenges and opportunities for innovation to the curricula of schools of social work. These include advances in technology, increasing numbers of non-traditional students, growth of a new generation of e-learners, pandemic impact on education and practice, and the emergence of greater practitioner and client adoption of telebehavioral health services. The audience for these challenges and opportunities in the United States is not limited to online undergraduate or graduate schools and programs, but all 539 baccalaureate programs and 303 master's programs accredited by the Council on Social Work Education (CSWE, 2021).

The COVID-19 pandemic and the acceleration of telebehavioral practice challenge schools of social work to reevaluate their curricula and make room for training in technology-mediated social work practice. The fact that over 60% of mental health practitioners are social workers (National Association of Social Workers, n.d.) adds urgency to this challenge. Although the number of COVID cases are decreasing in the United States, schools of social work must support students facing an uncertain future where community lockdowns may once again disrupt traditional educational experiences and social services delivery. Due to the COVID-19 pandemic, an urgency has been placed on social work education to reimagine practice skills assessment (Keeney et al., 2021).

Samantha N. Wolfe-Taylor, MSW, LCSW, CTH, Associate Director of the Office of e-Social Work Education and Practice and Clinical Assistant Professor, Khadija Khaja, PhD, Associate Professor, David Wilkerson, PhD, Director of the Office of e-Social Work Education and Practice and Associate Professor, and Christian K. Deck, MSW, LCSW, CTH, Lecturer, Indiana University School of Social Work, Indianapolis, IN.

Copyright © 2022 Authors, Vol. 22 No. 2 (Summer 2022), 287-302, DOI: 10.18060/24912



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

Morley and Clark (2020) identified that since the start of the COVID-19 pandemic, substantial changes have been made to social work education as it relates to the acceptance of technology-based supervision and engagement with clients for students in the field, but literature is limited on the impact these changes have made to assessment of practice in social work education. Additionally, “social work educators have for the most part been inactive in developing curricula that support student knowledge, training, and decision-making on the adoption of technology for practice” (Wilkerson et al., 2020, p. 1), slow to embrace distance learning (Smoyer et al., 2020), and late in the development of online high-impact practices (HIP). Smoyer and colleagues (2020) explored this further in their study on BSW students’ experiences in distance education during the COVID-19 pandemic and found that when students were unexpectedly thrust into online learning platforms due to the COVID-19 pandemic, most were able to learn online; however, substantive interactivity and synchronous engagement were factors that were necessary to maintain student overall satisfaction in the distance learning environment. Additionally, they point out the “the need for interactive technology in online social work classrooms to simulate the human interaction that is essential to student learning and practice” (Smoyer et al., 2020, p. 653).

In the CSWE’s (2015) Educational Policy and Accreditation Standards (EPAS), they identify assessment as being most fruitful when students engage in activities that reflect authentic practice skills and tasks that they will need or complete in practice in the field. To address the need for authenticity, social work educators have used role-playing: a single station where a student interviews a standardized client (often a classmate) while being observed, but for training purposes only. A multitude of informative and formative practice skills assessment tools and checklists have been used to assess social work students’ competency in practice (Baez, 2005; Bogo et al., 2014; Crisps & Lister, 2002; Kealey, 2010).

However, researchers have found these methods lack authenticity, for they do not provide students with opportunities to engage with clients in similar ways as they would upon entering the field to practice (Baez, 2005; Bogo et al., 2014). For social work educators teaching online, an additional concern is that they do not engage the learner in a way that allows for sufficient levels of interactivity with others. e-Simulations can provide students with the opportunity to practice competency prior to entering practicum settings or the field. e-Simulations are a high-impact innovation that address the challenges of enhancing online social work practice courses and prepare students for a future that includes telebehavioral practice.

High-Impact Practices in Education

In 2008, George Kuh identified high-impact practice (HIP) as a purposefully developed, evidence-based educational activity that seeks to engage students, directly and indirectly, in the learning process, while using various measures to assess learning outcomes (Buck, 2020). Kuh identified 11 HIPs for education:

- First-Year Experiences
- Common Intellectual Experiences

- Learning Communities
- Writing-Intensive Courses
- Collaborative Assignments and Projects
- Undergraduate Research
- Diversity/Global Learning
- ePortfolios
- Service Learning, Community-Based Learning
- Internships
- Capstone Courses and Projects.

The implementation of HIPs has been identified as a fundamental strategy to increase student engagement and academic success, create more authentic learning experiences, and improve campus culture (Linder & Mattison Hayes, 2018). Educators employ HIPs in the classroom with the goal of keeping students engaged in the course material and developing skills they can apply in other courses and beyond the classroom (Kuh, 2008; Linder & Mattison Hayes, 2018). However, most of the literature on implementing HIPs in education focuses on traditional, face-to-face education (Linder & Mattison Hayes, 2018). In 2018, the first book was published on how to implement HIPs into online education. It provides educators with the foundational background on the use of HIPs in online education and a multitude of studies exploring the outcomes from implementing the 11 HIPS in different ways and areas of practice (Linder & Mattison Hayes, 2018). HIPs in social work online education can further expand upon this literature and knowledge, but how do educators effectively do this in the online environment? Online simulation-based learning is one way in which social work faculty can offer HIP opportunities for face-to-face and online students to practice and demonstrate complex skills, all while creating space for implementing different types of scaffolding to facilitate effective learning (Chernikova et al., 2020).

e-Simulations in Social Work Education

A primary goal of social work education programs is to ensure that their graduates can contribute to social work's mission of enhancing human well-being (CSWE, 2021). e-Simulations can provide students with the opportunity to practice competency prior to entering practicum settings or the field. e-Simulations are an innovation that address the challenges of enhancing distance education's social work practice courses and prepare students for a future that includes telebehavioral practice. "It is a technique (not a technology) to replace and amplify real experiences with guided ones, often 'immersive' in nature, that evoke or replicate substantial aspects of the real world in a fully interactive fashion" (Lateef, 2010, para. 1). Simulations train students in a humanistic and competency-based method of practice that is reliable, valid, and authentically reflective of practice in the field (Bogo et al., 2014). In addition, simulations offer opportunities for students to practice and demonstrate complex skills while creating space for implementing different types of scaffolding to facilitate effective learning (Chernikova et al., 2020). In their study on student self-efficacy and practice readiness upon completion of simulation-based learning, Carter et al. (2018) discovered that simulation-based learning helps improve key social work practice skills, increases students' recognition of diversity in

practice, and students reported an increase in interviewing, managing emotions, and engaging in culturally competent practice skills. e-Simulations can come in the form of asynchronous case scenario, practice decision making trees, and synchronous online interview sessions with a mock client/patient simulating real-life (Bogo et al., 2012, 2014; Chiniara & Riviere, 2019). e-Simulations can also come in the forms of gamification, augmented reality (AR), e-Objective Structured Clinical Examination (e-OSCE), virtual reality (VR), etcetera (Bogo et al., 2012, 2014; Chiniara & Riviere, 2019).

Social work educators have only just begun scratching the surface of using online simulations to create HIP opportunities in an online educational environment. Since the start of the COVID-19 pandemic, publications on simulations and simulation-based learning have increased significantly in the fields of social work and distance education, but the literature lacks guidance and research on the development of online simulations in social work education practice courses. Huttar and BrintzenhofeSzoc (2020) recently conducted a systematic review of the literature and only found seven scholarly pieces that met their criteria for virtual reality and computer simulations in social work education. To address the gap in knowledge about the application of e-simulations as HIP for training students in technology-mediated practice, the following is a guide for social work administrators and faculty with the tools and considerations for developing, implementing, and assessing e-simulations in practice skills training of social work students.

Developing e-Simulations

The planning and designing of e-simulations for social work practice education requires time, strategic planning, and creativity. It takes reflexivity, critical evaluation, open-mindedness, and collaboration of faculty, administrators, students, IT professionals, course designers, and social work practitioners. A framework for developing, implementing, and assessing the e-simulations is key to its continued success. Due to the nature of these simulations being online and using technology, a framework like Assessment Technology Adoption Framework (ATAF) should be considered. ATAF is a set of practices to “enable a technology solution for program and institutional assessment that combines people, roles, and practices with the process of adoption in order to execute a shared vision for effectively implementing a technology to assist with evaluating outcomes to improve learning and learner success” (Newberry et al., 2021, p. 220). ATAF recognizes the importance of collaborative efforts amongst faculty, administration, and the technology, and looks to move beyond simply implementing a form of educational technology, but to achieve sustainable and broad adoption of the technology (Newberry et al., 2021).

Assessing the Organization’s Culture and Climate

Although an organization’s culture and climate are important components in determining the quality and health of the school, they are often overlooked components of school improvement (Bustamante, 2005; Freiberg, 1998; Peterson & Deal, 1998). The concept of a school’s culture and climate are further complicated by the multiplicity of racial/ethnic cultures (Lindsey et al., 2003); institutional, administration, faculty, and

staff's adoption and use of technology for learning; and pedagogical stances of faculty surrounding teaching social work practice in an online setting. Nissen (2014) discusses the gap in literature on schools of social works' readiness for change created in 2008 by the CSWE Educational Policy and Accreditation (EPAS). The release of the 2008 EPAS created a shift in standards from retention and reiteration of educational materials to application in social work education. Also, distance education and telebehavioral health practices have created a new shift in social work pedagogy and best practices. Additionally, the 2022 CSWE EPAS will play a significant role in the future of social work education standards, with new focuses and an emphasis on anti-racism, diversity, equity, and inclusion information (ADEI). Due to the increased desire by students to complete their education online, the COVID-19 pandemic impacting how higher education is provided, the changing landscape of higher education, and the influx in social workers using technology in practice, it is not surprising that higher education institutions and social work faculty may feel overwhelmed, apprehensive, or behind in catching up to the challenges and needs of the students of today and tomorrow. For this reason, organizational culture and climate assessments are essential to ensuring the school is ready to explore the use of e-simulations as HIPs for social work practice education.

Evaluating the School's Capacity and Need

Following the assessment of the school's culture and climate, schools of social work need to evaluate their ability to implement and sustain e-simulated learning opportunities in their curriculum. In addition, schools of social work should evaluate the need and benefits of e-simulations. Surveying the school's interest, support, and understanding of simulation-based learning provides e-simulation developers, faculty members, and administrators a foundation for an action plan. An action plan may have to start with educational and learning opportunities if faculty, students, and administrators are unaware of or are apprehensive about implementing e-simulations prior to developing and implementing an e-simulation.

Determining Goodness of Fit

There are an array of online simulated environments and types of e-simulations available for consideration. These include but are not limited to operational simulations (procedural, looking at proper steps to completing a task), principal based-soft-skills demonstration, and problem-solving simulations (Designing Digitally, 2017; Kincaid & Westerlund, 2009). These can come in the form of asynchronous e-simulations (e.g., branching scenarios and conversation scenarios) and synchronous e-simulations (e.g., online role-playing simulations and chat room/discussion board case-based dialogue). Gamification and virtual reality simulations can be categorized as asynchronous or synchronous, depending upon the design and requirements of the e-simulation. Alignment and appropriateness of course content, technology tools, and practice activities throughout the course are necessary for successful implementation and evaluation of the selected e-simulation(s). In addition, the selected e-simulation should complement the course content, technology used, practice competencies, and learning outcomes. If e-simulations are

identified as an appropriate learning opportunity within your institution, identification of resources becomes necessary.

Funding and Budget

Funding for an e-simulations program will all be dependent upon the school's budget and interest in creating the e-simulations "in-house" or to contract out for these services. It will also be dependent upon the number of faculty and staff involved in the development, implementation, and assessment for the e-simulations. Due to the COVID-19 pandemic, there has been an influx in external funding opportunities on technology innovations for mental health services, AI, and online, simulated learning for universities and schools to consider as a funding option. However, internal funding should be prioritized for sustainability and continuation of the e-simulation once grant funding is no longer available. Internal funding sources to consider are small course development grants, educational practice research funds, and lab fees for the e-simulation services. Schools of social work have also become creative in decreasing the cost of simulations by collaborating and sharing the cost with other fields by developing a multi-disciplinary simulation. Some budgetary items and positions to consider including are:

- Course(s) buyout for faculty involved in the design of the course content and e-simulations
- Part-time actors/actresses involved in the e-simulations
- Part-time employee work-study student or intern in online simulations development, software, and/or web development
- A full-time e-simulations coordinator position
- Part-time course designer to assist with accessibility adherence and course development
- External software, databases, and/or online simulations lab services
- Cameras, lighting, and noise-cancelling microphones and headsets
- Studio or recording room.

Staffing

Staffing could be split into two categories: short-term staffing and long-term staffing and should represent the types (asynchronous versus synchronous) of e-simulations being implemented. For example, if your institution selects an outside vendor to supply asynchronous e-simulations through proprietary software, the need for web developers, e-simulations designers, and proctors would not be necessary, as the outside vendor will provide software updates, address design and implementation issues, and manage the simulations in collaboration with the administration and faculty. However, if your institution desires to offer synchronous e-simulations that are designed "in house" then the staffing needs would likely include course designers, web and software developers, e-simulation designer(s), proctors, actors/actresses to role-play in real-time as clients, and faculty. Some questions to consider when determining staffing needs for the e-simulations should include:

- If developing the e-simulations (asynchronously or synchronously) “in-house” should the web and software developers create an online simulation platform, database, app, and/or software that can be edited and updated by faculty or is more complex coding required for maintenance and edits by developers only?
- Who will have access to the e-simulations and what type of access should be granted to faculty and staff?
- If data are collected on the outcomes and assessments, will there be a database that contains this information and is this database controlled by a faculty member(s) and/or staff?
- If using actors/actresses to develop the e-simulations, do you desire to have social workers, acting students, or professional actors/actresses participating in the development processes?
- If using actors/actresses in the synchronous e-simulations, do you desire to use practicing social workers, professional actors/actresses, or acting students to role-play as the client? How much will they be paid for their time/services? Are they representative of diverse groups in society?

Table 1. *e-Simulations Staffing Considerations*

Roles	Responsibilities
e-Simulations Coordinator	Oversees the development, implementation, and evaluation of the e-simulations (asynchronous or synchronous). Proctors the synchronous e-simulations and manages scheduling for synchronous e-simulations. Recruits, hires, trains, and manages the simulated patients.
Faculty	Assist in the course design and content development processes and ensure the alignment of the e-simulations and assessments with the course objectives and learning outcomes. Teach the course(s) with the e-simulations and prepares students for the expectations of the e-simulations. Provide debriefings with the students upon completion of the e-simulation. Collaborate with the e-Simulations Coordinator on scheduling of synchronous e-simulations.
Students (non-participatory)	Assist in web developing, graphic design work, software development, and content development as interns or work study students.
Students (participatory)	Complete the e-simulations as part of their social work practice education, complete assessments of their and a peer’s practice skills, participate in the debriefing with the standardized patient(s) and instructor, complete a reflection paper on the process, provide feedback on the experience.
Web Developer	Assist with database development for management of the schedules, assessments, and data that are collected.
Course Designer	Assist with course alignment, accessibility, and ensure the e-simulations can embed into the Learning Management System (LMS).
Graphics Designer	Assists in the development of the asynchronous e-simulations.
Social Work Practitioners	Participate in the development of the case scenarios and assessments. May role-play as the standardized patient(s).
Standardized Patients	Role-play as the client(s) in the e-simulations developed. Participate in the debriefing session with the students. Participate in the assessment of the student’s practice skills demonstration if it is a social work practitioner participating as the standardized patient.

The selection of educators, practitioners, and students reviewing and developing the case scenarios and assessment tools should come from diverse personal (age, gender identification, race, etc.), educational (BSW, MSW, and PhD levels), and professional backgrounds (health, mental health, family services, policy, private practice, education, etc.) as well. Provided in Table 1 is a more detailed exploration of the staffing considerations for e-simulations and the roles/responsibilities of those individuals involved in the process.

Technology

Considering the different types of technology, whether the school should develop its own platform versus paying for an app or software and identifying if the technology being used meets accessibility standards is key. The longevity and malleability of the different technological resources and services should be compared. Additionally, the cost-effectiveness and number of users allowable to create, change, and monitor the e-simulations should be compared as well. Reviewing the design methods of the technology developed is important. What ethical standards do the developers use during the design and management processes of the e-simulations? Were coded biases identified and addressed in the software app, platforms, or AI being used? How were they addressed? Was accessibility a priority in the development? Does the software meet accessibility standards and university guidelines for accessibility? How often is the software reviewed and updated? If purchasing an outside app or software for the e-simulations, is it conducive to the learning management system (LMS) used by your school? Is the software or technology easy to be trained on and to navigate? What supportive services are in place if there is an issue with the technology? Does the software or app meet Family Educational Rights and Privacy Act (FERPA) guidelines? If schools are interested in developing these tools “in-house” consider the following questions regarding the technology:

- Which staff and faculty will be involved in the developmental and management processes of the e-simulations, technology, and databases developed?
- What type of equipment (software, video cameras, microphones, video editing software, lighting, computers, etc.) will be needed to develop an asynchronous e-simulation?
- Can the e-simulation be embedded into the learning management system (LMS)?
- How bias in the coding will be evaluated, identified, and addressed?
- How will the school ensure accessibility standards and guidelines are being met?

Zoom, Kaltura, SignUp Genius, Otter Assistant (Otter.ai), and Adobe Captivate are a few no to low-cost external software or application tools to consider using for the design and implementation of synchronous e-simulations.

Asynchronous e-simulations are more involved in the developmental process than the implementation process. Once the software or database is designed it is crucial to conduct beta testing before the e-simulation “goes live”. Requesting faculty, students, course designers, and accessibility specialists to evaluate the software or databases performance ensures that 1) accessibility standards are being met, 2) the technology developed for the

asynchronous e-simulation is appropriate and not too complex to navigate, 3) there are no technology glitches or bugs that need to be addressed, and 4) that the asynchronous e-simulation aligns and explores the content and practice competencies for that specific course effectively and thoroughly.

iSpring Suite Max, BranchTrack, ITyStudio, and Uptale are a few external e-simulations software and applications to consider as well, but these are not as cost-effective and do not provide as much access and freedom for multiple developers to make significant changes without substantial cost increases in contracted services. Additionally, if an asynchronous e-simulation is being implemented, the institution could develop software or a database with pre-recorded potential responses that either allows the student to proceed forward in the e-simulation or electronically guides the student back to the course content and materials for further learning.

Implementing Synchronous e-Simulations

The implementation of synchronous e-simulations is an involved process for the instructor with a multitude of moving parts that present both strengths and challenges within the overall experience. Executing a seamless synchronous e-simulation requires instructor attention in the time leading up to the e-simulation as well as on the day of. Factors that must be considered include confirming the technical aspects of facilitation are optimized, ensuring the authenticity of the experience for the student, and engaging the student in dialogue before for preparation and after for a debriefing and evaluation of the student's completion of the e-simulation.

In preparation for implementation, it is vital for the instructor to create a schedule of available time slots for students to sign up. This is to ensure instructor availability to facilitate and monitor each simulation, and to secure actor/actress availability far in advance. This also allows the actors/actresses ample time to familiarize themselves with the client character that they will portray for the student. Once students have signed up for their e-simulation, the instructor can make the necessary technical adjustments within their course site for implementation, such as creating unlock times for case scenarios that correspond with individual sign-up times, testing video meeting room IDs and passcodes, and corresponding with all individuals involved regarding the optimization of audio/video equipment.

At the time of implementation, the student, instructor, and actor/actress will converge in the designated video meeting room. After ensuring the student reviewed their case scenario and that the audio/video components of all involved parties are functioning properly, the instructor should provide a short overview of the e-simulation process to ensure the student understands their role and the expectations for the experience. This short dialogue can consist of the following talking points:

- The student will have a set amount of time to complete the e-simulation. The instructor will keep track of time for the student, but they are welcome to do this on their own as well.

- The instructor will turn off their video and microphone so that they are not a distraction to the student or actor.
- The only time the instructor will communicate with the student is to let the student know when five minutes remain in the synchronous e-simulation and when time has expired if the student does not end the session prior to the time allotted.
- Upon completion of the synchronous e-simulation there will be a debriefing where the student will be provided feedback from both the instructor and actor.

Once this dialogue has concluded, and any logistical questions have been answered, the instructor will transition to an observer by turning off their video and microphone. The student will begin recording and will then proceed to engage the client for the purpose of demonstrating competency in their practice skills. It could be considered best practice for the instructor to have the student's rubric on hand while they take notes throughout the e-simulation. Instructors should approach this time as an opportunity to observe not only the student in the moment for the purpose of assessment, but also be mindful of any identified areas of growth throughout the term.

A strength of this implementation process is the collaborative approach to feedback provided at the end of the experience. Debriefing with the student is vital to the learning process and is the final step of implementation before assessment. This is an opportune time for the instructor to celebrate the conclusion of the e-simulation and congratulate the student. A moment of mindful reflection on the experience may be beneficial for the student before the instructor and actor/actress provide their observations and feedback. An instructor's approach to providing feedback can be at their discretion; however, highlighting areas of growth and specific moments within the e-simulation where competency was displayed is recommended.

Common issues that may manifest during the implementation are largely technical, due to the high-level of technical integration within the synchronous e-simulation process. However, these can be avoided when instructors are prepared to troubleshoot. Day-of issues with software and audio/video equipment are common. If students are willing to provide a phone number to their instructor, it may prove helpful for real-time communication when troubleshooting. Variances in time zones for involved parties is common, it is vital that this is communicated during the scheduling phase of implementation. It could be considered best practice for all involved parties to confirm their operating system does not have a pending update installation which could restart their computer during the e-simulation, test the input and output of their audio, and ensure the recording is captured in gallery view so that all participants are visible during the e-simulation.

Implementing Asynchronous e-Simulations

Once the beta testing of the asynchronous e-simulation has occurred and all technological issues resolved, implementing the asynchronous e-simulation involves embedding the software or database into the online course shell and ensuring the

designation of the software or database appropriately aligns with the course content and learning objectives. Additionally, the developers need to ensure that faculty and students are trained to use the technology that is necessary for the successful implementation of the asynchronous e-simulation.

Assessing e-Simulations

A multi-dimensional assessment strategy is recommended to assess the design and implementation of the e-simulation. These should include assessing: the learning materials developed, the technology created and used, the case scenarios, the goodness of fit of the assessment tool developed, and the experience for the student, faculty, and actors. Assessors can include instructional designers, web developers, administrators, faculty content leads, students, actors, and beta testers of the technology. Feedback forms are crucial and can provide continual data and information on the accessibility, usability, relevance, and impact of the e-simulation on student learning.

Depending upon what is being measured and the type of e-simulations being implemented, an institution should also include assessments of learning, practice competency, and skills demonstrated by the students. Diagnostic, interim, formative, and summative assessments should be developed to assess the students' practice competency. These assessments should be based upon the course objectives and outcomes, learning competencies, assignment requirements, and course content/topic. These forms of assessment can be created as electronic rubrics, competency-based assessment scales, reflective papers/videos/audio recordings, etcetera.

Provided in Table 2 is an example of assessment criteria developed for a practice competencies assessment for a synchronous e-simulation. The criteria were developed by social work practitioners, faculty, and students. The sample criteria are tailored to capture and evaluate the demonstrable skills and competencies specific to a graduate-level generalist theory and practice course that implemented a type of e-simulation called an online Objective Structured Clinical Examination (e-OSCE). The scale is identified as the social work post-OSCE practice competency rating scale (SWP-OPCRS).

Table 2. *Sample Criteria from the SWP-OPCRS*

Criteria	Description	Ratings for Practice Skills Demonstration at the MSW Level				Points	Feedback
		Exceptional 5 to 4.5 pts (100%-90%)	Satisfactory 4.49 to 4 pts (89%-80%)	Marginal 3.99 to 3.65 pts (79%-73%)	Unsatisfactory 3.64 to 0 pts (72% or less)		
Student's Use of Questions	Primary use of open-ended questions. As appropriate, judicious use of closed-ended questions. Avoids the use of multiple questions at one time, questions as statements, & "why" questions.						
Student's Exploration of Client's Needs	Works in collaboration with the client to explore & identify the client's current needs.						
Collaborative Goal Setting	Invites the client into the goal-setting process, works in collaboration with the client in identifying goals, & helps guide the client's ideas into a realistic, attainable plan that the student creates in collaboration with the client.						
Intervention	Selects intervention(s) that match the client's goals from appropriate PIE frameworks. Assists the client in narrowing of intervention to a reasonable expectation of 1-2 interventions to implement before next session.						
Total Points Received							

Limitations and Considerations

Although there are several benefits to using e-simulations in education, it is important to recognize their limitations. The financial cost of designing and implementing a face-to-face simulation can be rather cumbersome (Savoldelli et al., 2005) and has left some universities and programs with an inability to continue face-to-face simulations if significant funding resources are not provided. Although there is an alternative through e-simulation, it is important to recognize that there is still a cost to implementing an online simulation. The amount of time required to construct, proctor, review, and/or improve a simulation can also be identified as a limitation for smaller universities and programs that may have limited faculty and staff or that have a limited number of faculty available to manage all that e-simulation entails (McCoy & Merrick, 2001; Savoldelli et al., 2005).

There are concerns regarding educators' ability to integrate the e-simulations within the curriculum in the appropriate manner to ensure it meets the course learning objectives. It is also important to recognize that the e-simulation may be stress inducing for students and cause anxiety. Additionally, despite efforts to ensure standardization of clients through actor and case scenario preparation, there is still the possibility for different experiences with the client given the context, dialogue, and assessment at hand. Finally, when considering implementation of an e-simulation in social work practice education, it can be more difficult to assess the change process intervention depending upon the time limits allotted for each synchronous simulated experience (Bogo et al., 2014).

Futures of e-Simulations and Technology in Social Work

Ethical designs in educational tech, online simulations, and using technology to create high levels of interactivity and engagement in education are not new ideas or educational experiences; however, social work has been hesitant and at times resistant to engaging in futures-thinking in relation to using technology in social work education and practices. Online education and technology use in social work are here, growing, and advancing. The field of social work needs to further explore its role, responsibility, and ability to be at the forefront of technology innovation for distance education and social work practices. COVID-19 may have been the catalyst for some schools of social work in adopting technology and distance education, but social work has the opportunity and calling to change the future of tech, tech in social work education and practices, and tech's impact on social determinants. Social work will need to prioritize the call to *Harness Technology for Social Good* to create such changes in the profession and how it uses technology to prepare students for practice.

References

- American Academy of Social Work and Social Welfare [AASWSW]. (2015). *12 Grand Challenges: Harness technology for social good*. <https://grandchallengesforsocialwork.org/wp-content/uploads/2015/12/GC-one-pager-technology-final.pdf>

- Baez, A. (2005). Development of an objective structured clinical examination (OSCE) for practicing substance abuse intervention competencies: An application in social work education. *Journal of Social Work Practice in the Addictions*, 5(3), 3-20.
https://doi.org/10.1300/J160v05n03_02
- Berzin, S. C., Coulton, C. J., Goerge, R., Hitchcock, L., Putnam-Hornstein, E., Sage, M., & Singer, J. (2016, September). Policy recommendations for meeting the Grand Challenge to Harness Technology for Social Good (Grand Challenges for Social Work Initiative Policy Brief No. 8). Cleveland, OH: American Academy of Social Work & Social Welfare. <https://doi.org/10.7936/K7930SPJ>
- Bogo, M., Rawlings, M., Katz, E., & Logie, C. (2014). *Using simulation in assessment and teaching: OSCE adapted for social work*. Council on Social Work Education.
- Bogo, M., Regehr, C., Katz, E., Logie, C., Tufford, L., & Litvack, A. (2012). Evaluating an objective structured clinical examination (OSCE) adapted for social work. *Research on Social Work Practice*, 22(4), 428-436.
<https://doi.org/10.1177/1049731512437557>
- Buck, D. (2020). What even is HIP? Understanding HIPs through a theoretical model-part 2. *Elon University Center for Engaged Learning: Studying EL*.
<https://www.centerforengagedlearning.org/what-even-is-a-hip/>
- Bustamante, R. M. (2005). *Essential features of cultural proficiency in American international schools in Latin America: A Delphi study*. University of San Diego.
<https://www.proquest.com/docview/305369400?pq-origsite=gscholar&fromopenview=true>
- Carter, K., Swanke, J., Stonich, J., Taylor, S., Witzke, M., & Binetsch, M. (2018). Student assessment of self-efficacy and practice readiness following simulated instruction in an undergraduate social work program. *Journal of Teaching in Social Work*, 38(1), 28-42. <https://doi.org/10.1080/08841233.2018.1430095>
- Chernikova, O., Heitzmann, N., Stadler, M., Holzberger, D., Seidel, T., & Fischer, F. (2020). Simulation-based learning in higher education: A Meta-analysis. *Review of Educational Research*, 90, 499-541. <https://doi.org/10.3102/0034654320933544>
- Chiniara, G., & Riviere, E. (2019). Chapter 7: Adult learning and simulation-based education. In G. Chiniara (Ed.), *Clinical simulation: Education, operations, and engineering* (2nd ed., pp. 81-95). Academic Press. <https://doi.org/10.1016/B978-0-12-815657-5.00007-3>
- Council on Social Work Education [CSWE]. (2015). *Educational Policy and Accreditation Standards for Baccalaureate and Master's Social Work Programs*. https://www.cswe.org/getattachment/Accreditation/Accreditation-Process/2015-EPAS/2015EPAS_Web_FINAL.pdf.aspx
- CSWE. (2021). *About CSWE accreditation*. <https://www.cswe.org/Accreditation.aspx>

- Crisp, B. R., & Lister, P. G. (2002). Assessment methods in social work education: A review of the literature. *Social Work Education, 21*(2), 259-269. <https://doi.org/10.1080/02615470220126471>
- Designing Digitally. (2017). *The five kinds of simulations to use for your training needs*. <https://www.designingdigitally.com/blog/2017/10/five-kinds-simulations-use-your-training-needs>
- Freiberg, H. J. (1998). Measuring school climate: Let me count the ways. *Educational Leadership, 56*(1), 22-26. <https://www.ascd.org/el/articles/measuring-school-climate-let-me-count-the-ways>
- Huttar, C. M., & BrintzenhofeSzoc, K. (2020). Virtual reality and computer simulation in social work education: A systematic review. *Journal of Social Work Education, 56*(1), 131–141. <https://doi.org/10.1080/10437797.2019.1648221>
- Kealey, E. (2010). Assessment and evaluation in social work education: Formative and summative approaches. *Journal of Teaching in Social Work, 30*(1), 64-74. <https://doi.org/10.1080/08841230903479557>
- Keeney, A. J., Byrnes, E. I., Young, J. A., & Beecher, B. (2021). Beyond COVID-19: what's next for skill assessment practices in social work education? *Social Work Education, 1–12*. <https://doi.org/10.1080/02615479.2021.2003321>
- Kincaid, J. P., & Westerlund, K. K. (2009). Simulation in education and training. *2009 Winter Simulation Conference*. <https://doi.org/10.1109/WSC.2009.5429337>
- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Association of American Colleges and Universities.
- Lateef, F. (2010). Simulation-based learning: Just like the real thing. *Journal of Emergencies, Trauma, and Shock, 3*(4), 348-352. <https://doi.org/10.4103/0974-2700.70743>
- Linder, K., & Mattison Hayes, C. (2018). *High-impact practices in online education: Research and best practices*. Stylus.
- Lindsey, R., Robins, K., & Terrell, R. (2003). *Cultural proficiency: A manual for school leaders* (2nd ed.). Corwin Press.
- McCoy, J., & Merrick, H. (2001). The objective structured clinical examination (2nd ed.). *Association of Surgical Education*. <https://www.surgicaleducation.com/wp-content/uploads/2014/05/oscemmanual.pdf>
- Morley, C., & Clarke, J. (2020). From crisis to opportunity? Innovations in Australian social work field education during the COVID-19 pandemic. *Social Work Education Journal, 39*(8), 1048-1057. <https://doi.org/10.1080/02615479.2020.1836145>
- National Association of Social Workers. (n.d.). Thinking about a career in social work? <https://www.naswva.org/considering-a-career-in-social-work#:~:text=Professional%20social%20workers%20are%20the,is%20delivered%20by%20social%20workers>.

- Newberry, R., Robinson, R., & Botha, A. (2021). Enabling a solution for assessment and technology. In P. L. Maki & P. Shea (Eds.), *Transforming digital learning and assessment: A guide to available and emerging practices and building institutional consensus* (pp. 217-246). Stylus.
- Nissen, L. B. (2014). The power of organizational readiness to boost success with the 2008 EPAS in social work education. *Journal of Social Work Education, 50*(1), 5-18. <https://doi.org/10.1080/10437797.2014.856223>
- Peterson, K. D., & Deal, T. E. (1998). How leaders influence culture of schools. *Educational Leadership, 56*(1), 28-30. https://files.ascd.org/staticfiles/ascd/pdf/journals/ed_lead/el199809_peterson.pdf
- Savoldelli, G., Naik, V., Hamstra, S., & Morgan, P. (2005). Barriers to use of simulation-based education. *Journal canadien d'anesthésie [Canadian Journal of Anaesthesia], 52*, 944-950. <https://doi.org/10.1007/BF03022056>
- Smoyer, A. B., O'Brien, K., & Rodriguez-Keyes, E. (2020). Lessons learned from COVID-19: Being known in online social work classrooms. *International Social Work, 63*(5), 651–654. <https://doi.org/10.1177/0020872820940021>
- Wilkerson, D. A., Wolfe-Taylor, S. N., & Deck, C. K., Wahler, B. E. & Davis, T. S. (2020). Telebehavioral health practice basics for social work educators and clinicians responding to COVID-19. *Journal of Social Work Education, 39*(8), 1137-1145. <https://doi.org/10.1080/02615479.2020.1807926>

Author note: Address correspondence to Samantha Wolfe-Taylor, Indiana University School of Social Work, of Social Work, AD 2020N, 301 University Blvd., Indianapolis, IN, 46202. Email: swt@iu.edu