

Simucase: A Comprehensive Guide to Faculty and Clinical Instructor Training

Clint Johnson, MA, CCC-SLP, CHSE

---

---

---

---

---

---

- If you are viewing this course as a recorded course after the live webinar, you can use the scroll bar at the bottom of the player window to pause and navigate the course.
- This handout is for reference only. It may not include content identical to the PowerPoint. Any links included in the handout are current at the time of the live webinar, but are subject to change and may not be current at a later date.

---

---

---

---

---

---

© 2017 continued.com, LLC. No part of the materials available through the continued.com site may be copied, photocopied, reproduced, translated or reduced to any electronic medium or machine-readable form, in whole or in part, without prior written consent of continued.com, LLC. Any other reproduction in any form without the permission of continued.com, LLC is prohibited. All materials contained on this site are protected by United States copyright law and may not be reproduced, distributed, transmitted, displayed, published or broadcast without the prior written permission of continued.com, LLC. Users must not access or use for any commercial purposes any part of the site or any services or materials available through the site.

---

---

---

---

---

---

## Disclosure Statement

Relevant financial relationships:

- Clint Johnson is employed by Simucase, LLC

Relevant nonfinancial relationships:

- The speaker has not relevant non-financial relationships

## Learner Outcomes

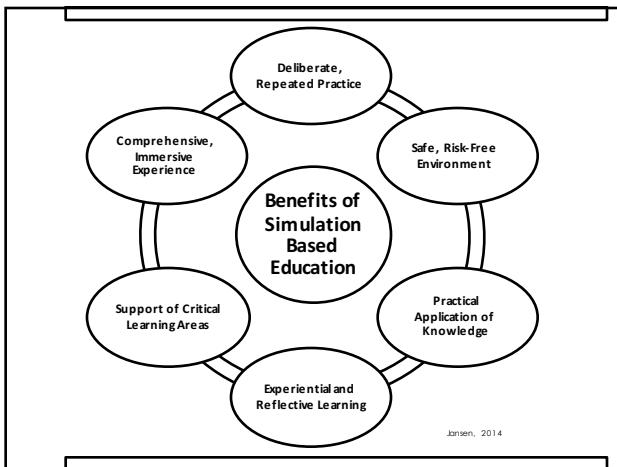
As a result of this continuing education activity, participants will be able to:

- Identify the six benefits of clinical simulations.
- Describe the guidelines for supervising and awarding clinical contact hours for computer-based simulations.
- Explain and apply the methodologies for pre-briefing, providing feedback, and debriefing students.

## CFCC 2016 Revisions to Standards

Revision 2: Implementation Language to Standard V-C (additions to paragraph 2) – Acceptance of clinical simulation for up to 20% (75 hours) of direct client hours:

- Up to 20% (i.e., 75 hours) of direct contact hours may be obtained through clinical simulation (CS) methods. Only the time spent in active engagement with the CS may be counted. CS may include the use of standardized patients and simulation technologies (e.g., standardized patients, virtual patients, digitized mannequins, immersive reality, task trainers, computer-based interactive). Debriefing activities may not be included.




---

---

---

---

---

---

### National Survey for the use of simulations in CSD

80% of faculty (n=146) indicated that students could benefit from simulations in clinical and academic training; however only 51% indicated that they were currently using them.

Top barriers to using simulations:

- limited knowledge of simulations
- time and personnel to learn about and implement this teaching tool
- limited availability of access to simulation facilities

Dudding, C.C. & Nottingham, E. (2018) A National Survey of Simulation Use in Communication Sciences and Disorders University Programs, American Journal of Speech Language Pathology

---

---

---

---

---

---

### Designing a Simulation Event

- Identify need (Issue) and Target Audience
- Establish Goals & Learning Objective(s)
- Create a back story and a simulation scenario
- Identify Critical Events in your scenario and the type of feedback that would be provided to the students

---

---

---

---

---

---

### Designing a Simulation Event (cont.)

- Choose a simulation modality that best addresses your goals
  - Standardized Patients – teaching interviewing and counseling skills; SP's may be trained to provide feedback
  - Part-task trainers – practicing specific, basic skills
  - Manikins – completing high-risk medical procedures; encourage team-based communication skills
  - Computer-based simulations – can be designed to include: interviewing skills, practicing specific skills, interpreting medical procedures
  - Virtual and Augmented Reality – creating immersive environments for clinical simulations

---



---



---



---



---



---



---

### Designing a Simulation Event (cont.)

- Choose or create an assessment method to rate students' performance during the clinical simulation
- Choose or create an evaluation method for students to rate the clinical simulation experience
- Establish methods for pre-briefing, providing feedback, and debriefing
- Arrange for access to simulation and review your budget: Reserve simulation facilities, recruit SPs and other confederates, or computer based login, etc.

---



---



---



---



---



---



---

### Benefits of Computer-based Simulations

- The Simulation scenarios (case studies) are already created and new scenarios can be added to the existing platform, but functionality remains consistent
- Can be designed to teach complete processes (i.e., evaluation and treatment protocols) and/or teach specific skills (test administration, MBS interpretation)
- Feedback and Scoring algorithms are built into the system
- Simulations are repeatable and can be accessed 24/7
- Supervision is typically asynchronous
- Reporting systems identify students' strengths and weaknesses

---



---



---



---



---



---



---

**Key elements of Effective Computer-Based Simulations**

- Make reflective decisions
- Include multiple solutions
- Provide feedback
- Train specific skills
- Encourage collaboration
- Apply knowledge
- Promote discovery learning
- Patient-Centered
- Improve critical thinking
- Encourage discussion



Johnson & Williams, 2016

---



---



---



---



---



---



---



---



---

**Simucase Overview**




---



---



---



---



---



---



---



---



---

**Supervision of Computer-Based Simulations: An Overview**

- Students must be supervised by a certified SLP to receive clinical clock hours
- Supervision of Simucase is typically asynchronous (you do not have to watch a student complete a case in real time)
- Supervision of Simucase must include a pre-brief, feedback, and a debrief
- Time spent completing a pre-brief, feedback, and debrief counts as supervision time but is not counted as part of a student's individual clock hours
- Each clinical simulation has an Average Completion Time and a Maximum Completion Time - programs should establish consistent guidelines for awarding clock hours
- Students must receive a 90% competency score in Learning Mode
- Students may attempt a clinical simulation as many times as they like

---



---



---



---



---



---



---



---



---

Three requirements for Supervising Clinical Simulations (CS)



- Pre-brief prior to the CS
- Feedback during the CS
- Debrief following the CS

---



---



---



---



---



---

Pre-brief



- An orientation session held prior to the start of a simulation-based learning experience.
- Prepares the students for the experience
- Sets the stage for a simulation scenario and helps participants achieve objectives
- Review equipment, technology, roles, time allotment, objectives, patient backstory, and evaluative methods
- Answer any questions, address concerns

Wilson L. & Wittmann-Price, R.A. (Eds.). (2015). *Review Manual for the Certified Healthcare Simulation Educator*. Springer Publishing Company, LLC, New York.

---



---



---



---



---

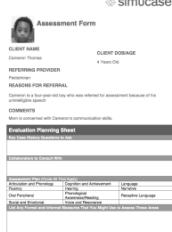


---



---

Pre-brief – Using Simucase



- Review the Simucase platform with students to ensure they understand the technology
- Introduce the clinical simulation using the Simucase Referral Form and answer any questions prior to beginning the simulation

Copyright: Assessment and Evaluations

---



---



---



---



---



---



---

## Pre-brief – Using Simucase (cont)

- Tell students the number of minutes a clinical simulation is worth by using the Clinical Clock Hour Guidelines Chart
  - Provide them with the deadline for completing the clinical simulation
  - Review how students will be assessed following the completion of the clinical simulation(s)

## Feedback



- Focus on the task, not on the individual
  - Feedback should be specific
  - Linked directly to personal goals
  - Feedback should not undermine self-esteem, but should not simply consist of praise

Archer, J.C. (2009) State of the science in health professional education: Effective feedback. *Medical education*. Vol. 44: 101-108.

## Providing Feedback

- Provide feedback prior to the due date for completing the assignment
  - Allow opportunities for students to ask general questions about the clinical simulation
  - Use the faculty dashboard to monitor student progress and identify areas of strength and weakness for discussion
  - Provide feedback in person, in a video conference, via email, or by phone

## Debrief



"The debriefing session is the most important part of the activity. It is here that the meaning of the enactment is clarified; the lessons to be learnt are underlined; and the connections are made to what the students already know and what they need to know for the future." - Morry Van Ments

Van Ments, M. *The Effective Use of Role Play*, 2<sup>nd</sup> ed. London: Kogan Page Ltd, 1999.

---



---



---



---



---



---



---



---

## Debriefing

- Review what was learned during the clinical simulation(s) and highlight how this information might be applied to real clients in the future
- Identify the areas where students excelled
- Address any areas of weakness or clinical errors
- Spend 1.5 minutes per clock hour debriefing (ex: if a simulation is worth 60 minutes, you would debrief for at least 15 minutes)
- Include a written assignment for groups of 10 or more students
- Establish a method for students to evaluate and reflect on their experiences
- Confirm the clinical hours that were earned

---



---



---



---



---



---



---



---

## Debrief Questions for Cameron's Case

- What are the implications of unintelligible speech on the speech and language assessment process?
- What impact does unintelligible speech have on Cameron's social and emotional interactions?
- What are your educational recommendations for Cameron?
- What information can you provide the family to help them work with Cameron at home?
- What is the relationship of phonological awareness to early literacy development and speech sound development?
- Discuss the importance of hearing evaluations for individuals with speech sound disorders.

---



---



---



---



---



---



---



---

Tele-supervision: A new approach to supporting clinical simulations

- Services
  - Facilitating implementation and training
  - Conducting all pre-brief and debrief sessions
  - Tracking and approving clinical clock hours
  - Rating student competencies for targeted ASHA standards and providing grade recommendations



---

---

---

---

---

---

Simulation Efficacy – St. Xavier University

- Diagnostic Teaching Model at SXU
- Diagnostic course (4 credit hours) second semester of the first year
- Participation in 5 – 7 diagnostic evaluations in on-campus clinic, with clients of various ages exhibiting a variety of disorders
- Students have completed 2 semesters of on-campus clinical practicum

---

---

---

---

---

---

Challenges of Existing Model

- Providing a sufficient number of evaluation experiences to ensure student competency
- Providing evaluation experiences with a variety of clients and disorder areas
- Student stress levels due to inexperience in assessment
- Supporting students who struggle to gain competence in assessment skills

---

---

---

---

---

---

## Traditional vs. Creative Solution

- Traditional Solution – increase direct instruction, increase diagnostic experiences, increase demand on the clinical program
- Creative Solution – Simucase Lab
  - Elective course: Assessment II (1 credit hour)
  - Utilized Simucase technology to supplement traditional learning experiences
  - Independent repetitive work on online cases combined with classroom discussion about each case

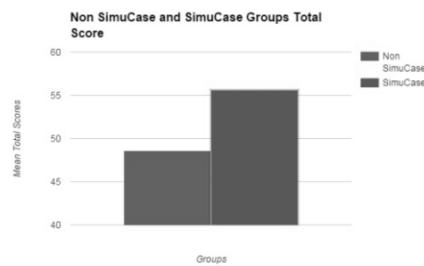
## Perceived Benefits

- Learning occurred in a situation opposite of that of high-stakes diagnostic practicum:
- Students could start and re-start cases as often as they liked
- Students able to collaborate and receive answers to their questions during the assessment process
- Engagement in discussions of pros and cons of various assessment choices
- Students were presented with the opportunity to change their diagnoses and treatment recommendations
- Perceived benefits sparked interest to complete research study

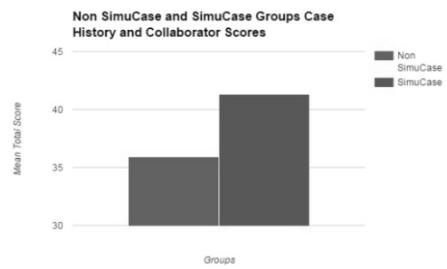
## Research Study

- To compare the assessment knowledge of graduate students who have taken a graduate level diagnostic course versus students who have taken a graduate level diagnostic course and an elective course in virtual simulations.
- N= 31, 12 Simucase and 19 controls
- All took Dx I second semester of grad study, 12 took Dx II third semester of graduate study, data collection at start of fourth semester
- Evaluation measure: Simucase Clinical Skills Inventory (SCSI)

## Results



## Results



Independent Samples T-Test: Significant (.004)

Questions – clint@simucase.com

