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Technical issues with the Recording?

- Clear browser cache using these instructions
- Switch to another browser
- Use a hardwired Internet connection
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Still having issues?

- Call 866-782-9924 (M-F, 8 AM-8 PM ET)
- Email customerservice@OccupationalTherapy.com

Developing Clinical Competency through Simulation-Based Education

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Learning Outcomes

1. List the benefits of computer-based simulations.
2. Describe how to navigate the Simucase platform successfully.
3. Explain the importance of pre-briefing, providing feedback, and debriefing learners following clinical simulations.
4. Describe how to integrate simulations into an OT curriculum and how to utilize them in Level 1 Fieldwork experiences to meet specific 2020 AOTA Standards.
5. Describe pilot study results investigating user perceptions, satisfaction and efficacy of a computer-based simulation platform.

Disclosures

- **Presenter Disclosure:** Financial: Wendy Brzozowski, Maura Lavelle and Clint Johnson did not receive an honorarium for this course. Non-financial: Wendy Brzozowski, Maura Lavelle and Clint Johnson are employees of Simucase and will be giving an overview of this product.
- **Content Disclosure:** This course will review Simucase.
- **Sponsor Disclosure:** This course is presented by OccupationalTherapy.com

Benefits of Simulations

- Opportunity to bridge the gap from the classroom to clinic
- A safe learning environment - opportunity for repeated practice to learn from mistakes
- Guaranteed exposure to particular experiences
- Technical and non-technical skills training
- Equitable learning opportunities-all students seeing same patient
- Opportunity for confidence building and reflective practice

Q1

(Gaba, 2004; Ker & Bradley, 2013)

Types of Simulation Activities

- Computer-based simulations
- Part-task trainers
- Standardized patients
- Manikins
- Virtual Reality

- Hybrid scenarios

Challenges of Incorporating Simulations

- Time to prepare simulation scenarios
- The fees associated with accessing a simulation laboratory
- Scheduling issues surrounding simulations
- Learning to use new technologies
- Coordinating experiences other disciplines

(Bethea, Castillo, & Harvison, 2014)

Benefits of Computer-Based Simulations

- Simulations are repeatable and can be accessed 24/7.
- Simulation scenarios are already created with new cases added regularly.
- Teach complete processes (e.g. evaluation and treatment protocols) and/or specific skills (e.g. use of adaptive devices, administration of a standardized test, documenting plan of care).
- Feedback and scoring algorithms are built in.
- Supervision is typically asynchronous.
- Reporting systems identify students' strengths and weaknesses.

Q2

Three requirements for Supervising Clinical Simulations (CS)

THE BIG 3

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

Q3

Pre-briefing a Simulation

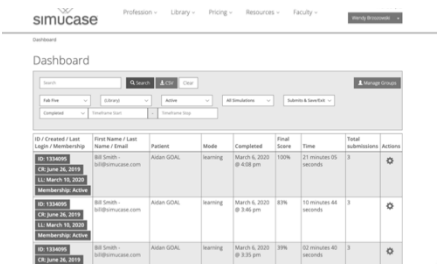
- Review the platform with students to ensure they understand the technology.
- Introduce the clinical simulation by presenting the referral, answer any questions prior to beginning.
- Tell students the number of minutes for the recommended completion time. Tell them to double that time when planning to complete their assignments.
- Provide a completion deadline.
- Review how students will be assessed upon completion.

Q4

Communicate Student Expectations for the Simulation

- All simulations should be completed 24 hours before the debrief session
- Expect to answer questions about the simulations throughout the debrief. You may bring your final reports to the debrief session.
- Simulation content is created from real patient encounters. Simulation fosters active engagement in a safe learning environment. Your role is to enter into this experience engaging with the patient, family and other members of your team as if the situation were real. This will provide you with the best active learning opportunity possible. Remember: be patient and professional. You will only get out what you put into this experience.
- The debrief sessions will typically last an hour. During the time we will:
  - Review the completed simulation(s)
  - Pre-brief the next simulations that will be due

Providing Feedback via the Faculty Dashboard



- Provide feedback prior to the due date.
- Feedback can be directive or facilitative.
- Give students the opportunity to ask questions.
- Use the faculty dashboard to monitor student progress.
- Identify areas of strength and weakness for discussion.
- Provide feedback in person, by phone, via email, or set up a discussion board.

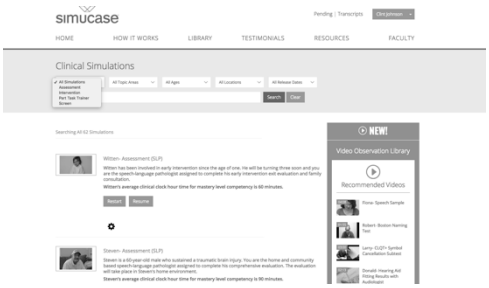
Q5

Debriefing a Simulation

- Debrief mode includes all answers to the simulation, debrief questions, and the ACOTE standards met within the simulation.
- Students should come prepared to "Tell their client's story."
- Identify the areas where the students excelled and any areas of weakness.
- All cases have a recommended completion time. Plan to spend at least 15 minutes per hour debriefing. If a case has a completion time of 120 minutes, debrief for 30 minutes.
- Include a written assignment for groups of 15 or more students.
- Review what was learned during the simulation and highlight how this information might be applied to the clients they see in the future.

Q6

Simucase Simulations + Video Library



- Assessments
- Interventions
- Part-Task Trainers (skill trainers)
- Observation video library

Clinical Decision Making and Competency Scoring

- Students earn points for reflective decisions and lose points for poor decisions (rejected decisions).
- There are also decisions that are judged as acceptable, which results in no points awarded or subtracted.
- The points earned in each section are added together to determine the overall competency level of the student.
- The following scale is utilized to assign a competency measure:
  - 90% or higher overall score = Mastering
  - 70-89% overall score = Developing
  - Lower than 70% overall score = Emerging

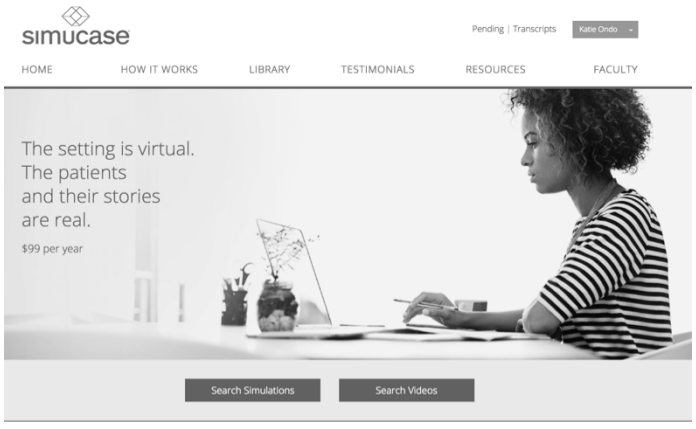
Why is the recommended competency score 90%?

An overall competency score of 90% is best practice and recommended by Simucase to ensure your students are mastering the decisions within the simulation.

The competency score is an average of all the sections of a simulation (e.g. Case History, Collaborators, Hypothesis, Assessments, Findings, and Recommendations).

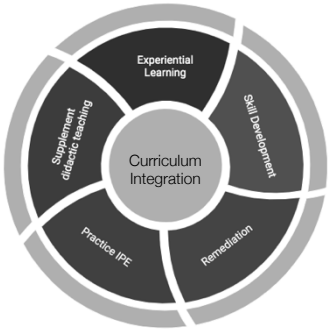
If a lower competency score is accepted, students could potentially receive a 50% in one section and 60% in another and still receive a passing competency score.

Simucase Demonstration



Curriculum Integration

1. Complete a Needs Assessment
2. Identify Learning Objectives
3. Assign Simulations and/or Patient Videos
4. Design the Debrief



(Thomas, Kern, Hughes, & Chen, 2016; Khamis et al., 2017)

Q7

Curriculum Integration

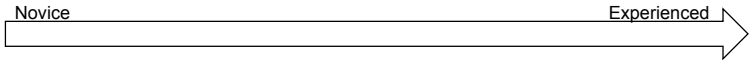
1. Complete a Needs Assessment
2. Identify Learning Objectives
   - **Example**: Upon completion of Level I Fieldwork using Simucase, the student will be able to:
     - *Interview a client and create a comprehensive occupational profile.*
     - *Utilize objective data obtained in the evaluation process and design a treatment plan.*
     - *Re-evaluate and modify intervention plans based on patient presentation*
   - ACOTE Standards provide a framework

Q8

Curriculum Integration

1. Complete a Needs Assessment
2. Identify Learning Objectives
3. Assign Simulations and/or Patient Videos

- Align assignments with learning objectives and level of your students



Curriculum Integration - Novice Student

- Case History
  - Utilize a list of all questions, highlight reflective questions and have a group discussion
  - Assign just the Case History section, create an occupational profile
    - Discuss motivational interviewing
- Collaborators
  - Utilize medical records to develop chart review skills
  - Assign just the Collaborator section
    - Discuss scope of practice / interprofessional communication
- Assessments
  - Compare specific assessment outcomes in two different simulations, i.e. home evaluation or pain scale
    - Debrief factors to consider and barriers to treatment for each client

Curriculum Integration - Experienced Student

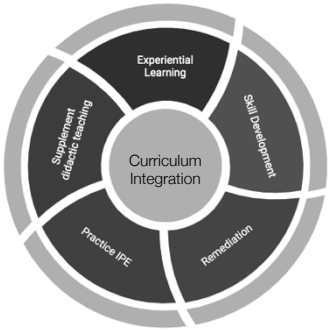
- Assessment
  - Complete all assessments with a client
    - Identify a standardized test not utilized in the case and describe expected outcomes
- Intervention
  - Complete all interventions with a client
    - Identify specific treatment principle used in each
    - Create a progressively challenging HEP for each treatment provided
- Reimbursement / Productivity
  - Review billing codes document
  - Discuss reimbursement for OT services in the client's setting
  - Identify ethical considerations for treatment and billing with the client

Curriculum Integration - FAQs

- Is it okay to repeat simulations across the curriculum?
- If I assign individual sections of a simulation, can I see how my students performed?
- What simulations can I use for OTA students?

Curriculum Integration

1. Complete a Needs Assessment
2. Identify Learning Objectives
3. Assign Simulations and/or Patient Videos
4. Design the Debrief



(Thomas, Kern, Hughes, & Chen, 2016; Khamis et al., 2017)

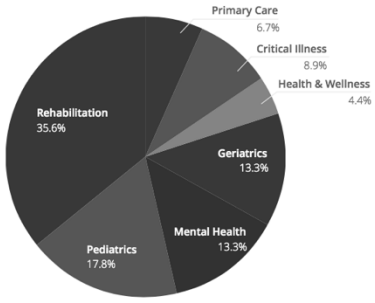
Fire Up Your Debrief Session!

Facts – Does the student know the facts of the simulation?
Interpretation – Did they understand the facts and how they related to the patient? Do they understand the emotional components of the simulation?
Reflection – Is the student able to answer *why* questions about specific choices made during the simulation?
Expansion – Are the students able to reflect upon their performance and apply it to their future clinical practice?

Adapted from Tanner's Model for Clinical Judgment (2006); Ondo & Johnson (2019)

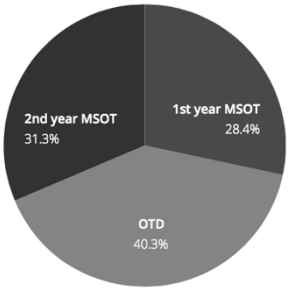
OT Pilot Program

Indicate your primary area(s) of clinical practice or expertise



Faculty Reviews across 5 universities
22 reviews of 9 simulations

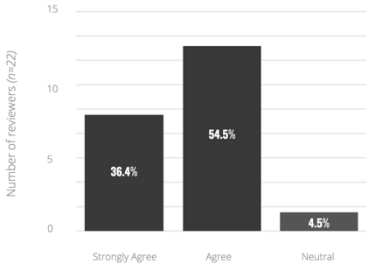
Describe where you are in your OT training (e.g. first-year graduate).



Student Reviews across 7 universities
67 reviews of 9 simulations

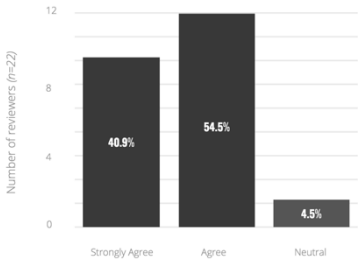
Faculty Pilot Program

The virtual case simulation provided an appropriate challenge



Over 90% of faculty agreed or strongly agreed that the simulations provide an appropriate challenge

The Simucase technology was user friendly, and technical support was available as necessary.



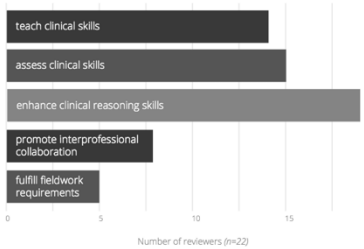
Over 95% of faculty agreed or strongly agreed that Simucase technology is user friendly

Faculty Pilot Program

Provide feedback about the quality of the simulation.

Over 80% of faculty described the simulation content as **realistic, concise, clear,** and ideal for offering clinical **practice/skill development.**

Which of the following educational goals could be met through participation in this simulation?



Over 70% of faculty described that these simulations can **enhance clinical reasoning skills** and **teach / assess clinical skills.**

Q9

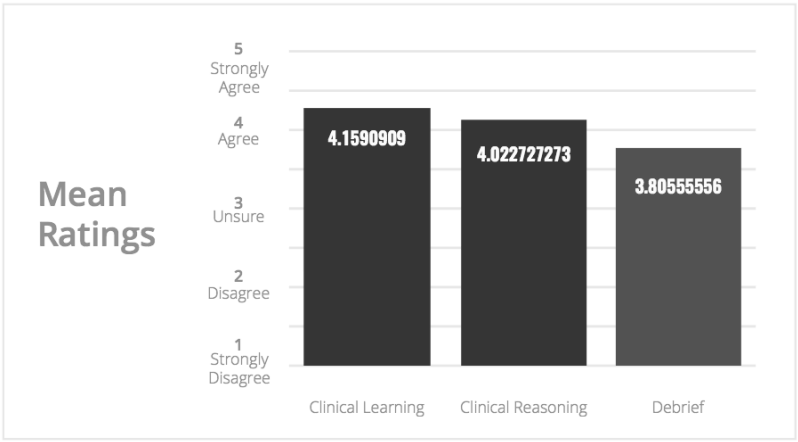
Evaluating Simucase Education

<u>Satisfaction with Simulation Experience Scale (SSES)</u>

- Method: 1st year MSOT graduate students (n=44) completed and reviewed a sampling of adult and pediatric assessment simulations
- 18 item self-rating Likert scale of satisfaction
- Adequate construct validity and reliability
- Item
  - Clinical Learning
  - Clinical Reasoning
  - Debrief and Reflection

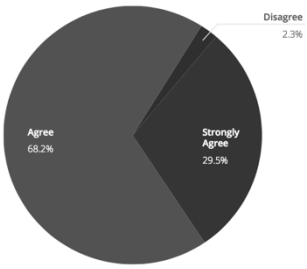
(Levett-Jones, et al., 2011; Williams & Dousek, 2012)

SSES Results



(Levett-Jones, et al., 2011; Williams & Dousek, 2012)

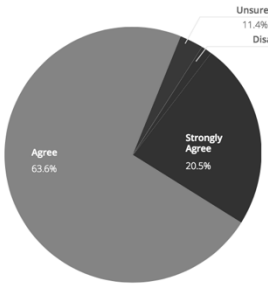
SSES: Clinical Learning



The simulation caused me to reflect on my clinical ability.

>97%

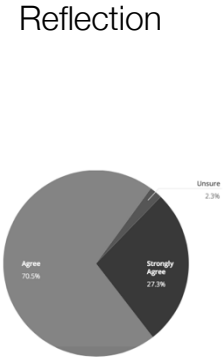
SSES: Clinical Reasoning



The simulation developed my clinical decision-making ability.

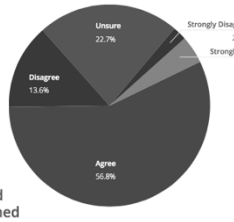
84%

SSES: Debrief and Reflection



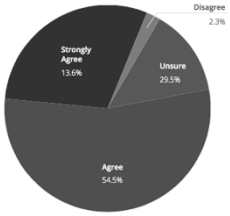
The simulation helped me apply what I learned from the case study.

97%



I had the opportunity to reflect on and discuss my performance during the debriefing.

61%



The facilitator's questions helped me learn.

68%

Lessons Learned

- Ensure facilitators understand importance of debriefing
- Offer direct feedback to guide students' decisions
- Provide explicit opportunities to identify strengths and weaknesses
- Engage students in discussion to assist with reflection
- Assist in students' application of *clinical knowledge bank* to future clinical scenarios

(Fanning & Gaba, 2007)

Q10

Simulation Development

- Structured recruitment process for practitioner and client
    - Based on expertise in requested content area
- Pre-simulation review to identify evidence-based content
- Expectations are set for the simulation
- Simulations follow AOTA Practice Framework
- Simulations are paired with ACOTE Standards of Practice
- Review Process during and after simulation development
    - Internal editorial process
    - External review board

Interested in submitting content? editorial@simucase.com

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Questions?

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