User Guide 3.0

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QUICK GUIDE



Assess your virtual client using these tools:

- 1. Work through the assessment process in the core areas, in any order. We recommend starting here:
 - a. Case History interact with the virtual client or caregiver by selecting appropriate questions
 - b. Collaborators consult other professionals and family members, select questions and review reports
 - c. Clinical Hypothesis record your hypothesis and action plan
 - d. Assessments administer age-appropriate standardized and non-standardized tests and procedures
 - e. Diagnosis select your diagnoses
 - f. Recommendations select your recommendation

You are scored based on the appropriateness of ayour decisions.

- 2. The Clipboard saves all of your decisions for review.
- 3. Save/Exit your case to resume at a later time.
- 4. Submit your case upon completion and print your finl report.

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What is Simucase[™]?

Simucase is a web-based application designed to enhance your clinical competency across various specialty areas. The platform includes interactive simulations and patient videos across multiple settings. The user can complete observations, screenings and assessments, and provide intervention while interacting with virtual clients, family members, and professionals. The Simucase library provides opportunities to practice clinical skills in a safe, nonthreatening environment and is intended to build knowledge and professional judgment—qualities that contribute to successful, competent clinicians.

Implementing Simucase

Simulations are powerful tools for learning. When simulations are blended with faculty instruction, research has shown significantly higher achievement results compared to students provided with traditional instruction (McGaghie, Siddall, Mazmanian, & Myers, 2009; Rieber, Boyce, & Assad, 1990). Research has shown that simulations are most effective when a pre-brief, feedback and debrief are completed (Fanning & Gaba, 2007). A pre-brief is an introduction to the simulation. A pre-brief establishes the standards for which learners will be evaluated by reviewing learning outcomes prior to beginning the simulation. Within a pre-brief the learners should be introduced to the simulation program and features.

A pre-brief for Simucase might include the following:

- Provide learners with detailed learning objectives for the Simucase assignment.
- Review the Simucase platform and provide an overview of the case functionality.
- Provide learners with expectations for a final debrief.

As users work on a case, they will need supportive feedback and strong guidance from their instructor to succeed. Kirschner, Sweller and Clark (2006) concluded that educational approaches that provide extensive guidance to students are more effective and efficient than approaches that are minimally guided.

Following the completion of the simulation, a debrief should occur. A debrief is the process where faculty and learners reexamine the simulation experience following the completion of the simulation. A debrief promotes the development of clinical reasoning skills through reflective learning processes. There are multiple models for debriefing. A debrief for Simucase might include the following:

- Review the simulation and identify the impact of the experience. This can be done in a writing journal, think aloud, group discussion, or 1:1 conference.
- Sort out and clarify thinking and any areas of misconception
- Identify the ways in which emotion was involved
- Reinforce specific teaching points
- Allow time for reflection and generalization of the experience

Facilitative instruction with a guided pre-brief and debrief, combined with the experiential learning opportunities that Simucase provides, creates a successful constructivist approach to teaching and learning.

Simucase Scoring

Simulation scoring is based on the strength of the decisions students make within each section of a case. In general, students earn points for good, **reflective** decisions and lost 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

Simucase Categories

Screening simulations are designed to improve the skill sets necessary for completion of a screen. These cases contain screenings for the user to practice the elements that contribute to a comprehensive screening protocol.

Assessment simulations encourage the student to exercise the clinical decision-making skills required for a full client assessment. The student is expected to interact with family and other professionals to gather information pertinent to the case, as well as administer assessments to make a diagnosis and provide recommendations.

Intervention simulations are designed to provide learners the opportunity to improve interventions skills; each case includes intervention activities that allow for practice of treatment methods.

Part Task Training simulations are designed to improve the skill sets necessary for completion of a specific task (e.g. administering an assessment, interpreting a video swallow study).

Patient Video Library is a collection of short video clips that target specific learning objectives across 20+ target areas.

Simulation Learning Mode and Assessment Mode

There are two simulation modes that a user must select from when beginning a simulation: learning mode and assessment mode.

Start Case	×
Learning Mode Provides specific feedback regarding performance throughout the case to facilitate learning.	Assessment Mode Designed to assess your overall performance on the case. There is no specific feedback regarding your actions in the case.
Start in Learning Mode	Start in Assessment Mode

Learning mode is designed to provide the user with specific, real-time feedback relative to clinical decision-making throughout the simulation. The intent of learning mode is to provide the student with a formative learning experience. Performance meters are found in the main menu of the case, and these meters fill and empty based on the actions of the user. The goal is to fill the meter completely for each section. As the meter fills, the color will transition from yellow to green, indicating mastery within the section. Within learning mode, there are positive feedback messages when a user makes a series of correct decisions and there are redirect messages when a user makes incorrect selections.



Feedback messages also occur as the user progresses through the case. When a series of good decisions are made, a positive feedback message appears at the base of the case study window.



When poor decisions are made, a redirect feedback message appears in the same manner. The number of redirect feedback messages received by the user within each section is saved in both the clipboard and the final report. When poor decisions continue to be made, the redirect message changes to reflect critical errors and the user is prompted to restart the simulation.



Assessment mode is designed to assess the overall performance of a user in a summative manner. The only feedback provided in assessment mode is a redirect prompting the user to restart when a series of critical errors has occurred. No additional, real-time feedback is provided to the learner within the case while in assessment mode. The performance meters remain grayed out and no additional feedback messages are presented to the user within the case. The user is provided a final score after submitting the case.

Working, Saving and Submitting a Simulation

For each of the four simulation types, there are key functions that are similar as students work through a case: the clipboard, saving/exiting a case, and submitting a case.

Using the Clipboard

The **Clipboard** is a dynamic, interactive tool that allows recording of data throughout a simulation. This is a feature designed to help organize user data; use of the clipboard is not scored. Decisions made throughout the case are added automatically from each of the tools. Additional notes can be entered by clicking the **Add Entry** button. Users can also delete notes in the Clipboard.



The Clipboard offers the option for users to enter General Information. This is an optional feature that allows users to record behavioral objectives such as conditions, student behavior and performance criteria. The user can add, edit, or delete text in the general information section at any time prior to submitting the case. All notes in the Clipboard are included in the final report so decisions made during the case can be reviewed once the case is submitted. As a reminder, use of the Clipboard is not scored.

The clipboard can be hidden using the **Show/Hide Clipboard** button in the main navigation, as well as attached and re-attached to the main header of the case study with the **Attach/Re-Attach** button. The clipboard is easily moved by clicking and dragging, and can also be re-sized by clicking and dragging the edges of the floating window.



Save/Exit

Simucase has an auto-save function so the user does not need to worry about saving data while working within a case. To exit the program, select **Save/Exit**, and then choose from the following options:

Save My Progress and Exit—this feature allows the user to save all work with the case and to exit the program. Saved cases are listed in a user's pending course page.

Forget My Progress and Exit—this feature allows the user to exit and restart a case.

Return to Current Case—this feature allows the user to go back into the current case.

simucase	☞ Save and Exit	X Submit Case 🛓 Save & Ext
Case History Collab	Save My Progress and Exit All progress up to this point will save as a Saved Case, allowing you to resume it at any time in the future.	lagnosis Recommendations
	Forget My Progress and Exit All progress up to this point will be forgotten. You will have to start over from the beginning.	

Submitting the Simulation

A simulation is not complete until the user chooses **Submit Case**—the final step in the simulation process. When clicking Submit Case, results regarding the user's competencies in each of the areas of decision-making associated with the case type are provided.

In addition, the amount of time spent in the case is indicated, although is not a part of competency scoring. The time indicated is an estimate and includes the time it might have taken to complete a screening or assessment activity. Although time spent on a case is not considered in the competency scoring, the issue of time spent on a case is a good point of discussion for any of the cases included in Simucase.

The user can view a printed report of his or her competencies and all clinical decisions he or she made throughout a case by **Exporting Final Report**. This final report is a PDF summarizing all actions taken within the simulation. The user's competency scores are also listed. Completed cases are saved on a user's Completed Case Transcript.

simucase	C Restart the Simulation 1	Select a New Case 🛛 🗐	View Transcript	Export Final Report
RESULTS - LEARNING N	IODE	Client Name: Fiona	Examination Da	te: October 30, 2017
Collabora 19% • 0%			Diagnosis 0% o	Recommendations 0% •
	Completion Time: 10 Minutes	Your Competency Sc	ore: 3%	
3%: Emerging Competency	Overall Compe Emerging Co			
	EMERCING (0-69%)		DEVELOPING MAST (70-89%) (90-1	Eling 00%
		nal Report		

Simucase[™] Technical Requirements

Simucase is cloud-based application with minimal technical requirements: a web browser and a high-speed Internet connection. For optimal performance we recommend the following:

Supported Internet Browsers: Safari version 7.0 and above, Firefox version 38.0 and above, Internet Explorer 10.0 and above, Chrome version 42 and above

To insure compatibility, users can select the **Browser Test** found on the Simucase drop down menu to test the required browser settings.



To verify the ability of your system to playback media (i.e. audio and video files) within the Simucase application, the Browser Test page also includes automatic playback of a video file. You should see and hear the virtual patient introduction.



Additional recommendations for optimal performance of Simucase include:

- JavaScript must be enabled
- Adobe Acrobat Reader (free from <u>get.adobe.com/reader/</u>
- Headphones are optional but highly recommended

We are here to help you! If additional technical support is needed, please contact Simucase.com customer service at 855-747-9547 between the hours of 7 AM and 7 PM ET. You may also contact our support team via email at <u>help@Simucase.com</u>

Simucase Frequently Asked Questions

Where Does the Case Content Come From?

Simucase content has been provided by families from a variety of hospitals, schools, and clinics across the United States. Each case was created from an actual client and submitted by a practicing speech-language pathologist.

Once a case is created, at least two reviewers with expertise in the disorder area review the case content to insure evidence-based practices. Each reviewer evaluates scoring information and provides approval prior to release of a case.

How Long Should It Take a User to Complete a Case?

Understanding that Simucase is a simulated case study experience for the speech-language assessment process, it should take users several hours to successfully complete a case. Since this experience is similar to the diagnostic process, users should expect to spend approximately 1-3 hours working through the diagnostic process.

Can a case be completed more than once?

YES! One of the greatest advantages of simulation is the opportunity for repeated practice. Learners should be encouraged to start over when dissatisfied with decisions or scoring.

Can students work on more than one case at a time?

YES! Each case is stored and scored independently within the Simucase.com user account.

Are there any supplemental activities available?

YES! Simucase assessment cases also include Supplemental Activities for use. Click **Supplemental Activities** on the Results page to access these activities. All forms are provided in PDF format and can be downloaded to a local drive for printing and use.

Screening

Screening simulations are designed to improve the skill sets necessary for completion of a screen. These cases contain screenings for the user to practice the elements that contribute to a comprehensive screening protocol.

The Simucase Screening Tools

The majority of Simucase tools are presented in the toolbar at the top of the opening screen. Referral, Collaborators, Screening/Assessments, Screening Results, Summary, Save/Exit, and Submit Case are easy to access via the toolbar. The dynamic clipboard, an additional tool, helps users organize the information they gather about the case. When first opening a case, the Clipboard must be opened and can be resized, as well as closed as needed. The following sections walk you through the purpose and function of each of the menus in the toolbar.



Referral

The **Referral** tool allows the user to interact with the supervising speech-language pathologist to find out more information pertaining to the case. The user may select questions. These responses can be viewed and printed at any time. All videos allow the user to adjust the volume, play at full screen, replay, rewind, pause, or stop.



Collaborators

The user can consult other family members and various professionals who may be working with the client using the **Collaborators** tool.



Once chosen, a collaborator makes an opening remark and some collaborators will send a report to the user. Reports are sent as PDF files to the Clipboard, where they ca xn be opened.

Following the opening remark, users are provided a list of questions to ask the collaborator. Users should be selective of the questions they ask and avoid asking redundant questions. When complete, users will select the x to close the question window in order to collaborate with other professionals. For Screening cases, users must collaborate with the supervising speechlanguage pathologist to both gain and share information regarding the case.



Screening/Assessments

The **Screening/Assessments** tool allows the user to choose from a variety of screening and assessment measures. Users can print a PDF of all available assessment measures. Printing this PDF allows the user to plan ahead for an efficient session (much like what is required in the real world).



For all screening/assessment tools, users are expected to know the age range and appropriateness of an approach and activity; an inappropriate choice (e.g., due to age range) will result in negative points and affect the user's overall competency rating. Screening/Assessment tools are available in a number of formats. Computer-driven assessments are those that the computer automatically provides results. Users simply select the component they wish to utilize. When clicking **Administer**, a summary of the results of the assessment appears in the Interaction box. More detailed results of the screening or assessment are placed in the Clipboard. The user may add to the details in the Clipboard regarding any of the screenings or assessments at any time by clicking **Add Entry.**



User-driven screenings/assessments are those that the user controls and all selections are interactive. The user observes, scores, and reports the response accuracy of the client. In some cases, the user-driven treatment is a graded assessment. Graded assessments are interactive and require the user to answer questions that are graded for accuracy. The number of questions tied



to each response is variable and the user must answer all questions to advance through the graded assessment. Graded assessments results are NOT included in the clipboard, but will be reported on the results page and the final exported report at the completion of the case. When clicking **Administer**, user-driven screenings/assessments play a video so the user can practice conducting the screening/assessment, scoring, and reporting. All videos allow the user to adjust the volume, play at full screen, replay, rewind, pause, or stop. Once the user completes an analysis, the data or results obtained may be entered into the clipboard. All screenings/assessments may be re-administered at any time, however, this extra time and effort affects the user's overall time.

Screening Results

The **Screening Results** tool allows the user to indicate outcome of the screening. After making selections, the user clicks **Select**.



Summary

In addition to reporting screening results, the **Summary** tool allows you to select a summary statement for the client. After selecting the summary statement, the user clicks **Submit**.



How Does Simucase Screening Scoring Work?

Understanding that Simucase is a simulated learning experience, users are encouraged to complete the simulation as many times as needed. The most powerful form of learning is through repeated practice. Therefore, users are encouraged to practice and learn from their mistakes and to spend as much time as needed working through a case. As they work through the case, if many mistakes are made, students are encouraged to begin again. They should not be worried about restarting a case for learning purposes.

Simucase scoring is rated based on strength of decision-making skills. The following describes how decisions within each competency are scored.

Referral

Questions are rated based on strength of decision-making skills when gathering referral information. Users must be selective in the questions chosen. If questions are repeated or are redundant, points may be deducted (redundancy is not the best use of the user's, client's, or caregiver's time). Some questions may be irrelevant and score 0 points; other questions may be inappropriate for the case and will score negative points.

Collaborators

Points are awarded for identifying appropriate collaborators for a case and for selecting relevant questions. Points are deducted for selecting inappropriate team collaborators. Once a collaborator is chosen, the user can ask the collaborator questions to obtain additional information about the case. Points are deducted for asking irrelevant, inappropriate, or redundant questions.

Screening/Assessments

Points are awarded for administering appropriate screening/assessments. Each case has numerous possibilities for outcomes but it is the combination of screening/assessments that is scored.

In screening/assessments, users are deducted points for:

- Selecting inappropriate screening or assessment activity based on the case information
- Selecting an unnecessary screening or assessment activity
- Selecting an age-inappropriate screening or assessment activity
- Selecting two or more screening or assessment activities that measure the same outcome

Screening Results

Points are awarded for selecting the appropriate outcome for speech, language, and hearing screen. Points are deducted for each inappropriate selection.

Summary

Points are awarded for selecting the most appropriate summary statement regarding the progress of the client.

Areas Not Scored

As mentioned previously, the final competency score and rating are calculated based solely on the decisions of the user. Use of the Clipboard is **not** scored. This is an optional feature that assists users with the treatment process. Graded assessment results are reported separately on the results page and within the final exported report, but are **not** included in the calculation of the final competency score or competency rating. The time it takes to complete a case is measured but is also **not** scored. The timer indicates total simulation play time. This can be defined as the time spent in the simulation, which helps users monitor their efficiency in making case decisions. Note that the estimated time it takes to complete specific treatment activities is included in the time spent in the simulation.

The Simucase Competency Rating

A user's overall competency in screening a particular client is rated and indicated on the Results screen. The Results screen displays a user's overall performance in each of these areas:

- Referral
- Collaborators
- Screenings/Assessments
- Screening Results
- Summary

If a user earns a 90% or higher overall score, the Mastering competency rating is earned. If a user earns an overall score of 70-89% a Developing competency rating is earned. If a user fails to earn at least 70% an Emerging competency rating is earned.

Assessment

Assessment simulations encourage the student to exercise the clinical decision-making skills required for a full client assessment. The student is expected to interact with family and other professionals to gather information pertinent to the case, as well as administer assessments to make a diagnosis and provide recommendations. Assessment cases are available in both learning and assessment modes. Please direct your students to utilize the most appropriate mode based on your learning objectives, learning activities and assessment methods.

The Simucase Assessment Tools

The majority of Simucase tools are presented in the toolbar at the top of the opening screen. Case History, Collaborators, Clinical Hypothesis, Assessments, Diagnosis, Recommendations, Save/Exit, and Submit Case are easy to access via the toolbar. The dynamic clipboard, an additional tool, helps users organize the information they gather about the case. When first opening a case, the Clipboard must be opened and can be resized, as well as closed as needed. The following sections walk you through the purpose and function of each of the menus in the toolbar.



Case History

The **Case History** tool allows the user to interact with a virtual client or caregiver (e.g., a parent). By choosing a category of questions and then directly selecting questions within the category, the virtual client or caregiver responds. As questions are selected, responses are placed in the user's Clipboard as though the user is taking notes. These responses can be viewed and printed at any time.



Collaborators

The user can consult other family members and various professionals who may be working with the client using the **Collaborators** tool.

SIMUCASE Neurosci di procedentación com	Getting Started A Submit Case 🛓 Save & Exit
Case Histor Collaborators Hypothesis (a) Assessme	ents Diagnosis Recommendations
建 COLLABORATORS O Help	SELECT A COLLABORATOR TO ASK A QUESTION
Medical Physican Family Family Mether	 Instructions Click on an individual team member with whom you wish to collaborate. Select a question. Questions and responses will be saved in the clipboard. Enter any additional notes via 'Add Entry' in the clipboard. View reports (if applicable) in the clipboard.
Allied Professions	

Once chosen, a collaborator makes an opening remark; then the collaboration occurs via selected questions. Some collaborators will send a report to the user. Reports are sent as PDF files to the Clipboard, where they can be opened. When complete, users will select the x to close the question window in order to collaborate with other professionals.

SIMUCASE Provededuce at representation corr com	Getting Started A Submit Case 🛓 Save & Exit
Case History Collaborators O Hypothesis Assessment	ents Diagnosis O Recommendations
COLLABORATORS O Help	SELECT A COLLABORATOR TO ASK A QUESTION
Mother *	 Instructions Click on an individual team member with whom you wish to collaborate. Select a question. Questions and responses will be saved in the clipboard.
Why does Fiona live with you?	Enter any additional notes via 'Add Entry' in the clipboard.
Please describe Fiona's history with stuttering.	View reports (if applicable) in the
Do you blame yourself for not getting her more help? Do you think if you had gotten her more therapy she wouldnt have continued to stutter?	Clipboard. You contact the Mother
What are your current concerns?	
How has Fiona's stuttering changed over time?	Mother: Hi, I'm Fiona's mother. I can answer questions you may have,
Describe how Fiona's stuttering changes by situation. however Fiona is an adult and can answer on her own behalf.	
How do you feel that Fiona's stuttering affects her in school?	
Do you feel Fiona is able to communicate well with you?	

Clinical Hypothesis

The clinical hypothesis tool allows the learner to record a clinical theory and plan regarding the client's presentation of behaviors. The purpose of the clinical hypothesis is to guide clinical decision-making throughout the simulation. The student must type in both the hypothesis and the action plan in the designated text fields. Once the student clicks the **Save** button, the data is then stored in the clipboard for later review. The clinical hypothesis is not graded, but is instead marked as complete or incomplete in the final report.

SINUCASE Proveded by speed-destination control → Getting Started → Submit Case ★ Save &	Exit
Case History Collaborators O Hypothesis Assessments O Diagnosis O Recommenda	ions
• HYPOTHESIS • Help	
Client Name: Fiona	
Hypothesis #1 Delete	
Action Plan:	
Add Another Hypothesis	
Discard Changes Save Hypothesis	

Assessments

The **Assessments** tool allows the user to choose from a variety of resources—including both standardized tests and non-standardized tests and procedures—with which to evaluate the client. The assessment options are categorized by the domain or area of assessment (e.g., Articulation and Phonology, Fluency, Classroom Performance) and by subcategories within those areas. Users can print a PDF of all available assessment options categorized by domain and subcategories. Printing this PDF allows the user to plan ahead



for an efficient assessment (much like what is required in the real world).

For all assessment tools, a brief description of the test or procedure is given as well as the reference/source. Users are expected to know the age range and appropriateness of an assessment tool; an inappropriate choice (e.g., due to age range, area of assessment) will result in negative points and affect the user's overall competency rating. A link to the Reference List is provided so users can refer to the original source for more information, including how to conduct a procedure and/or how to interpret results.

Administration of assessments is either computer driven or user driven. Computer-driven assessments are those that the computer automatically provides results. Users simply select the component they wish to assess, then the test or subtest they wish to administer. When clicking **Administer**, a summary of the results of the assessment appears in the Interaction box. More detailed results of the assessment are placed in the Clipboard. The user may add to the details in the Clipboard regarding any of the assessments at any time by clicking **Add Entry**.



User-driven assessments are those that the user controls. The user observes, scores, analyzes, and interprets results. Examples of user-driven assessments include procedures to analyze a speech sample, a language sample, a play session, an interview, or an oral mechanism exam.

The user-driven assessments include blank forms to download and use when conducting the procedure and analysis. When clicking **Administer**, many user-driven assessments have a video file play so the user can practice conducting the procedure, the scoring, and the analysis. All videos allow the user to adjust the volume, play at full screen, replay, rewind, pause, or stop. Other user-driven assessment tools do not provide a video or audio file for analysis. Rather a checklist, written language sample, etc. is downloaded to the Clipboard for analysis. Once the user completes an analysis, the data or results obtained can be entered into the clipboard.

All assessments may be re-administered at any time, however, this extra time and effort affects the user's overall time.



Diagnosis

The **Diagnosis** tool allows the user to indicate a diagnosis. Categories and subcategories of diagnoses are provided as choices. Cases may have multiple diagnoses so users need to be thorough in their choices. Cases may also have no area of concern. Once choosing the categories/subcategories of diagnoses or indicating no concern, the user clicks **Select**.

	O 00:00:29 IIII Show Clipboard A Getting Started A Submit Case L Save & Exit
Case History	Collaborators O Hypothesis Assessments Diagnosis Recommendations
	leip
Instructions	Client Name: Fiona
AAC/Augmentative Communication	Cognition/Executive Function
Aphasia	Cognition
Apraxia	Executive Functioning Deficits
Attention/Behaviora	Memory Deficits
Autism	Mild Cognitive Impairment
Central Auditory Processing	Severe Cognitive Impairment
Cognition/Executive Function	Select
Dialect	
Dysarthria	
Dysphagia/Feeding	
Fluency	

Recommendations

In addition to making a diagnosis, the **Recommendations** tool allows you to select recommendations for the client. If intervention is required, that recommendation must be made. Once selecting the recommendation, the user clicks **Submit.** Recommendations can be added or deleted at any time until the case is submitted.



How Does Simucase Assessment Scoring Work?

Understanding that Simucase is a simulated learning experience, users are encouraged to complete the simulation as many times as needed. The most powerful form of learning is through repeated practice. Therefore, users are encouraged to practice and learn from their mistakes and to spend as much time as needed working through a case. They should not be afraid to start over when mistakes are noted and they should not fear starting over often.

Simucase scoring is rated based on strength of decision-making skills. The following describes how decisions within each competency are scored.

Case History

Questions are rated based on strength of decision-making skills. Users must be selective in the questions chosen. If questions are repeated or are redundant when a question was already asked, points may be deducted (redundancy is not the best use of the user's, client's, or caregiver's time). Some questions may be irrelevant and score 0 points; other questions may be inappropriate for the case and will score negative points.

Collaborators

Points are awarded for identifying appropriate collaborators for a case and for selecting relevant questions. Points are deducted for selecting inappropriate team collaborators. Once a collaborator is chosen, the user can select the collaborator questions to obtain additional information about the case. Users are deducted points for selecting redundant and inappropriate questions.

Assessments

Points are awarded for administering appropriate standardized assessments or informal measures. Each case has numerous possibilities for assessments but it is the combination of assessments that is scored.

In assessments, users are deducted points for:

- Selecting inappropriate assessments based on the information and topic area (e.g., a stuttering assessment for a language case)
- Selecting an unnecessary assessment
- Selecting an age-inappropriate assessment (e.g., selecting the *Clinical Evaluation of* Language Functions-Preschool for an adolescent student)
- Selecting two or more assessments that measure the same outcome (CAAP-2 and the HAPP-3)

Diagnosis

Points are awarded for identifying areas of concern for a given case. Each case study can contain one or several areas of concern or diagnoses. Each of these areas needs to be selected based on assessment results in order to show competency. Points are deducted for each inappropriate diagnosis identified. Note that the outcome of a case can also have no area of concern.

Recommendations

Points are awarded for selecting the most appropriate recommendation for each case.

Areas Not Scored

Use of the Clipboard is **not** scored. This is an optional feature that assists users with the assessment process. The time it takes to complete a case is measured but is also not scored. The timer indicates total simulation play time. This can be defined as the time spent in the simulation, which helps users monitor their efficiency in making case decisions. Note that the estimated time it takes to administer specific tests and procedures is included in the time spent in the simulation. The clinical hypothesis is not scored; it is marked as complete or incomplete in the final report.

The Simucase Competency Rating

A user's overall competency in assessing a particular case is rated and indicated on the Results screen. The Results screen displays a user's overall performance in each of these areas:

- Case History
- Collaborators
- Clinical Hypothesis
- Assessments
- Diagnosis
- Recommendations

If a user earns a 90% or higher overall score, the Mastering competency rating is earned. If a user earns an overall score of 70-89% a Developing competency rating is earned. If a user fails to earn at least 70% an Emerging competency rating is earned.

Scoring Model

On the Results page, click Scoring Model to review an example of the breakdown of the skills for each case. Competencies are based on the American Speech-Language-Hearing Association's (2009) Knowledge and Skills Acquisition (KASA) standards. Each case has customized KASA competencies to track user performance.
Intervention

Intervention simulations are designed to provide learners the opportunity to improve interventions skills; each case includes intervention activities that allow for practice of treatment methods. Please note the intervention cases are only available in assessment mode.

The Simucase Intervention Tools

The majority of Simucase tools are presented in the toolbar at the top of the opening screen. Baseline Data, Collaborators, Treatment, Client Progress, Summary, Save/Exit, and Submit Case are easy to access via the toolbar. The dynamic clipboard, an additional tool, helps users organize the information they gather about the case. When first opening a case, the Clipboard must be opened and can be resized, as well as closed as needed. The following sections walk you through the purpose and function of each of the menus in the toolbar.



Baseline Data

The **Baseline Data** tool allows the user to interact with the virtual client. By choosing a category of questions (i.e. language samples) and then directly selecting questions within the category, the virtual client responds. All videos allow the user to adjust the volume, play at full screen, replay, rewind, pause, or stop.



Collaborators

The user can consult other family members and various professionals who may be working with the client using the **Collaborators** tool. Once chosen, a collaborator makes an opening remark; then the collaboration occurs via selecting questions for the chosen collaborator. Some collaborators will send a report to the user. Reports are sent as PDF files to the Clipboard, where they can be opened. For intervention cases, users must collaborate with the supervising speech-language pathologist to both gain and share information regarding the case.



Treatments

The **Treatment** tool allows the user to choose from a variety of treatment activities which to evaluate the client. The treatment approach options are categorized by type of activity and each activity includes a variety of intervention techniques. Users can print a PDF of all available treatment options categorized by activity and approaches. Printing this PDF allows the user to plan ahead for an efficient treatment session (much like what is required in the real world).



For all treatment tools, users are expected to know the age range and appropriateness of an approach and activity; an inappropriate choice (e.g., due to age range) will result in negative points and affect the user's overall competency rating. Treatment tools are available in a number of formats. Computer-driven treatments are those that the computer automatically provides results. Users simply select the component they wish to utilize. When clicking **Administer**, a summary of the results of the treatment appears in the Interaction box. More detailed results of the treatment are placed in the Clipboard. The user may add to the details in the Clipboard regarding any of the treatments at any time by clicking **Add Entry**.



User-driven treatments are those that the user controls and all selections are interactive. The user observes, scores, and reports the response accuracy of the client. In some cases, the userdriven treatment is a graded assessment. Graded assessments require the user to answer questions for each response. The number of questions tied to each response is variable and the user must answer all questions to advance through the graded assessment. Graded assessments results are NOT included in the clipboard, but will be reported on the results page and the final exported report at the completion of the case.

When clicking **Administer**, user-driven treatments play a video so the user can practice conducting the technique, the scoring, and the reporting. All videos allow the user to adjust the volume, play at full screen, replay, rewind, pause, or stop. Once the user completes an analysis, the data or results obtained may be entered into the clipboard. All treatments may be re-administered at any time, however, this extra time and effort affects the user's overall time.

Client Progress

The **Client Progress** tool allows the user to indicate the accuracy for completed treatment activities. The user is expected to indicate the appropriate level of accuracy, take home activities, and indicate if the objectives were or were not met for the sessions. After making selections, the user clicks **Select.**

	O 00:02:38 Image: Show Clipboard Image: A Getting Started Image: Submit Case Image: Save & Exit
Baseline Data	Collaborators Client Progress Summary
🖻 CLIENT PROG	
Instructions	Client Name: Alex
Social / Emotional	Dijectives
Objectives	Objectives Met
Activity	Objectives Not Met
Auditory Discrimination	Select
/k/ Isolation	
/k/ Sentence Level	
/m/ Initial Position Word Level	
/p/ Initial Position Word Level	
/r/ Syllable Productions	
/r/ Initial Position Word Level	

Summary

In addition to reporting client progress, the **Summary** tool allows the user to select specific details regarding the client's session. After selecting the summary, the user clicks **Save Summary**. The summary can be edited at any time until the case is submitted.

Baseline Data Collaborators I Treatment Client Progress Summary
UMMARY Orein Alex was inattentive throughout. He did not engage in any activity or participate in therapy. Session results reported to family and teacher, continue plan of care. Alex was attentive intermittently during the session. He required redirection and continued encouragement to stay engaged in the therapy activities. Alex completed auditory discrimination with 80% accuracy. Targeted /r/ in initial position of words. Alex is beginning to show emerging r/l productions in words such as recess and read. Provided take-home activity and reported session results to family, continue plan of care. Alex was attentive intermittently during the session. He required consequences for his actions in words care. Alex was attentive throughout. He engaged in all activities. He produced /r/ in isolation with 100% accuracy. He produced r/l in the posted session results reported to family, continue plan of care. Alex was attentive intermittently during the session. He required consequences for his actions in order to complete the therapy session. He produced /r/l in the function with 40% accuracy. He produced r/l in Submit Submit

How Does Simucase Intervention Scoring Work?

Understanding that Simucase is a simulated learning experience, users are encouraged to complete the simulation as many times as needed. The most powerful form of learning is through repeated practice. Therefore, users are encouraged to practice and learn from their mistakes and to spend as much time as needed working through a case. As they work through the case, if many mistakes are made, students are encouraged to begin again. They should not be worried about restarting a case for learning purposes.

Simucase scoring is rated based on strength of decision-making skills. The following describes how decisions within each competency are scored.

Baseline Information

Questions are rated based on strength of decision-making skills when gathering language samples. Users must be selective in the questions chosen. Some questions may be irrelevant and score 0 points; other questions may be inappropriate for the case and will score negative points.

Collaborators

Points are awarded for identifying appropriate collaborators for a case and for selecting relevant questions. Points are deducted for selecting inappropriate team collaborators. Once a collaborator is chosen, the user can select the collaborator questions to obtain additional information about the case. Users are deducted points for selecting inappropriate, irrelevant, or redundant questions of a collaborator.

Treatments

Points are awarded for administering appropriate treatment activities. Each case has numerous possibilities for treatments but it is the combination of activities that is scored. In treatments, users are deducted points for:

- Selecting inappropriate treatment activity based on the case information
- Selecting an unnecessary treatment activity
- Selecting an age-inappropriate treatment activity
- Selecting two or more treatment activities that measure the same outcome

Client Progress

Points are awarded for identifying the accuracy for an appropriate level of targeting the sound(s) in question for a given client, appropriate take home activities and the correct status of objectives. Points are deducted for each inappropriate selection.

Summary

Points are awarded for selecting the most appropriate summary statement regarding the progress of the client.

Areas Not Scored

As mentioned previously, the final competency score and rating are calculated based solely on the decisions of the user. Use of the Clipboard is **not** scored. This is an optional feature that assists users with the treatment process. Graded assessment results are reported separately on the results page and within the final exported report, but are **not** included in the calculation of the final competency score or competency rating. The time it takes to complete a case is measured but is also **not** scored. The timer indicates total simulation play-time. This can be defined as the time spent in the simulation that helps users monitor their efficiency in making case decisions. Note that the estimated time it takes to complete specific treatment activities is included in the time spent in the simulation.

The Simucase Competency Rating

A user's overall competency in treating a particular client is rated and indicated on the Results screen. The Results screen displays a user's overall performance in each of these areas:

- Baseline Information
- Collaborators
- Treatments
- Client Progress
- Summary

If a user earns a 90% or higher overall score, the Mastering competency rating is earned. If a user earns an overall score of 70-89% a Developing competency rating is earned. If a user fails to earn at least 70% an Emerging competency rating is earned.

Part Task Trainer

Part Task Trainer simulations are designed to improve the skill sets necessary for a specific assessment measure.

The Simucase Part Task Trainer Tools

The majority of Simucase tools are presented in the toolbar at the top of the opening screen. Referral, Manual, Screening/Assessments, Assessment Results, Summary, Save/Exit, and Submit Case are easy to access via the toolbar. The dynamic clipboard, an additional tool, helps users organize the information they gather about the case. When first opening a case, the Clipboard must be opened and can be resized, as well as closed as needed. The following sections walk you through the purpose and function of each of the menus in the toolbar.



Referral

The **Referral** tool allows the user to interact with a speech-language pathologist to find out more information pertaining to the case. The user may select questions. These responses can be viewed and printed at any time. All videos allow the user to adjust the volume, play at full screen, replay, rewind, pause, or stop.



Manual

The user can consult the assessment manual using the **Manual** tool.



Once chosen, the manual makes an opening remark and sends portions of the printed manual to the Clipboard. Reports are sent as PDF files to the Clipboard, where they can be opened. Following the opening remark, users are provided a list of questions to ask the manual. Users should be selective of the questions they ask and avoid asking redundant questions. When complete, users will select the x to close the question window.

Screening/Assessments

The **Screening/Assessments** tool allows the user to administer screening and assessment measures.



For all screening/assessment tools, users are expected to know the age range and appropriateness of an approach and activity; an inappropriate choice (e.g., due to age range) will result in negative points and affect the user's overall competency rating. The user may add to the details in the Clipboard regarding any of the screenings or assessments at any time by clicking **Add Entry.**



User-driven screenings/assessments are those that the user controls and all selections are interactive. The user observes, scores, and reports the response accuracy of the client. In some cases, the user-driven treatment is a graded assessment. Graded assessments are interactive and require the user to answer questions that are graded for accuracy. The number of questions tied to each response is variable and the user must answer all questions to advance through the graded assessment. Graded assessments results are NOT included in the clipboard, but will be reported on the results page and the final exported report at the completion of the case.

When clicking **Administer**, user-driven screenings/assessments play a video so the user can practice conducting the screening/assessment, scoring, and reporting. All videos allow the user to adjust the volume, play at full screen, replay, rewind, pause, or stop. Once the user completes an analysis, the data or results obtained may be entered into the clipboard.

All screenings/assessments may be re-administered at any time, however, this extra time and effort affects the user's overall time.

Screening Results

The **Assessment Results** tool allows the user to indicate outcome of the screening. After making selections, the user clicks **Select**.

ASSESSMENT RESULTS • Help Instructions Client Name: Alexis PPA Scale Part Task Trainer Raw Score: Raw Score: Rhyming Raw Score: Print Knowledge 0 Raw Score: Initial Sound Matching 1 Raw Score: Final Sound Matching 2 Raw Score: 3
Task Trainer Raw Score: Raw Score: Rhyming Raw Score: Print 0 Raw Score: Initial 0 Sound Matching 1 Raw Score: Final 2 Raw Score: 3
Rhyming Raw Score: Rhyming Raw Score: Print 0 Raw Score: Initial 1 Sound Matching 2 Raw Score: Sound Matching 3
Raw Score: Initial Sound Matching 1 Raw Score: Final Sound Matching 2 Raw Score: Sound-Symbol 3
Raw Score: Final Sound Matching 2 Raw Score: Sound-Symbol 3
Raw Score: 3
Raw Score: 4 Phonemic
Awareness 5 Total Raw Score
Standard Score
Confidence 7 Interval 90% Form A +/- 3
Form A +/- 3

Summary

In addition to reporting screening results, the **Summary** tool allows you to select a summary statement for the client. After selecting the summary statement, the user clicks **Submit**.



How Does Simucase Part Task Trainer Scoring Work?

Understanding that Simucase is a simulated learning experience, users are encouraged to complete the simulation as many times as needed. The most powerful form of learning is through repeated practice. Therefore, users are encouraged to practice and learn from their mistakes and to spend as much time as needed working through a case. As they work through the case, if many mistakes are made, students are encouraged to begin again. They should not be worried about restarting a case for learning purposes.

Simucase scoring is rated based on strength of decision-making skills. The following describes how decisions within each competency are scored.

Referral

Questions are rated based on strength of decision-making skills when gathering referral information. Users must be selective in the questions chosen. If questions are repeated or are redundant, points may be deducted (redundancy is not the best use of the user's, client's, or caregiver's time). Some questions may be irrelevant and score 0 points; other questions may be inappropriate for the case and will score negative points.

Manual

Points are awarded for collaborating with the manual and for selecting relevant questions. Points are deducted for selecting inappropriate questions.

Screening/Assessments

Points are awarded for administering appropriate screening/assessments. In screening/assessments, users are deducted points for:

- Selecting inappropriate screening or assessment activity based on the case information
- Selecting an unnecessary screening or assessment activity
- Selecting an age-inappropriate screening or assessment activity
- Selecting two or more screening or assessment activities that measure the same outcome

Screening Results

Points are awarded for selecting the appropriate outcome. Points are deducted for each inappropriate selection.

Summary

Points are awarded for selecting the most appropriate summary statement regarding the progress of the client.

Areas Not Scored

As mentioned previously, the final competency score and rating are calculated based solely on the decisions of the user. Use of the Clipboard is **not** scored. This is an optional feature that assists users with the treatment process. Graded assessment results are reported separately on the results page and within the final exported report, but are **not** included in the calculation of the final competency score or competency rating. The time it takes to complete a case is measured but is also **not** scored. The timer indicates total simulation play time. This can be defined as the time spent in the simulation, which helps users monitor their efficiency in making case decisions. Note that the estimated time it takes to complete specific treatment activities is included in the time spent in the simulation.

The Simucase Competency Rating

A user's overall competency in screening a particular client is rated and indicated on the Results screen. The Results screen displays a user's overall performance in each of these areas:

- Referral
- Manual
- Screenings/Assessments
- Assessment Results
- Summary

If a user earns a 90% or higher overall score, the Mastering competency rating is earned. If a user earns an overall score of 70-89% a Developing competency rating is earned. If a user fails to earn at least 70% an Emerging competency rating is earned.

Patient Video Library

Patient Video Library is a collection of short video clips that target specific learning objectives across 20+ target areas.

The Patient Video Library Tools

Users can search for videos by topic, ages, locations, release dates and the open text search.



The Pending page displays videos that users start and do not complete. The Pending page can be filtered for All, Simulations, or Videos.



The Transcript page displays videos that users complete. The Transcript page can be filtered for All, Simulations, or Videos.



References

- Akilli, G.K., & Cagiltay, K. (2006). An instructional design/development model for game-like learning environments: The FIDGE model. In M. Pivec (Ed.), Affective and emotional aspects of human-computer interaction game-based and innovative learning approaches (Vol. 1, pp. 93-112). Amsterdam, The Netherlands: IOS Press.
- American Speech-Language-Hearing Association. (2009). *Knowledge and skills acquisition (KASA)* summary form for certification in speech-language pathology. Retrieved from www.asha.org
- McGaghie, W.C., Siddall, V.J., Mazmanian, P.E., & Myers, J. (2009). Simulation in undergraduate and graduate medical education: Implications for CME. *Chest*, *135*(3 Suppl.), 62S-68S.
- Rieber, L.P., Boyce, M., & Assad, C. (1990). The effects of computer animation on adult learning and retrieval tasks. *Journal of Computer-Based Instruction*, *17*(2), 46-50.
- Williams, S., & Schreiber, L. Simulated case studies for SLP student assessment. Paper presented at the American Speech Language and Hearing Association, November, 2009 New Orleans, Louisiana.
- Williams, S., & Schreiber, L. Simucase: Interactive case studies for SLP student assessment. Paper presented at the Council of Academic Programs for Communication Sciences and Disorders, April, 2010 San Antonio, Texas.
- Williams, S., Lewis, B., & Buchner, M. (2006). Creation and implementation of an interactive immersive virtual reality simulation program for training CASE students: Best practice diagnostic procedures for children with speech-language disorders. Unpublished paper, CASE Western University, Cleveland, OH.