INTERACTIVE SCENARIO BUILDER (ISB)

for Windows

USER GUIDE

An Easy-To-Use Tool for Creating Web-Ready Simulations of Interpersonal Interactions

Developed by the Center for Spirituality and Healing for use by Faculty, Staff, and Students

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<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABOUT THE INTERACTIVE SCENARIO BUILDER (ISB)</td>
<td>3</td>
</tr>
<tr>
<td>PLANNING A SCENARIO</td>
<td>4</td>
</tr>
<tr>
<td>PROGRAM FLOW IN A FINISHED SCENARIO</td>
<td>5</td>
</tr>
<tr>
<td>INSTALLING THE ISB</td>
<td>6</td>
</tr>
<tr>
<td>GENERAL NAVIGATION</td>
<td>7</td>
</tr>
<tr>
<td>USING A WORD TEMPLATE TO PLAN YOUR SCENARIO</td>
<td>8</td>
</tr>
<tr>
<td>INTRODUCTION SCREEN</td>
<td>9</td>
</tr>
<tr>
<td>IMPORTING PHOTOS</td>
<td>10</td>
</tr>
<tr>
<td>HOW TO PROCESS PHOTOS FOR THE ISB USING PHOTOSHOP</td>
<td>11</td>
</tr>
<tr>
<td>YOUR ROLE SCREEN</td>
<td>12</td>
</tr>
<tr>
<td>PATIENT INTERACTION SCREEN</td>
<td>13</td>
</tr>
<tr>
<td>General Overview</td>
<td>13</td>
</tr>
<tr>
<td>Specifying Guidelines</td>
<td>14</td>
</tr>
<tr>
<td>Overview of Questions and Statements</td>
<td>15</td>
</tr>
<tr>
<td>Entering Questions</td>
<td>16</td>
</tr>
<tr>
<td>Advanced Features</td>
<td>17</td>
</tr>
<tr>
<td>Editing Questions or Statements</td>
<td>18</td>
</tr>
<tr>
<td>Levels of Frustration</td>
<td>19</td>
</tr>
<tr>
<td>FEEDBACK SCREEN</td>
<td>20</td>
</tr>
<tr>
<td>REFECTION ON THE INTERACTION SCREEN</td>
<td>21</td>
</tr>
<tr>
<td>PLAN OF CARE INTRODUCTION SCREEN</td>
<td>22</td>
</tr>
<tr>
<td>PLAN OF CARE OPTIONS SCREEN</td>
<td>23</td>
</tr>
<tr>
<td>Editing Care Options</td>
<td>24</td>
</tr>
<tr>
<td>FOLLOW-UP TO THE PLAN OF CARE SCREEN</td>
<td>25</td>
</tr>
<tr>
<td>SUMMARY SCREEN</td>
<td>26</td>
</tr>
<tr>
<td>SAVING AND PUBLISHING YOUR SCENARIO</td>
<td>27</td>
</tr>
<tr>
<td>VIEWING A COMPLETED SCENARIO</td>
<td>28</td>
</tr>
</tbody>
</table>
The Interactive Scenario Builder (ISB) allows you to create online patient care scenarios without any knowledge of programming. These scenarios simulate a provider/patient interaction. Learners select questions to ask the virtual patient. The patient responds differently to each question. After the interaction, learners select a plan of care for the patient.

As the author of a scenario, you develop the details:

- **The scenario:** What is the patient's story? Where is he or she at in their process? Are they newly diagnosed? Are they coming to you for a second opinion?
- **The goal of the interaction:** What are the learning objectives?
- **The questions learners can ask the patient:** There should be a wide range of questions, some appropriate and some inappropriate.
- **Patient responses to each question:** Just like in real life, you may want learners to encounter some unexpected answers to questions
- **Plan of care options:** Like the questions, there should be a wide range, some good, some bad.

Once you have planned your scenario, simply open the input tool and enter the scenario information in each field. When you are done, you click the Create Course Package button and the tool automatically compiles your information into a finished scenario. All of the necessary files are assembled in a single directory on your computer, which your network administrator can then upload to the web.
Creating the online simulation using the input tool is the easy part.

Coming up with effective scenarios and writing a "superlist" of provider questions and plan of care options involves some planning.

Before you begin writing, look at a finished simulation:

www.csh.umn.edu/isb/index.html

PLANNING A SCENARIO

Consider the following questions before creating your scenario:

- What is your instructional goal with this simulation? For example, do you want learners to uncover specific patient information? Do you want them to practice dealing with a difficult situation?
- Do you have a guideline, model, or framework for the interaction that you want learners to apply?
- What details do you want to give learners about the patient and the situation at the very beginning?
- At what point in the patient visit is this interaction taking place?
- What are the important questions that the learner should ask in this situation? How would this patient respond to these questions? What non-verbal cues would they give?
- What are some inappropriate questions or statements? How would the patient respond?
- Should the learner ask certain questions before others (is there an order they should follow)?
- What aspects of the interaction would you like the learner to reflect on? For example, would you like them to reflect on how they feel after dealing with a difficult patient?
- What are some appropriate plan of care options in this situation? How would this particular patient respond to them? (Patients might reject good care options!)
- What are some inappropriate plan of care options?
- What would you like to see in a follow-up plan for this patient?
The **Introduction** screen provides the learner with a general overview of the scenario.

The **Your Role** screen describes the role of the learner ("In this scenario, you are a healthcare provider and the goal is to...").

The **Patient Interaction** screen has a "Superlist" of questions that the learner can ask the patient. The patient responds to each question.

The **Reflect on the Interaction** screen provides a question and answer that invites the learner to think about their reactions to the interaction.

The **Feedback** screen provides feedback on the interaction based on values you assigned to each question.

The **Plan of Care Intro** screen has a Q&A that invites the learner to reflect on establishing a plan of care for the patient.

The **Plan of Care** screen has a "Superlist" of care options that the learner can recommend for the patient. The patient responds to each care option.

The **Feedback** screen provides feedback on the plan of care based on values you assigned to each question.

The **Follow-Up to the Plan of Care** screen provides an opportunity for the learner to think about what type of follow-up the patient may need.

The **Summary** screen provides a brief recap of the scenario.
To install the ISB:

- Double click the **Interactive Scenario Builder Install** icon.
- It will install the program in your Program Files folder, it automatically puts the necessary files into the Program Files folder on your computer (see the screen captures on the right).
- It also creates a shortcut on your desktop.

To launch the program:

- Double-click the shortcut icon.

**Note:** You can save your scenario in the “Projects” folder if you want, but you don’t have to. You can save your scenarios in any folder on your computer. If you are working on more than one scenario, be sure to save each scenario in a separate folder. If you save all of your scenarios in the “Projects” folder, it will overwrite the last one each time you save.
GENERAL NAVIGATION
(or How to Create a Scenario in a Nutshell)

There are eight screens you need to complete. Go to each screen by clicking these buttons. You can complete the screens in any order.

Each screen has fields into which you enter information. You can cut and paste text from Word into the fields.

Follow the prompts in each field.

There are default screen titles (you can change them).

As you enter information into each field, this screen capture dynamically shows you what the screen will look like in the finished scenario.

Click Create Course Package to when you are ready to publish the scenario.

Click Open Module to open a file you have already saved.

Click Save Module as you go along to save your work. Be sure to save your work frequently.
USING A WORD TEMPLATE TO PLAN YOUR SCENARIO

Some people find it easier to plan their scenario in a word processing program, and then copy and paste the information into the ISB. We have a template that you can download from the web at http://www.csh.umn.edu/isb/index.html. Below is a screen capture of the first page of the template. The places where you need to enter information are highlighted in yellow.

---

**ISB TEMPLATE**

Note: The photos on screens 1-5, 6-7, and 9-10 are linked. If you change the picture on one of these screens, it will change the picture on each of these screens.

Identify the photo that you want to appear on these screens:

**Enter name of pg here**

<table>
<thead>
<tr>
<th>Introduction = Screen 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your Role = Screen 2</td>
</tr>
<tr>
<td>Interaction = Screen 3 (the photo that appears when the learner first gets to this screen)</td>
</tr>
<tr>
<td>Reflection = Screen 4</td>
</tr>
<tr>
<td>Intro to Plan of Care = Screen 6</td>
</tr>
<tr>
<td>Plan of Care = Screen 7</td>
</tr>
<tr>
<td>Follow-Up = Screen 9</td>
</tr>
<tr>
<td>Summary = Screen 10</td>
</tr>
</tbody>
</table>

---

**1. INTRODUCTION SCREEN**

<table>
<thead>
<tr>
<th>What is the title of your scenario? (character limit – 87)</th>
<th>Write a brief description of your scenario (no character limit – window will scroll)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enter screen title here</strong> – the default is “Introduction”</td>
<td><strong>Enter scenario description here</strong></td>
</tr>
</tbody>
</table>

---

**2. YOUR ROLE SCREEN**

<table>
<thead>
<tr>
<th>What is the title of this screen? (character limit – 87)</th>
<th>Describe the role the learner will play (for example, “In this scenario you are a healthcare provider interviewing a patient”). You can also list the learning objectives here. (no character limit – window will scroll)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enter screen title here</strong> – the default is “Your Role”</td>
<td><strong>Enter role description here</strong></td>
</tr>
</tbody>
</table>
The Introduction screen provides the learner with a general overview of the scenario.

You need to enter:
- The title of your scenario (for example, "Seeking Relief of Menopause Symptoms").
- An introduction to the scenario (for example, "Marissa is a 52-year-old woman who has been referred to you for relief of menopause symptoms.").
- Your name and department under "Author Credits."
- A photograph of the patient.

Note: You can change the screen title if you want.
IMPORTING PHOTOS

To import photos into the ISB, click the camera icon on the screen:

1. Click the Import New button.
2a. Browse to the folder where you saved the photo.
2b. Click on the photo you want and click Open. It will appear in the ISB list.
3. You can import all of your photos at the same time by repeating Steps 1 and 2. The names of the photos are displayed here.
4. Click on any photo to select it.
5. Click the Accept button.

NOTE: You can only select ONE photo for the following screens:
Screen 1: Introduction
Screen 2: Your Role
Screen 3: Interaction (the photo that appears when the learner first gets to this screen)
Screen 4: Reflection
Screen 6: Intro to Plan of Care
Screen 7: Plan of Care
Screen 9: Follow-Up
Screen 10: Summary

The photos on these screens are linked. If you change the picture on one of these screens, it will change the picture on each of these screens.
HOW TO PROCESS PHOTOS FOR THE ISB USING PHOTOSHOP

Important notes about photos:
- Photos must be saved as jpg files.
- The name of the jpg must be lowercase.
- Do not save the graphics as Progressive JPG files. If your photos are progressive JPGs, they will not work in the ISB. This is due to a bug in Flash.
- Photos should be 300 pixels wide by 343 pixels high. The ISB will automatically resize your graphics, but they need to be proportional to dimensions of this field.

Step 1. Open your graphic in Photoshop (if it's really big, you might want to reduce it using Image --> Image Size and changing the pixel dimensions. Then, select the rectangular marquee tool, set the Style to "fixed size" and set the width to 300 px and the height to 343 px as shown. Click your mouse in the graphic. A selection box will show up. Click your mouse to move the box around to center it over your graphic. Then select Image --> Crop.

Step 2. Save the graphic as a JPG. Go to File -> Save As. Under "Format" click on the pulldown menu arrow to select JPG.

Step 3. Name the graphic. Important: Make sure the letters are all lowercase. Also make sure that the "ICC Profile" and "Use Lower Case Extension" boxes are checked as shown. Then click the Save button.

Step 4. After you click Save, the following dialogue box will appear. Make sure that the Baseline ("Standard") Format Option is selected. Then click the OK button.
YOUR ROLE SCREEN

The **Your Role** screen describes the role of the learner in the scenario and the goal of the patient interaction.

**You need to enter:**
- The learner's role (for example, "You are a healthcare provider working in a holistic care clinic.").

**Notes:** You can change the screen title if you want. If you change the photo on this screen, remember it will change it on all other screens (see “Importing Photos”).

The screen will end up looking like this:
The **Patient Interaction** screen is where you enter all of the questions in your superlist and any guidelines for the questions. Detailed instructions are provided on the following pages.

**PATIENT INTERACTION SCREEN**

**General Overview**

This is how the superlist appears in the simulation:

- Click **Specify Guidelines** to classify questions (see next page for more info).
- Click **Add New Question or Statement** to add an item to the Superlist (see next page for more info).

Having learners select items from a superlist is more instructionally effective than simple multiple choice questions.
The guidelines provide a way for you to categorize each question or statement according to a model, framework, or principle. This feature is optional.

The program can evaluate whether or not learners have successfully selected items from each category of the model.

- **If you have specified guidelines**, the feedback screen will display whether or not they asked questions from each guideline in a column labeled “Guidelines.”

- **If you haven’t specified guidelines**, the program will display “N/A” in this column.

For example, the "PEARLS" model is used to facilitate effective patient-provider communication. Each item in the superlist can be categorized according to this model.

- Partnership
- Empathy
- Apology
- Respect
- Legitimization
- Support
Here is an example of information entered for a single question in the Superlist:

<table>
<thead>
<tr>
<th>Question/Statement:</th>
<th>I'd like to repeat the history and exam today.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Response:</td>
<td>Haven't I already been through that? Why can't you just read my file?</td>
</tr>
<tr>
<td>Patient Photo:</td>
<td>upset.jpg</td>
</tr>
<tr>
<td>Body Language:</td>
<td>Patient starts crying.</td>
</tr>
<tr>
<td>Value:</td>
<td>1 (assigning a value of &quot;1&quot; means that it isn't a very good question).</td>
</tr>
<tr>
<td>Rationale for Question:</td>
<td>Respect for the referring provider and the time of the client would be best served by verifying components of the history and performing targeted aspects of the exam.</td>
</tr>
</tbody>
</table>

(Note: The value of the question and the rationale don't appear in this screen. They appear later in the Feedback screen.)

This is how the information appears in the scenario:
For the most effective simulations, we recommend that you write a large number of questions/statements. There should be four types of questions or statements:

- **Excellent.** You will assign a value of 4 to these items.
- **OK, but not the best.** You will assign a value of 3 to these items.
- **Not useful.** You will assign a value of 2 to these items.
- **Harmful or detrimental.** You will assign a value of 1 to these items.

For each question or statement, you will need to enter:

- The patient's response
- The patient's photo (changing a photo for a question doesn’t change the photo on the other screens)
- The patient's body language (optional)
- A brief rationale for why the item is useful or not
- The value of the question
- Any guidelines

When you are done entering a question, either click the **Done** button, or click the **Save and Add New Question** button to continue adding items.

**Question Value Key:**
- 4 - Excellent
- 3 - Okay, but not the best
- 2 - Not useful
- 1 - Detrimental

**Note:** The photos you select for the Superlist don’t appear in the screen capture in the lower-left corner of the ISB.
You can specify whether or not an item will appear in the superlist. Items that don't appear in the superlist can only be accessed when the learner searches for it using a keyword.

You can also specify prerequisite questions, that is, a question or questions that the learner should ask before a particular question. There is no limit to the number of prerequisite questions you can specify, but we recommend you use them judiciously.

**For example:**

**Question 2:** What is your name?
**Question 5:** What is your sexual history?

If you want a learner to ask Question 2 before they ask Question 5, you would go to Question 5 and click the “Specify Prerequisite Questions” button. Then, click on Question 2 in the list. It will turn red, indicating that it is a prerequisite.

In the scenario, if the learner clicked on Question 5 before clicking on Question 2, a blue pop-up box would appear:

*It is inappropriate to ask this question at this time. A more appropriate question would be "What is your name?"*
You can scroll through the list of items you have entered by clicking the forward and back arrows. You can also edit and delete items.

**Note:** The patient photo doesn't change as you scroll through the questions, but it does appear when you click **Edit**.
In a finished scenario, the program automatically adds "levels of patient frustration" if the learner repeatedly asks inappropriate questions (that is, questions assigned a value of 1 or 2). Different expressions of frustration are added at the beginning of the patient's response.

For example:

- After a learner selects the 5th inappropriate question, the patient will say "Isn't this taking a long time?"
- After a learner selects the 10th inappropriate question, the patient will say, "This seems like a lot of questions."
- After a learner selects the 15th inappropriate question, the patient will say "I have to go soon."
- After a learner selects the 20th inappropriate question, the patient will say "Are you even listening to me? I can't sit here and answer questions all day."
- After the 20th inappropriate question, the program stops tracking frustration.
The program will provide feedback after the patient interaction, and after the learner selects plan of care options. You do not need to enter anything for feedback screens - the program automatically tracks the value of the questions and statements you entered and generates this screen. We are showing the feedback screen here to give you a sense of how the program flows, but there is no feedback screen in the Input Tool.

- **Key Questions Asked or Statements Made**: Lists all the 4-value questions and statements that the learner selected, the patient response, the relevant guideline (if applicable) and the rationale for the question.

- **Key Questions or Statements Missed**: Lists all the 4-value questions and statements that the learner missed, the patient response, the relevant guideline (if applicable) and the rationale for the question.

- **Ineffective Questions or Inappropriate Statements**: Lists all the 1-value and 2-value questions and statements that the learner selected, the patient response, the relevant guideline (if applicable) and the rationale for the question.

- **Use of Guidelines**: Tells the learner whether or not they asked questions from each guideline in the patient interaction. This button appears only if you have specified guidelines.

**Note**: Value 3 items do not appear in the feedback.
The Reflect on the Interaction screen provides a question and answer that invites the learner to reflect on the patient interaction.

You need to enter:
- The reflective question (for example, "Did you find yourself reacting emotionally to the patient?").
- A response to the question that provides a brief discussion of issues you want the learner to consider.

Note: If you change the photo, remember it will change it on all other screens (see “Importing Photos”).

The screen will end up looking like this:
PLAN OF CARE INTRODUCTION SCREEN

The Plan of Care Introduction screen provides a question and answer that invites the learner to reflect on establishing a plan of care for the patient.

You need to enter:
- The reflective question (for example, "Do you feel comfortable determining a plan of care for the patient at this point?").
- A response to the question that provides a brief discussion of issues you want the learner to consider.

Note: If you change the photo, remember it will change it on all other screens (see “Importing Photos”).
At the Plan of Care screen, you will enter a variety of care options for the patient that the learner can select.

You need to enter:
- The plan of care option.
- The patient's response to the suggested option.
- A rationale for the option.
- The value of the plan of care option.
- If you want, you can change the screen title and the additional instructions.

For the most effective simulations, we recommend that you write a large number of care options. Just like the questions in the superlist, there should be four types of care options:

- Excellent. You will assign a value of 4 to these items.
- OK, but not the best. You will assign a value of 3 to these items.
- Not useful. You will assign a value of 2 to these items.
- Harmful or detrimental. You will assign a value of 1 to these items.

The screen will end up looking like this:

Click here to enter a new care option.

Type the plan of care option here.

Type the patient's response to the plan of care here.

Type the rationale for the plan of care option here.

Specify the value of the care option here.

Click the Accept button when you are done.
You can scroll through the list of care options you have entered by clicking the forward and back arrows.

You can also edit and delete options.

In the program, the user can click on the Patient Response button to see the patient's response to each care option selected:
The Follow-up to the Plan of Care screen provides an opportunity for the learner to think about what type of follow-up the patient may require.

**You need to enter:**
- A general discussion of issues that you want the learner to consider with regards to establishing a follow-up plan for the patient.

**Note:** If you change the photo, remember it will change it on all other screens (see “Importing Photos”).

This interaction is not judged. The learner types in their response and clicks the Discussion button for generic feedback.
The Summary screen provides a brief synthesis of the scenario.

You need to enter:
- A summary of important points from the scenario.

Note: If you change the photo, remember it will change it on all other screens (see “Importing Photos”).
SAVING AND PUBLISHING YOUR SCENARIO

Save your work as you go along!
- The program doesn't automatically save each page so you need to be vigilant about saving your work.
- The first time you click the Save Module button, it will prompt you to specify the folder that you want to save the scenario in.
- Save your work often.

Publishing your scenario
- When you have finished entering information for each screen and are ready to publish your scenario, click the Create Course Package button.
- The program will prompt you to specify the folder that you want the scenario saved in.
- A pop-up dialogue box will confirm that your file was saved.

For testing purposes, we recommend publishing your scenario frequently as you input information into the ISB.
VIEWING A COMPLETED SCENARIO

To look at your completed scenario:

• In the folder where you saved your scenario, there should be four files:

  1. **Images** (all of the JPGs you use in your scenario are copied into this folder)
  2. **course.html** (this is a web page that holds the Flash movie)
  3. **course.swf** (this is your scenario - it's a Flash file that pulls information from your data file)
  4. **scenario.xml** (this is the data file that feeds the scenario)

• Double click on **course.html** (or open it manually in Internet Explorer).

• You need to have the Flash player installed to run the scenario. Here is the URL to download the Flash player:

Uploading your scenario to the web

• Work with your network administrator to upload these files to your server.
Good luck with your scenario!

If you need additional assistance on this tool, please contact:

Louise Delagran
Education Specialist
delag002@umn.edu
612-625-2197

Sheila Hoover
Education Specialist
hoove024@umn.edu
612-624-7669

University of Minnesota
csh.umn.edu