The Purpose of this Document

This document is a teacher resource for Ecopod, a place-based, mobile learning project created by the Center for Applied Second Language Studies (CASLS) at the University of Oregon. This document is designed to 1) provide a brief introduction to digital games and place-based learning; 2) provide examples of how teachers use ARIS, a place-based mobile game design platform, in the classroom; 3) and provide examples of how students might use ARIS to build games for themselves. In concert, these stated purposes fulfill the ultimate goal of this document— to prepare teachers to use ARIS games that have already been built in their classrooms and to support teachers wishing to have their students develop games in ARIS.

Table of Contents

Why ARIS (Why Digital Games and Place-Based Language Learning)?.................................3
  What is ARIS?..................................................................................................................3
  Why digital games? ........................................................................................................3
  Why place-based mobile games? ....................................................................................4

Using ARIS for Game-Enhanced Instruction........................................................................5
  What is game-enhanced instruction? .............................................................................5
  How can I find games on ARIS? ...................................................................................5
  What are some examples of game-enhanced learning with ARIS? ...............................5

Using ARIS for Student-Created Projects...........................................................................7
  Steps for Classroom Incorporation..............................................................................7
  Object Activity...............................................................................................................8
  Trigger Activity.............................................................................................................9
  A note about scenes.....................................................................................................10
  A recommended timeline for building an entire game..................................................10

Great! Now how do I get started? ......................................................................................11

References.......................................................................................................................13

Appendices.......................................................................................................................14
Why ARIS (Why Digital Games and Place-Based Language Learning)?

What is ARIS?

ARIS (Augmented Reality Interactive Storytelling Engine) is an open-source, user-friendly platform that is used to create and play mobile games. These games can incorporate augmented reality and geotagged locations, thereby facilitating game-enhanced learning, game-based learning, and place-based language learning. To build with ARIS, users simply need to register online. To play games on ARIS, registered users need to download the ARIS app (iOS only) and use the search function to find the games they need.

Why Digital Games?

In second language acquisition (SLA), digital games provide the ability to expand upon what is normally possible in a classroom. For example, challenges in intercultural competence, pragmatics, and learning strategies are usually set aside to be tackled through study abroad and immersion settings. With games, however, these issues can be addressed in a traditional language classroom (Sykes, 2013), a need that is widely recognized. In fact, the 2007 Modern Language Association Report stated that the adoption of curricula that has the potential to increase translingual and transcultural competence is essential for a broad range of students (Neville, 2010). The use of games can help satisfy the transcultural aspect of a well-rounded curriculum that is often difficult to provide. In addition, digital games provide opportunity for students to increase their autonomy and reinforce classroom learning. Games can accommodate multiple learning styles while also adapting to the skill level of the player and providing a meta-understanding of how to learn (De Grove, 2012).

As stated in Sykes (2013), five principles of SLA: goals, interaction, feedback, context, and motivation, run parallel to sound digital game design (p. 32). In digital games, goals and goal orientation are continually evolving as a player progresses through a game. Effective use of games has the potential to maintain learner-driven participation without interfering with instructional demands. Student autonomy is authenticated through gameplay and provides a solution to static learning tasks (Sykes, 2013). The second principle, interaction, can be seen on a number of levels, depending on the game involved. In general, however, digital games offer a context in which interaction is facilitated through, about, and around the game (Sykes, 2013). For feedback, digital games provide
resources to learners as the game unfolds. Failure through games is a fantastic teaching method as it provides multiple opportunities for success, often through engaging with a task several times. This characteristic also provides ample opportunity for instructors to give feedback (Sykes, 2013). Next, context is created by both the in-game narrative and also context of play. Game narrative, characters, and communities help create literacy around the game and can serve as a starting point for extension activities and discussion (Sykes, 2013). As noted in Neville (2010), “Seeing knowledge as being contextually situated has a profound impact on both teaching and learning. In particular, it fundamentally alters how a student interacts with a problem space and similarly influences the form that knowledge can take within this space” (p. 450). Finally, the principle of motivation is a key reason for using digital games in the L2 classroom. Good game design is key to an engaging and motivating game. Sykes (2013) states, however, that “while games can be engaging, it is usually the experience of learning elements of language (such as politeness and intercultural competence) which prove to be the true motivators” (p. 33). That is to say, games offer the ability to learn linguistic elements that traditional classrooms cannot provide. Namely, pragmatics can be introduced and practiced via games, offering a new motivation for language learning that students often don’t have access to.

Do digital games have a place in the classroom? A most emphatic yes. Through game integration, instructors not only have the potential to increase student engagement and motivation, but also deepen student pragmatic and cultural awareness. Though the world of digital gaming is new and rapidly evolving, there are many advantages that can be gleaned from its implementation in SLA. Pedagogy and SLA must rise up to meet the new demands and possibilities of an increasingly digital society.

**Why Place-Based Mobile Games?**

Though digital games offer a variety of formats, topics, and genres, place-based mobile games in particular allow educators to meaningfully and profoundly engage learners with the local community (Holden & Sykes, 2011b; Klopfer, 2008; Mathews, 2010; Squire, 2009; Sykes, 2013,). The result of this characteristic is that learners are more likely to find learning experiences to be both authentic (genuine) and relevant (personally authenticated). Place-based games like *Ecopod: Survival, Ecopod: Quake Response!, ChronoOps*, and *Paris Occupé* (all available on the ARIS platform) have the potential to engage language learners socially, engage learners with target language speakers in both digitally-mediated and face-to-face interactions, and expose language learners to
language learning “in the wild,” that is, language learning in a naturalistic setting (Holden & Sykes, 2011a) In this sense, the ability of place-based mobile games to move learners out of the classroom and to simultaneously capitalize on the affordances of digitally-mediated and face-to-face communication uniquely positions place-based mobile experiences as a viable tool to enhance language learning.

Using ARIS for Game-Enhanced Instruction

What is game-enhanced instruction?

Loosely put, game-enhanced language learning involves the use of games not necessarily designed for language learning as academic intervention. Typically, educators find or suggest games to use to explore a certain theme or topic (Plague Inc. by Ndemic Creations and Miniclip (resources found here) helps students explore issues related to global health) or engage in a specific language function (games like Fallout Shelter (Bethesda Game Studios) could be used to expose learners to flirting in the target language). Games on ARIS certainly serve both purposes.

How can I find games on ARIS?

Finding games on ARIS is relatively simple. Simply create your account online, download the client app, and log in. Then, use the search function to find what you are looking for. If you aren’t sure what is available, many place-based games are featured on CASLS’s project site for Place and Experienced-Based Language Learning (PEBLL). Additionally, you could engage in place-based mobile learning by using the activities created for Ingress.

What are some examples of game-enhanced learning with ARIS?

Ecopod: Survival, a game created by the Center for Applied Second Language Studies for use in the University of Oregon residential immersion program, is an excellent example of game-enhanced learning through ARIS. In Ecopod: Survival, learners use their target language to solve problems and find collaborators in order to survive a global pandemic. Students create game narrative at the end of play and consider how location and sociopragmatic awareness might change the narrative from its translated version.

A selection of novice through advanced classroom activities that facilitate active language learning through Ecopod are available here. Below is one advanced example
activity taken from “Ecopod for the Language Classroom.” Handouts can be accessed at the end if this document in Appendices 1 and 2.

Objectives:

Learners will be able to:

- Negotiate unknown language
- Create a survival narrative that reflects the cultural norms of a city in which the target language is spoken
- Fulfill meaningful roles in a collaborative group

Modes: Presentational, Interpersonal, Interpretive


Procedure:

1. Divide the class into groups of three members and give each group one of each of the group role worksheets provided (Appendix 1). Each member will take one for themselves. Explain that the objective of this exercise is to have all of the members of the group contribute to the brainstorming activity in a specific way in order to accomplish the task efficiently.

2. In their groups, learners will play through Ecopod: Survival. If they lose the game, instruct them to try again and give them suggestions about what they can do to survive longer, like choosing a different dialogue options or picking up more items. As they play, they must each take notes on their own sheets of paper of every event that occurs to inform the rest of this activity.

3. After playing, learner groups will move on to the brainstorming exercise to think of ways to reshape the narrative of the game to suit the context of a different city which speaks the target language. Every learner will have their own role and worksheet (assigned by the respective Recorder, Reader, and Facilitator Sheets: Appendix 1), and learners are not allowed to show it to the other members of the group. This exercise strategically divides up the labor for accomplishing the brainstorming exercise so that learners will be better prepared to change the
story to suit their target city. As they brainstorm, learners will be encouraged to
do as much research as necessary to get a good sense of the city which they
have chosen, whether on a laptop or some other sort of personal device.

4. Once each group has accomplished the brainstorming activity to the best of their
abilities, bring the class back together and go through the questions on the
brainstorming activity, inviting learners to share what they answered.

5. Finally, give the *Ecopod: Survival* Writing Handout (Appendix 2) to each learner.
They will choose one section of *Ecopod: Survival* to rewrite: Day 1, Day 2, Year 1,
Year 2, or Year 5. They will use the city that their group researched and
brainstormed with as the setting of the narrative, and keep in mind how the
regional, cultural, and social aspects of that city will shape the content. Tell
learners to be as creative with this as they wish, but to still reference events they
encountered in the game. Learners should write in second person to mimic how
the story is currently written.

6. Once they have finished writing their narratives, invite a learner to share his or
her creation with the rest of the class. Afterwards, collect the writings from the
learners to check their language use and their integration of the cultural realities
of a city in which the target language is spoken.

---

**Using ARIS for Student-Created Projects**

**Steps for Classroom Incorporation**

As is the case with any tool for learning, learning to build with ARIS requires time.
As such, we recommend having learners build with certain functionalities in the tool with
alternative content leading up to their ultimate creation of a game. This alternative content
might be game-related, or it could simply be that students learn a functionality by turning
in a classroom assignment, like a self-reflection, through ARIS. In general, the goal is to
maximize familiarity with the tool before learners engage in the difficult task of writing
their own game narratives. This way, the game narrative creation requires the majority of
their effort when the time comes.
In order to be prepared to use ARIS, students need a basic understanding of objects (media content), triggers (how to access content), and scenes (organizational units for triggers and objects). Activities that expose students to these features are explained below.

Object Activity

The activity below requires students to build a single object in ARIS and is included in this document as an approachable way to get students to learn the platform. Objects (media content) can be plaques (information screens), items/attributes collected during gameplay, conversations, or webpages. The object type featured in the activity below is plaque. Plaque was chosen because it is the most basic type of game object in ARIS. Also, plaques include a title, descriptive text and can include external media (video, sound, or images) and/or icons (seen from only from the geotagged location in which the plaque is visible). As such, the creation for the plaque allowed students to experiment with different media and approaches to building in the platform.

Objectives:

Learners will be able to:

- Provide and recognize historical information about their communities
- Summarize research

Modes: Presentational

Materials: Computer with internet connection, mobile device for capturing images, ARIS app (to play experience), Ingress Documentation Handout, Ingress Reflection Handout, ARIS Creation Handout

Procedure:

1. After learning about a topic of interest, learners will explore public art in their community. The Ingress Documentation Handout (Appendix 3) that accompanies this example references issues related to race.
2. As the learners explore, they must take photos of the art and document its location, the issue it represents, and any other information that is available to them as they explore on the documentation handout.
3. Next, learners review the information they collected as they explored by completing the Ingress Reflection Handout (Appendix 4).

4. After that, learners write brief paragraphs about the art they explored according to the instructions on the summary handout. They follow Step 2 on the handout to complete peer review of one another’s paragraphs.

5. Next, learners create a walking tour of the art they explored by following the instructions on the ARIS Creation Handout (Appendix 5). This step walks them through how to make plaques and how to organize them into scenes.

6. Allow learners to explore one another’s walking tours!

The activity featured above involved the creation of a variety of plaques. However, as we have already mentioned, teachers can introduce their students to plaque creation using something much more simple, such as creating a single plaque to document an exit ticket or the like.

**Trigger Activity**

The activity below requires that students build a series of objects (in this case, a conversation) that are unlocked by certain triggers (in this case, locks). Triggers can take on a variety of formats (geotagged positions, QR codes, locks [internal game logic that permits players to see certain objects based on their choices], timers, or AR View [images captured in the real world trigger that certain content appears, much like is the case with QR Codes]).

**Objectives:**

Learners will be able to:

- Create an AR exploration of issues related to gender identity within their community

**Modes:** Interpersonal, Presentational

**Materials:** Computer with internet connection, mobile device for playing created games, ARIS app (to play experience), Instructional Handout (Appendix 6)

**Procedure:**

1. After finding a partner and deciding on a topic of interest, learners will explore gender and decision-making surrounding an issue related to gender. The
instructional handout (Appendix 6) guides students through the exploration and ARIS building process.

2. As the learners develop their topic, they will need to research the consequences of different decisions included in their games. For example, learners may choose to link to articles or news clips of issues like wage gaps as they are observed and reported in their own communities.

3. After completing their research and fleshing out their issue of choice, learners will complete a conversation tree (template at the end of Appendix 6).

4. Learners will then build their conversation into ARIS and put a lock on their conversation. The how-to guide is included as part of their Instructional Handout (Appendix 6). It will help orient learners to conversations and locks.

5. Next, learners should get feedback from at least one other team and make any necessary changes to their ARIS conversations.

6. Allow learners to explore one another’s conversations in ARIS!

A note about scenes

All items created in ARIS (objects and triggers) are organized in scenes. It is helpful to conceptualize scenes as game levels. The objects must be organized within scenes to be connected and playable/viewable. Additionally, like a game level, while games can have multiple scenes, triggers and objects within a particular scene cannot “talk” with triggers and objects in other scenes. Also, once a player passes a scene (level), he or she cannot go back.

A Recommended Timeline for Building an Entire Game (Learner Activities)

The timeline below features a series of activities that were successfully implemented in an online class in which secondary learners created a place-based game on ARIS as their final exam. Each day listed assumes 90 minutes of class time to work on tasks. Educators should adapt their own timelines to match their particular scheduling infrastructure.

<table>
<thead>
<tr>
<th>Day</th>
<th>Explanation of Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>• Come up with game premise</td>
</tr>
</tbody>
</table>
Great! Now how do I get started?

As we have already mentioned, ARIS is an open-source, experimental platform that allows users to create and play their own place-based and augmented reality games. It is both fun and easy to use and has the ability to make anything from simple conversation games to larger interactive quests and scavenger hunts. Register now to start building. Also don’t forget to check out some of ARIS’s user-friendly tutorials. Here are several to get you started:

<table>
<thead>
<tr>
<th>1</th>
<th>If needed, experiment with new features in ARIS, explore how to create games, and test with some practice building</th>
</tr>
</thead>
</table>
| 2 | • Write an outline for the game story  
• Plan what parts will be necessary for the game—plaques, conversations, characters, etc.  
• Create a name for the game |
| 3 | • Conceptualize scenes  
• Organize scenes in a way that makes sense for the game |
| 4 | • Create game objects (plaques, items, conversations, etc.)  
• If applicable, tie game objects to relevant map locations |
| 5 | • Use a mindmap tool or conversation tree template (Appendix 6) to brainstorm and begin building conversations  
• Once the conversations are drawn out, put them in the game |
| 6 | • Upload external media such as pictures, audio, and video to relevant plaques |
| 7 | • Review and edit the game  
• Engage in peer review as time allows |
| 8 | • Make the game public  
• Test the game  
• Work with peer group to engage in additional testing and solicit feedback |
| 9 | • Finalize the game based on feedback from peers and your own testing  
• Submit the game |
| 10 | • Play the final games as a class! |
• ARIS Manual for Game Creation: http://manual.arisgames.org/
• Step-By-Step Introduction to Basic ARIS Structures:
  http://manual.arisgames.org/tutorials/aris101
• Helpful Blog: https://localgameslababq.wordpress.com/

Happy Building!
References


Appendices

Appendix 1: Ecopod: Survival Group Role Worksheets

<table>
<thead>
<tr>
<th>The Recorder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Directions:</strong></td>
</tr>
<tr>
<td>1. In your group, brainstorm ideas about how you would revise the narrative of the time period that you selected in <em>Ecopod: Survival</em> to better suit the social, cultural, economic, and political issues of a nation which speaks the target language.</td>
</tr>
<tr>
<td>2. As “the recorder,” you will pay attention to the questions that one of your group members will read out loud. Then, write down all of the ideas that your group comes up with on this worksheet. Shorthand writing is okay provided that you can understand your own notes. You cannot show your worksheet to any of the other group members; only you can take notes for the group.</td>
</tr>
<tr>
<td>3. Speak as clearly as you can and be sure to provide your ideas and opinions as well.</td>
</tr>
<tr>
<td><strong>Notes:</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Reader</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Directions:</strong></td>
</tr>
<tr>
<td>1. In your group, brainstorm ideas about how you would revise the narrative of the time period that you selected in <em>Ecopod: Survival</em> to better suit the social, cultural, economic, and political issues in a city in which the target language is spoken.</td>
</tr>
<tr>
<td>2. As “the reader,” you will read each of the following questions to your group out loud. You cannot show your worksheet to any of the other group members; only you can read the questions.</td>
</tr>
</tbody>
</table>
3. Speak as clearly as you can and be sure to provide your ideas and opinions as well.

*Note: This activity was designed for Day 2, where the player has the choice of helping a family in need. They can give the family items to use or keep the items for themselves. The player will encounter different dialogue based on the choice that they make.*

**Questions:**

1. Where does the game take place?
2. Who does the player encounter in the game? Describe the people in as much detail as you can.
3. Did this encounter resolve the way that you thought it would? Why or why not?
4. What were some of the other choices that you encountered in the game?
5. Would these choices be the same in a city where the target language is spoken? Why or why not?
6. In your opinion, how important is it to help others in your target culture? In general, would your target culture be more willing to help a group of strangers than your home culture? Why do you think that?

---

**The Facilitator**

**Directions:**

1. In your group, brainstorm ideas about how you would revise the narrative of the time period that you chose in *E copod: Survival* to better suit the social, cultural, economic, and political issues of a city in which the target language is spoken.
2. As “the facilitator,” you will pay attention to the questions that one of your group members will read out loud, while the other group member takes notes. Ensure that every group member is actively engaged in the activity. Make sure that every member of the group has shared their ideas and clarifies any points that you do not understand. You cannot show your worksheet to any of the other group members.
3. Speak as clearly as you can and be sure to provide your ideas and opinions as well.
Here are some ideas of what to say to your group:

To get more ideas from your group:
Do you have any ideas, _____?
What do we have written down so far?
Is there anything else we can think of?
Any other suggestions?

To clarify:
Could you repeat what you just said?
What do you mean?
I don’t understand. Please explain.
Did you mean to say ________?

To give positive feedback:
Great idea!
Let’s write that down!
I never thought of that!
I like that!
Good thinking!

To make sure everyone is focused:
Let’s move to the next question.
We don’t have a lot of time left.
What is the next question?
I think we should continue.

Appendix 2: Ecopod: Survival Writing Handout
Choose one section of *Ecopod: Survival* to rewrite: Day 1, Day 2, Year 1, Year 2, or Year 5. You will use the city your group chose to research and brainstorm as the setting of the narrative. Keep in mind how the regional, cultural, and social aspects of that city will shape the content of your narrative.

1. How would collecting resources, evacuating the city, or fighting to survive be different from how it is in the game?
2. What are some of the benefits of gathering resources in this city? The challenges?
3. Think of what kinds of encounters you would have with both officials and civilians. Would they be friendly or hostile? Orderly or chaotic?
4. What are some other differences that you can come up with? Be as creative with this as you wish, but refer to events you encountered while playing *Ecopod: Survival*. Write in second person to imitate the way that the game is written.

---

**Appendix 3: Ingress Documentation Handout**

**Related Can-Do Statement**
I can provide and recognize historical information about my community such as demographic information and points of interest.

**Instructions**

During the field trip, you are to complete the “Exploring Portland Mural Series” mission on *Ingress*.

As you play, take photos of any public art that you come across that you believe reflects and issue related to race. You will need to perform additional research on some of this art, so take good notes regarding any identifying characteristics and the exact location of the art.

<table>
<thead>
<tr>
<th>Name of art (if it exists) and location</th>
<th>Issue related to race</th>
<th>Additional information (artist name, any historical information that you come across)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4: Ingress Reflection Handout

Related Can–Do Statement
I can provide and recognize historical information about my community such as demographic information and points of interest.

Instructions
Before your next class period, you must reflect on the public art that you witnessed while playing Ingress. Answer the five questions below and submit your reflection to the self-reflection journal.

1. What types of places did you visit? Were they important community areas? Why or why not?
2. What issues related to race did you note as you traveled through the community?
3. If you were to write a paragraph about the art that you viewed, what would you be able to say? What do you still need to know?
4. Pick your favorite five examples of public art dealing with issues related to race. For each piece of art, find a source (digital media including print advertisements, videos of speeches or documentaries, etc.) that relates to the issues tackled by the art. These sources may be sources that you found earlier in this unit of study, but the sources may not be those which were already provided to you by your instructor.

<table>
<thead>
<tr>
<th>Art</th>
<th>Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. In your opinion, does the art have the potential to inspire a dialog about issues related to race? Make sure to use subjective and objective language appropriately when responding to this question.

Appendix 5: ARIS Creation Handout

Now that you have your summaries of the art and the issues related to race that they espouse, you are ready to add them to ARIS as plaques. For each mural, you must create a plaque which includes a picture of the art, your explanation of the art, and a link to the external source. Afterwards, you will tag each plaque by the location of where it exists in the world. Follow these instructions to complete this activity:

1. On a computer, log in to ARIS (arisgames.org) and log in with your username and password. (If you don’t have one yet, click ‘Register’ and create a new profile.)
2. Start a new game and name it ‘Day 9 - [YOUR NAME HERE]’. Also, put the starting location close to where most of your murals are going to be on the world map (this will make your life so much easier!)
3. You should now be at the main menu. On the left sidebar, click on the blue plus sign next to ‘Plaques’ to create a new plaque. You will make a plaque for every mural that you have. In the ‘Name’ bar, put the name of the mural. In the description, put your explanation. Once you are finished, click ‘Save.’
4. Now, you will upload pictures for each mural. If you do not have pictures of the murals on your computer, be sure to upload them to your computer or download pictures from the internet.
5. Once you have a picture of each mural on your computer, you are ready to upload pictures to ARIS. At the top of the editor page, click on the ‘Media’ tab.
Click 'Upload Media' to select the pictures of the murals you want to upload. Be sure to click 'Save' for every picture.

6. After you have the pictures ready, click on the 'Scenes' tab to go back to the main menu. Click on the first plaque you made on the sidebar. Click on 'Media' and choose the picture of the mural you are describing. Click 'Save' once you are finished. Do this for every plaque you have made.

7. At this point, you have all of your murals ready and made in your game. Now, you will actually have them show up on the map in the game. In the middle of the editor, click on the blue plus sign next to 'Starting Scene' and click 'Plaque.' Put each of your plaques in the game this way.

8. Once you have your plaques in the 'Starting Scene,' click on the first plaque. It will show its location in the right sidebar. Using the minimap, drag the pin to the location of the mural in the world and click 'Save.' You can zoom in and out on the map by clicking the '+/-' buttons respectively. Do this for every plaque in your game.

9. Finally, you will make your game available to play. Click on the 'Game' tab, then click 'Settings.' Scroll to the bottom of the page, click 'Published,' then click 'Save.'

10. Your game is ready to go!

Post-Activity Self-Reflection

When you are done, make sure to include some screenshots of your work in ARIS the [project portfolio](#). Also, please post a self-evaluation in the [self-reflection journal](#) regarding your writing skills and your community engagement. Feel free to use the rubrics in the [assessment folder](#) and the peer and teacher feedback that you have received to guide your thinking.

Appendix 6: ARIS Instructional Handout

You have now seen many issues surrounding gender: marketing, the prescription of gender roles, and gender identity issues. In a few days, you will turn in a persuasive essay regarding one of those issues. Find someone in the class who wants to deal with the same issue as you to design a short, augmented reality game using ARIS. This game will explore the decision making related to the issue that you choose. For example,
consider how gender might impact one’s sense of safety in public places or how one’s gender might impact how much money or time a person spends on his or her appearance.

In order to design this game, you will need to complete a conversation tree (see appendix 6) in which you explore the decisions that people make that are impacted by their gender identity and the research-based possible consequences of those decisions. For example, if you choose to look at having bathrooms for people who are transgender in public places, you should research consequences that people have experienced for choosing a specific bathroom and use that research to inform your tree. As an added bonus, you may choose to geotag your work to the location in which your research occurred.

Next, you will put a lock on your conversation so that it only shows up under certain conditions. Make it so that your conversation appears in a certain order based on the choices a player might make. This is important when creating the game, since without locks the player would see everything in the game in random order.

Once you are finished with your first draft, make sure to get feedback from at least one other team on your work. Consider the following questions: Is the conversation tree logical and research based? Are the decisions communicated clearly? Does the player have enough details to arrive at a decision? Should the grammar or vocabulary used be improved upon? You may respond in English or the target language.

How to make a conversation in ARIS
Fig. 1: An image of what a conversation looks like in the app (top) and in the editor (bottom)

What is a conversation?

The basic metaphor is that the player of the game is having a conversation with a virtual character. However, it does not have to be limited to this metaphor; conversations are used in ARIS to control what kinds of text and media the player sees.

There are 3 parts of every conversation:
**Characters** – The participants in the conversation. Each character has a name and media (portrait) associated with it. Create new characters by clicking the (+) button in the left column of the characters column in the conversations editor (shown above).

**Lines** – Dialogue in the conversation. Essentially, this is the text that the player will receive from the game.

**Choices** – Branches in the conversation. After each line, the player can be given one or more choices on how to continue. Choices have a **prompt** (the text the player sees which describes the choice they are making) and an **action** (what happens when the player makes this choice).
Fig. 2: An image of what locks look like in the app (top) and in the editor (bottom)

**What are Locks?**

**Locks** are basically the logical glue that gives structure to the game being created. Essentially, locks make it so the player does not see everything in the game in random order. The game can be created so that players will see certain parts of the game only under certain conditions.
For example, say that you have 2 plaques and you want the second plaque to show up once the player has already seen the first one. In this case, the lock that you would put on the second plaque would look like this:

This is pretty self-explanatory: Plaque 2 will appear once the player has already viewed Plaque 1.

**Conversation Tree Template**

*For each large box, write down what lines you want the player to see in your game. This will be the content you provide for the player as they play.*

*For each small box, write down the choices you want the player to make after reading the text. These choices will determine how the story progresses for the player.*

*For the boxes at the end, write down each outcome you want for the player once they have reached the end of their branch. This could lead to another conversation, a plaque, give the player an item, end the game, and so on. These will determine the kinds of locks you will use.*