

## KEEPING THE LEARNER AT THE FOCAL POINT: THE USE OF NEEDS ASSESSMENT AND PERSONA CONSTRUCTION TO DEVELOP AN INSTRUCTIONAL RESOURCE CENTER FOR INSTRUCTIONAL DESIGNERS

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This design case shares how personas were utilized to create an online career resource center intended to help instructional design students in making informed career decisions. The outcome of this project has helped identify instructional opportunities to improve services currently provided to instructional design students and graduate student members of the Association for Educational Communications and Technology (AECT). By evaluating the mechanisms and supports already in place and contrasting those with the needs of the students who are seeking career guidance, the intent of the project was to bridge the gap between graduate student members' career needs and the resources available to them within a professional association. We discuss how we gathered information through a needs assessment for the creation of a Career Resource Center to further educate and inform instructional design students of resources for career decision-making.

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### INTRODUCTION

The Association for Educational Communication and Technology (AECT) is a professional association of educators and practitioners whose activities are directed toward improving instruction through technology. The association has become a major organization for those actively involved in the designing of instruction and a systematic approach to learning. It provides an international forum for the exchange and dissemination of ideas for its members and for target audiences and is the national and international spokesperson for the improvement of instruction ([www.aect.site-ym.com/](http://www.aect.site-ym.com/)). AECT consists of 2,300 members, including 760 graduate students, of which approximately 150 are international graduate student members. Increased graduate student membership drives the need for relevant membership resources and benefits, and when implementing performance improvement measures, culturally inclusive and contextually comprehensive perspectives can aid in moving large groups of people toward a common goal.

The Career Resource Center (CRC) was created in response to data collected in a previous study exploring the career needs of graduate instructional design students (Mills et al., 2020). By capturing the career needs of instructional design students, we were able to respond to their feedback regarding a lack of career resources. From a practical perspective, this study has the potential to guide professional associations on

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ways to improve quality, appropriateness, and magnitude of their existing member resources.

This case documents how our instructional team relied on our own experiences as instructional design practitioners to develop a career resource for instructional design students. Personas were used to help us ensure that we were addressing the specific needs of our intended audience and not making assumptions about what we felt instructional design students needed.

### **The Need for a Career Resource Center for Instructional Design Students**

As the field of instructional design continues to evolve, the challenge in preparing students to enter this particular line of work is in how to describe the profession as it takes on different titles, roles, and responsibilities in different parts of the world, or even within the same industry or institution. This lack of consistency adds a complex layer to the career decision-making process and necessitates continuous collaboration and refinement of professional development opportunities, including the exchange of ideas, experiences, and best practices. It is increasingly important for all graduates to understand their career options and make informed career decisions, but even harder for international students who in addition to navigating a traditional job search process must adjust to a different culture, set of workplace values and expectations for a particular discipline, department or profession in a host country.

The National Association for Colleges and Employers (NACE), the leading source of information on the employment of college students, defines career readiness as “the attainment and demonstration of requisite competencies that broadly prepare college graduates for a successful transition into the workplace” (naceweb.org). Gati and Asher (2001) define career decision-making as the process people go through when they search for career alternatives, compare them, and make a choice.

Several factors can contribute to decision-making difficulties among job seekers, regardless of discipline (Gati et al., 1996; Gati et al., 2001):

1. Lack of readiness: including motivation, general indecisiveness, dysfunctional beliefs of irrational expectations
2. Lack of information: about self, occupations, career alternatives or ways to obtain information
3. Inconsistent information: unreliable information or internal or external conflicts).

International graduate students studying in the United States represent a substantial student population and have unique career needs. According to a recent Open Doors Report from

the Institute of International Education, 1,078,822 international students studied at colleges and universities in the United States for 2016-2017, with approximately a third of that population represented by graduate student enrollment (www.iie.org, 2016).

International student career needs are typically divergent from their domestic student peers by way of cultural differences, language barriers and differences in the home or host educational systems (Cheng et al., 1993; Leong & Sedlacek, 1989; Yang et al., 2002). Many students face career decision difficulties throughout their careers. These difficulties may stem from a variety of sources, including difficulties with personal identity and vocational understanding (Gati et al., 1996).

Instructional design students may not have the voice to successfully advocate for their career needs. This may be because they are unaware of the need for career readiness skills, may not readily acknowledge the depth of the career decision-making process, and/or may not interpret their situations as ones in need of assistance. Therefore, they may be less likely to seek career assistance or resources available within their respective campuses or professional development organizations. In turn, practitioners and university personnel working with instructional design students could be unaware of their needs and would subsequently be less likely to intervene or help when necessary. An online career resource center provides students with a starting point for the types of information and interactions needed to contribute to career decision-making success.

It was our intent to develop an online resource that instructional design students could access and use as a repository to seek guidance on different topics related to career development.

### **Deciding on a Web-based Platform**

Based on the results of our needs and context analysis, we determined that web-based instruction is an appropriate solution to our instructional problem. We believe that the web-based learning approach enables learners who are both international and domestic instructional design students across various institutions to overcome geographical and temporal barriers while being able to access up-to-date and relevant learning materials designed to meet their career needs. Our goal was to create a resources hub to congregate instructional design students as well as to foster an interactive learning community where they can learn about and explore career options related to the field of instructional design. In designing the e-learning modules, our goals are to a) inform students of the job search process, b) provide relevant and timely information regarding instructional design careers, c) deepen learners' understanding of the importance of networking, and d) equip learners with targeted resources on international career seeking.

In comparison to traditional face-to-face learning environments, the level of flexibility, and free access to vast amounts of information is powerful and appealing to learners (Sitzmann et al., 2006). We wanted to provide an asynchronous online environment to provide learners with the ability to review, revisit the portions of learning materials and study at their most comfortable time and place, as well as interact with other learners in the same learning community.

## DESIGN PROCESS

### Forming Our Design Team

Our design team consisted of two instructional design faculty and two graduate students who were enrolled in an instructional design graduate program. Cumulatively, our design team members had experience with the following: advising domestic and international graduate students, academic career advising in higher education, job searching from domestic and international perspectives, human-factor design, and instructional design processes.

As we engaged in the design process for this project, we continually reflected on our previous experiences and participated in several group discussions during design sessions to triangulate our experiences with those gathered from literature searches, conversations with colleagues, and more formal needs assessment techniques.

### Needs Assessment

We conducted a needs assessment to further examine factors that influenced graduate students', both domestic and international, career decisions (Mills et al., 2020). The data gathered during the needs assessment was used to inform the development of learner personas later on in the project. The participants were graduate instructional design students or those who had graduated in the past year. Participants were recruited through a variety of division networks of AECT. We conducted interviews with the graduate students to discuss, in detail, challenges they have faced searching for jobs and the types of support they needed. The following are excerpts from these conversations:

- "I think my main thing for myself is that I doubt my own abilities— I felt even with my current position I didn't have sufficient experience ...." (International Graduate Student)
- "One thing is finding—among the hundreds of job postings—what you need but until you really dive into those it's hard to know what the opportunity is. In organizations, if they aren't public ...even if I ask ... it's hard to know what the job really is and what is included." (Domestic Graduate Student)
- "I need [a resume] for professional design jobs. I am pushing for graduation in December in the Fall and I don't have a resume for an IDT faculty position. I really need help with putting that together. I'm not sure how to

make that transition from taking classes. Who is going to hire me for IDT?" (Domestic Graduate Student)

- "[One of my strengths are the] networks that I've built with my cohort with my professors. My profs have provided networking opportunities for example AECT; not only as members but I have also participated in the conference as speaker or as an intern or volunteer in order to meet people... I'm trying to break out of my shell with confidence knowing that we are all in the same boat—but everyone is learning and continues to learn—I appreciate the transparency." (Domestic Graduate Student)
- "Since my goal is to become a faculty member in a research university, the opportunities to do the research and projects [are] very important for me, and also if I can find a job in a department where the faculty members collaborate that would also be very important. There is no doubt the job has to match my research interest—but I'm still framing my interests. I [also] still need to improve my English and understanding about American culture." (International Graduate Student)

### Persona Development

Personas have the benefit of being based on real-world qualities and experiences and can help a designer focus on the primary user, behavior patterns, and needs (Chang et al., 2008). Based on Erin's experience growing up overseas, previous research, and the profession as a career counselor, she was able to draw on personal experience and reflect on the questions and issues she would hear most often. These perspectives were a part of the design process from the beginning.

Through surveys and interviews with participants, we were able to identify a pattern of their needs and barriers to success. We used this information to guide the development of our personas. This helped us to ensure we were designing content that was aligned with their needs. With a clearer understanding of how instructional design graduate students experienced similar pain points in regard to a lack of information about the job market, a need for timely communication and a desire for reliable resources, we were able to drill down to the core problem we were trying to solve and provide empathy for intended users.

Although personas are typically used in real-world contexts, this work suggests that personas are also helpful when defining a model of information seeking. Personas in our study were used to represent a group of graduate instructional design students that share common needs for career decision making. When considering personas for this project, items related to design thinking included:

- Ideal customer/user
- Current behaviors of graduate students in the field

- Why was the current solution not working?

Defining the persona with well-known characteristics of career transition needs, we were able to describe the scenario and work toward creating a resource and solution. The personas in this work allowed the designers to shift from talking about general users to focusing on the understanding and identification of what the students within this field really wanted to gain from a career resource. Rather than referring to students as an abstract form, references to the personas enabled the design of the resource to better capture the needs and characteristics of those taking part in the information-seeking process.

Based on our findings gathered from our needs assessment (Mills et al., 2020), we developed a series of personas to be the focal point of all design decisions made for the project (Baaki et al., 2017). Personas are fictitious representations of audience members for an intended design (Baek et al., 2008; Williams van Rooij, 2012). As we engaged in the construction of our personas, we referred to the interviews we had conducted with graduate students to ensure that we were addressing their needs, wants, and fears in our designs for career resources.


Our design team met and reviewed excerpts from participants in our needs assessment study (Mills et al., 2020). We discussed which comments were most common among the participants. We also reviewed the demographic information provided by that study to determine what personas would be most representative from that sample of participants.

We developed three learner personas to understand who the potential learners are and to learn about their needs, fears, and aspirations (see Figures 1-3). The majority of participants in that study shared common concerns pertaining to employment in the United States.

The needs assessment and persona construction guided the design of the instructions and helped us identify the instructional topics that would be most useful to the learners when seeking a career in instructional design (ID) within the United States.

We had our persona pictures with their descriptions present at every team meeting. Any time we made a change or a decision on the structure of the learning modules and topics, a member of the designer team would take on the role as an

### Ari Nguyen




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**Sex:** Female  
**Age:** 25  
**Marital Status:** Single  
**Location:** Georgia, United States  
**Education Qualifications:** Masters in Instructional Design & Technology

Ari is originally from Vietnam. She was born and brought up in Vietnam. She completed her Bachelor's degree in Education from a university in Vietnam. Two years ago, Ari came to the United States to pursue a Master's degree in Instructional Design and Technology. She recently graduated with her master's degree from a reputed university in the United States. Upon graduation, she has now started searching for jobs that fit her educational qualifications. She wishes to seek a job within the United States. However, she is flexible with the location within the United States. Ari loves technology and is always willing to try new things. In her department at the university, she was known to be the person to test drive new technology initiatives. She is looking for an Educational Technologist job. This is her first time searching for jobs. In her job search process, she seems to be concerned about her resume. Ari is not sure if her resume effectively reflects her skills. She is looking for more information on how to write a good resume that fits the industry standards. Additionally, she would like to learn the etiquettes of the American work culture as she wants to have a strong application and wants to have the right etiquettes for the job interview so that she have a good first impression on the interviewers and can stand out from the crowd.

FIGURE 1. Persona of Ari Nguyen.

### Jamie Jones



Used with Permission.

**Sex:** Male  
**Age:** 40  
**Marital Status:** Married  
**Location:** Pennsylvania, United States  
**Education Qualifications:** Ph.D. in Instructional Design & Technology.

Jamie has a doctoral degree in Instructional Design. He has been working in the industry as a Senior Instructional Designer since last 10 years. He has worked with the same company since the beginning. He is now trying to move up the ladder in his career but feels that it is hard to advance in the same company. Therefore, he is looking for other options. With social media becoming pervasive in professional fields, Jamie wants to learn how he could use social media for networking. He is interested in learning how to create a solid portfolio on social media and how to market himself using this tool. Additionally, he wants to learn how to use social media to learn about the potential job opportunities. He is also unaware of the different instructional design careers that are available today and hence, would like to learn more about this.

FIGURE 2. Persona of Jamie Jones.

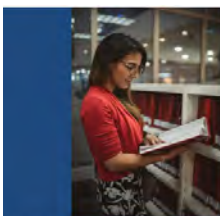
advocate for one of the personas (i.e., Ari, Jamie, or Sonya). The member of the design team was to focus solely on their persona's needs and not worry about generalizing for a larger population.

This exercise helped our team by having deeper conversations about how these individuals (personas) would navigate the Career Information Center. This informed the different examples we provided throughout the modules.

### Selection of Topics

After conducting the learner analysis and developing the learner personas, our design team collaborated for a

## Sonya Rodriguez



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**Sex:** Female

**Age:** 33

**Marital Status:** Married

**Location:** Florida, United States

**Education Qualifications:** Ph.D. in Instructional Design & Technology.

Sonya is originally from South America. She moved to the United States with her husband. She has earned a doctoral degree in Instructional Design. She is now interested in pursuing a career in academia and is currently going through the job search process. She is trying seek an assistant professor's position at a research university in Tallahassee, Florida as her husband has a full-time job there. She understands that the application requirements and the job interview process will be a little different from the industry setting. Sonya knows that it is important to document her experiences and showcase her design artifacts to the employers in an effective manner. However, she does not know how to do this. She is also feels that she is not prepared for the job interviews and therefore, is feeling a little apprehensive about it. She would like to learn how to document her experiences effectively and how to prepare for the job interviews.

**FIGURE 3.** Persona of Sonya Rodriguez.

### Categories for Website Content

#### Preparing for the Job Search

- Interviewing Basics
- Resume Writing (industry versus academic)
- Documenting Your Experiential Learning
- Managing Your Expectations for the Job Search
- Converting Your GPA
- Correspondence
- American Work Culture

#### Instructional Design Careers

- Where to look for job announcement
- Links to websites for finding jobs in instructional design
- Testimonials- people working in industry

#### Networking

- Social Media for Networking
  - o Facebook, Twitter, LinkedIn
- Links to the IDT groups and resources on social media

#### VISA

- Sponsorship
- Internships

#### Student Resources

- Testimonials- suggestions for students seeking jobs
- Career sites

#### Contact Us---- Website Development

- Contact Information
  - o Address
  - o Email questions (create an email for the international website)

**FIGURE 4.** Grouping and categorization of the instructional topics.

brainstorming session where we identified topics that would be relevant to the learners' needs and would align the goals of this web-based instruction. By keeping the personas in perspective during the brainstorming session, it helped us to see things from the learners' perspective. Being cognizant to the learners' needs, feelings, thought processes and wants helped us to be more mindful when they were identifying the instructional topics. During this brainstorming session we talked with one another about what topics would help us (or would have helped us in the past). We reviewed the personas and asked ourselves, "Would Sonya find this beneficial? How would this module help Ari or Jamie?"

Upon generating the topics, we grouped and categorized these topics into major sections. This was done to ensure that the learners can access relevant information under the same umbrella topic (see Figure 4). We created sections addressing the following: 1) the

job search, 2) instructional design careers, 3) networking, and 4) international resources. We have included a series of e-learning modules that were created using Articulate Storyline 3. Each module was storyboarded and reviewed by two members of our design team to test the content. While the purpose of this resource center is to promote informal learning, we have incorporated assessments at the end of each learning module to serve as checkpoints for students who access the materials. We also included links to other resources as well as testimonials from faculty members to assist students with seeking job opportunities in the field of instructional design.

### Design and Development of Instructional Resources

Each member of our design team was entrusted with the task of designing and developing particular modules for the topics assigned to them. We were assigned specific topics based on our experience, expertise, and comfort levels with the subject matter. We tasked ourselves with keeping the personas in mind when designing and developing the instructional modules to be cognizant of the learners' needs and wants pertaining to each topic. Ari Nguyen's persona (see Figure 1) was used to guide the design of some of the modules that fell under the "preparing for the job search" section (i.e. interviewing basics, managing your expectations-job search, correspondence, resume writing, and American work culture. Sonia Rodriguez' persona was used to guide the design of the following modules: documenting your experiential learning experiences, resume writing with a focus on academia, and interviewing basics.



Lastly, Jamie Jones' persona was used to inform design decisions for the module on using social media for networking, and for identifying social media and organizational resources for the "networking" section of the career resource center. Each author created storyboards of the modules for the topics that they were assigned. Each storyboard consisted of the learning objectives, the instructional materials, the questions for the assessments, and the script of the instructional narrations. We employed instructional design principles and strategies to develop the instructional units.

Having individuals who had experience as international instructional designers on the design team was extremely beneficial as they had more insight into our audience's perspective. They helped keep a check on each instructional module to see if the modules covered everything that graduate students would need and would want to know (e.g., types of questions that the employers could ask the interviewee). They identified specific topics that they thought would be a dominant piece of information that the graduate students would need to know (e.g., how to practice professionalism during a job interview). In this way, the graduate students on the design team helped assess the needs of the graduate students and helped identify the content information and resources that would be valuable for both domestic and international graduate instructional design students.

Each module was verified by at least one other designer from the team to ensure that there were no errors in the instructions. Then, one designer transformed all the storyboards into interactive eLearning modules using the Articulate Storyline 3 software. The purpose behind having only one designer to develop the modules using the Articulate Storyline 3 was to strive for consistency and maintain the aesthetics of the design of the instructions.

The eLearning instructional units were developed to be self-paced to allow learners to have the flexibility to select the module that they want to complete and to allow them to complete the instructions at their own pace. Each unit affords learners to pause the instructions, go back to the previous slide, and proceed to the next one at their convenience (see Figure 5).

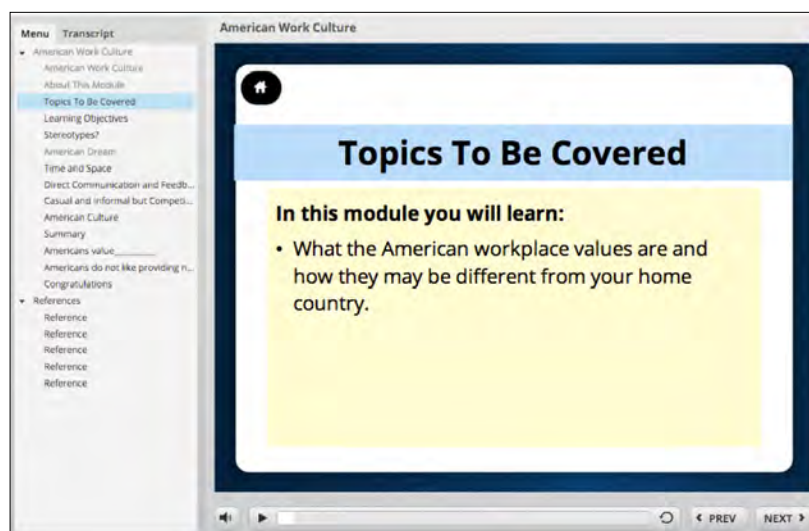


FIGURE 5. Example of an eLearning module.

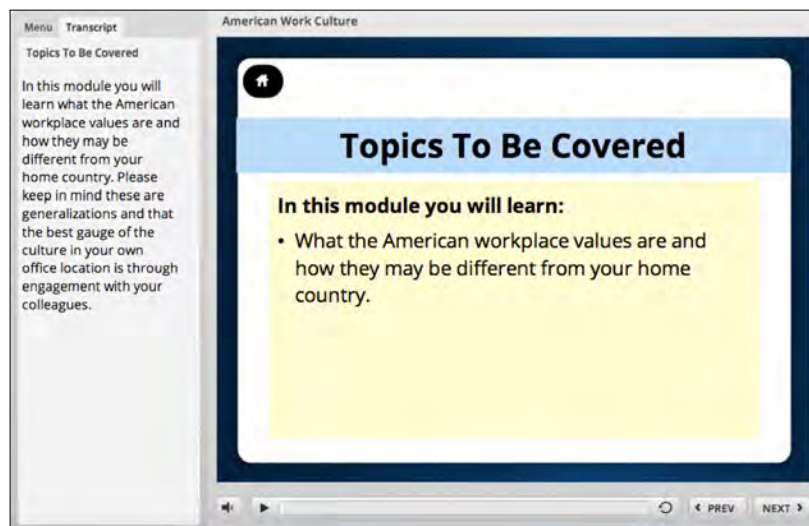


FIGURE 6. Example of the transcript provided for the auditory narration.

### Designing for Accessibility

To make the instructional units usable and accessible by a wider range of learners, we designed the instructions according to Americans with Disability Act (ADA) compliance and web accessibility in mind (WebAIM). We used the Open Sans font for presenting text-based instructions. The font size was greater than 12pt. Additionally, to increase readability, the designers created a high contrast between the text and the background by employing black color text on light color background. To increase the accessibility of the instructions for visually impaired users, we developed audio narrations for each instructional slide. We also created transcripts for each auditory narration to allow hearing-impaired individuals to access the instructions (see Figure 6).

## Selecting a Platform for Web-Based Instructions

### Google Sites

When we initially thought of the idea to develop career training modules, we wanted to present the modules on a website that would not require an individual to have a username or login. We had envisioned having a link to a website that graduate students could access through AECT's website. Having spoken with a number of divisional leaders, we knew that many of AECT's divisions were using Google Sites as supplemental websites to share information.

We chose Google Site because of its easy to use design interface, clean layouts, its ability to auto adjust contrasts to increase readability, and its free file uploading and sharing features. It also provides a list of six website themes that one can choose to create their personal websites. It allows users to change the color and the font style of the theme that they have selected. However, it does not provide much flexibility to change the layout of the theme, font type of the theme, and color of the font type to fit one's needs. For each theme, the users can only choose from the three font types that are available for each theme (see Figure 7). Additionally, unlike the older version of the Google Site, the new version does not support web hosting of the eLearning modules. Therefore, we decided to relinquish using Google Site to host the eLearning modules.

### Wix Website Builder

With the failed attempts to host the eLearning modules on the Google Site, the authors decided to employ Wix.com to host the eLearning modules. This is because it provides more flexibility to design the website. The users can select from various design templates and alter the information to fit their needs or could design the website from scratch. While designing the website, the authors tried to host the eLearning file into the website, but they were unsuccessful in doing so. The Wix website for some reason, could not support the eLearning modules that were designed for web-based instructions. Additionally, when using the free version to create the website, the "Create a WiX site!" advertising tag showed up in the top right corner of every page of the website (see Figure 8).

### Blackboard CourseSite

After encountering such problems when hosting the web-based instructions, we decided to use an established learning management system (LMS) that could host all the

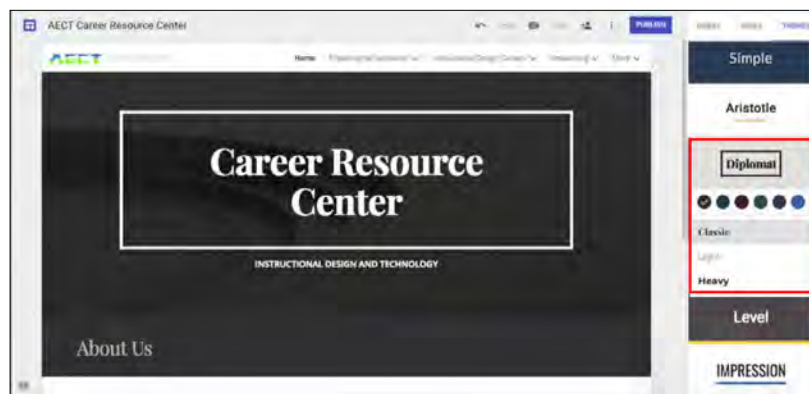


FIGURE 7. Image depicts the limited choice of fonts that are associated with each theme.

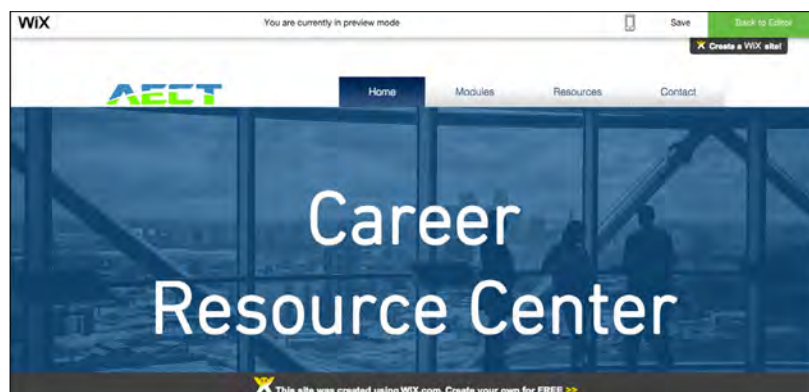


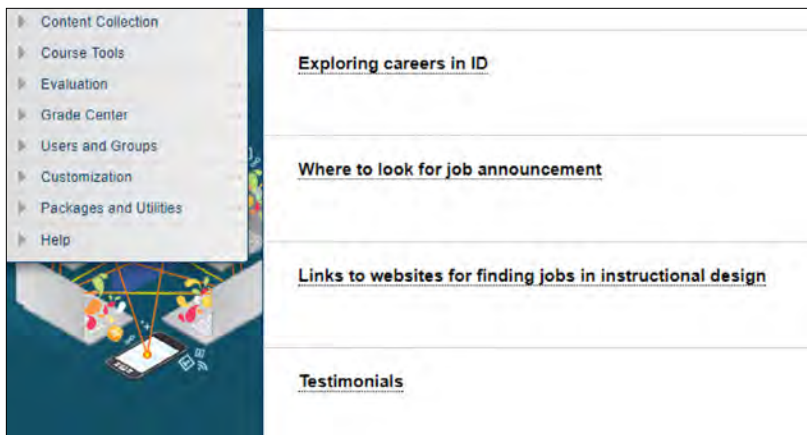
FIGURE 8. Advertising tag in Wix.com.

eLearning modules. We then decided to employ a commonly used LMS named Blackboard CourseSite to host all the instructional materials and the eLearning modules that were created using the Articulate Storyline 3. Blackboard CourseSite provided the authors with the flexibility that they needed to design this web-based instruction. The biggest affordance of this LMS system was its ability to host the eLearning modules and making it easily accessible to the users.

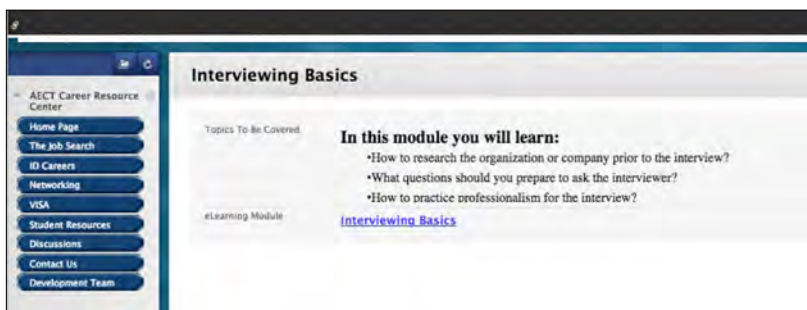
### Developing the Blackboard CourseSite

We first created an independent page for each major topic category (i.e., The job search, ID careers, Networking, VISA, Student resources, and Contact us) that were identified during the brainstorming session. Under each main category page, we developed a module for each subcategory. For example, under the main category of "Instructional Design Careers" we created the following subcategories: Exploring careers in ID, Where to look for job announcements, Links to websites for finding jobs in instructional design, and testimonials (see Figure 9).

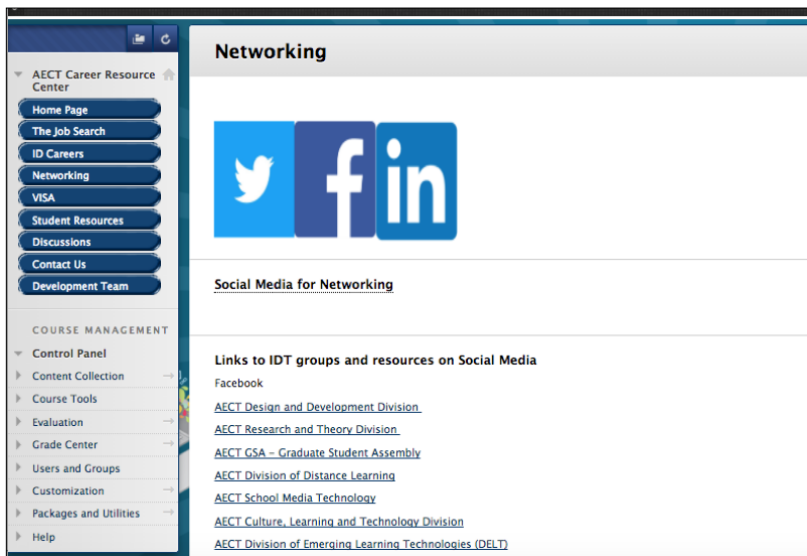
Each module had a lesson plan consisting of the learning objectives, and a link to the eLearning course for that particular module (see Figure 10). Along with instructional modules,



**FIGURE 9.** Example of the lesson plans created for the subcategories.



**FIGURE 10.** Example of a lesson plan consisting of the learning objectives and the link to the eLearning module.



**FIGURE 11.** Example of the links to the Instructional Design groups on social media websites.

we also developed an independent page for a discussion board to allow learners to share their opinions, ask questions, and communicate with other peers.

Besides instructional units, we also provided links to job search engines, instructional design groups on social media,

and other resources in this web-based instruction (see Figure 11). This provides learners easy access to some reliable sources that they can use for networking and for seeking jobs in the field of instructional design.

Under the student resources section, we provided testimonials of the individuals currently working in the field on instructional design (ID). The testimonials dispense advice to students seeking careers in the field of ID on how to engage in academic studies, on the benefits of and recommendations for networking, recommendations for students seeking ID positions and for students seeking a faculty position in the field of ID (see Figure 12).

## Conducting a Usability Test

### Learner Information

There were six participants (1 Male, 5 Females) who participated in this usability study. Participants were between the ages of 29 years to 55 years ( $M = 39$  years) and belonged to different ethnic backgrounds (3 Caucasian, 1 African American, 1 Asian/Pacific Islander, 1 other). All participants had taken a computer-based or web-based training before the study. Five out of six participants had prior experience with using the Blackboard site. Participants' prior experience with using the Blackboard site ranged from less than a year to 15 years. Additionally, four out of six participants preferred face-to-face learning, and two participants preferred computer-based learning.

### Revising our Designs

To address usability, we conducted a usability test with instructional design students who were AECT members to evaluate the materials provided on the AECT Career Resources website. We assessed the navigability, ability to access the learning materials, and users' satisfaction with the course site. Upon completion of the usability test, we made improvements to improve the interface and the instructions based on the feedback we received (Appendix A and B).

The usability test was conducted via Skype. Instructional design students were asked to complete a scenario-based task that involves finding relevant learning materials (i.e., relevant eLearning modules, and links to the job search





**FIGURE 9.** Example of the lesson plans created for the subcategories.

websites, resources, networking sites, and testimonials) within the Blackboard course site. Participants were presented with different scenarios, and they were asked to locate the information that was relevant for the given scenario. For example, participants were presented with the following scenarios “You are applying for a job in the United States and you want to know how to create a resume or a cover letter. Where would you find this information?”; “You are currently searching for a job, and you would like to know how to find suitable job announcements,” among others. They were tasked to navigate through the course site to locate the relevant information. Participants were assessed on their ability to successfully complete each task within 30 seconds. This task helped assess participants’ perceived expectations of the site navigation. This method was adopted from Doubleday (2013). After completing the tasks, participants were asked to complete a short usability formative assessment adopted from Tessmer (1993).

Based on the results from the usability study, some changes were made to the web-based instruction in order to increase its usability. The changes included changing the name of the “VISA” module to “International Resources” to make it more meaningful. The “Calculating your GPA” and the “American Work Culture” modules were moved from “The Job Search” module to the “International Resources” module because these modules are probably most likely to be visited by the international students than the domestic students. It is anticipated that the international students would likely be interested in learning how to convert their percentages into the grade point average (GPA) than the domestic students who already have their grades in this format. It is also likely that international students may be unfamiliar with the American work culture than most domestic students, and therefore, they would be more likely to use this module. Hence, these two modules were added under the “International Resources” tab to make it convenient for international students to access the modules.

Additionally, the “Career Sites” that was located in the “ID Careers” module was removed as it was not adding much to the topic. Therefore, as an alternative, a folder named “Careers in Instructional Design” was created under the ID Careers module. This folder hosted links to web articles that inform about the different ID careers and discusses the path to ID careers and the steps that one can take to seek an instructional design position in the field. Initially, the “Link to websites for finding jobs in instructional design” was listed only under the “ID Careers” tab. But, after the pilot study, the link was also made available under “The Job Search”. This change was made to help because people who are interested in learning about the different ID career opportunities

and those who are actively seeking a job in the field would both be interested in exploring the websites that post relevant instructional design jobs. Therefore, it is meaningful to locate the link under both tabs for providing easy access to the users.

Changes were made to the existing Blackboard CourseSite for AECT Career Resource Center based on the feedback that the participants provided during the usability testing. The contact information was initially presented in the form of an image. This made it impossible for someone who would want to copy the email address to their email when trying to contact the career resource center. Therefore, the image providing contact information was replaced with the text to allow the copying of the email address.

Under the “Networking” module, the image banner consisting of the social media icons were perceived by participants as being clickable buttons. Therefore, to avoid confusion, the image was replaced with an image that is a connotation of networking and which does not look like a button or a clickable item. The font size of the links and texts that were posted under the “Networking” module was increased to improve the readability. Also, page break that appeared in the “Networking” module was removed as it made the list of links posted above the line to be perceived as one group and the ones listed below the line as another. The groups under which links were listed were made more distinct than what they appeared before.

Under the “International Resources” course page, USCIS links were provided to present information about employment and working in the United States. However, participants did not know if they were USCIS links. Therefore, the initial statement that read as “Please visit the links below to learn more about seeking employment in the United States” was replaced with “Please visit the USCIS links below to learn more about seeking employment in the United States” to make it more informative.

The word “The” was removed from the “The Job Search module” as it was the only one with the word “the” and it appeared weird among the list. The list of tabs listed on the vertical navigation bar was rearranged such that, the “ID Careers” tab was listed before the “Job Search” tab. This was done to create a hierarchy in the list to make list categories from general to more specific. During the usability study, participants found the course name “Correspondence” to be vague, and as a result, they were not sure what to expect from this course. Therefore, to reduce the vagueness and to make it more informative, the course was renamed as the “Different Types of Job Search Correspondence”. Additionally, the course named “Documenting Your Experiential Learning Experiences” was renamed as “Documenting Your Experiential Learning Experiences (C.V., Resume, & ePortfolios)”. This is because participants reported not knowing what experiential learning meant and if that was the course that they should refer to if they wanted to learn about how to create ePortfolios.

## DESIGNER REFLECTIONS

The intent of this design case is to highlight strategies we employed to make informed design decisions based on information gathered during a needs analysis, the construction of personas, and the process of usability testing. By using a multi-method assessment approach, coupled with instructional design principles, we believe we were able to customize an instructional product that will meet the needs of our intended audience members.

It was important for our design team to be able to customize a resource that would meet the needs of our audience. We intentionally gathered data from a variety of sources and constituents to help us identify and validate the career needs of instructional design students.

Taking into consideration that there are unique career differences between domestic and international students, we understood the importance of hearing directly from our intended audience. We focused on learning about their individual experiences as they shared stories to assist us with developing a better understanding of their circumstances and needs. By constructing personas, we were reminded to think of our intended audience as an actual person, rather than an unknown collective group (Stefaniak & Baaki, 2013). These personas were continually referred to as we embarked on usability tests and revised the preliminary design of the Career Resource Center. As we considered the feedback provided by the usability tests, we also referred back to the developed personas to reflect on whether these individuals would ask for similar design modifications.

While all four of us had experience using personas to assist with learner analysis and usability testing, this was our first time *advocating* for a persona throughout the design phase.

By assigning a team member to advocate for a persona, we were able to infuse an iterative approach to learner analysis throughout the duration of the project.

As we discussed our design decisions, our group was tasked with determining how our instruction would be perceived by each of the learning personas. This helped enrich our group discussions and really kept the learner as a focal point throughout our design process. This project has really shaped the way each member of our design team approaches learner analyses, personas, and team-based instructional design projects.

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## APPENDIX A

### Scenario-Based Tasks

<b>1</b>	You are close to graduation and you have started searching for a suitable job in the field of Instructional Design. You know that networking is very important and if done well, it could lead you to a good job. You are interested in networking with professionals from your field and you want to learn how to use social media for networking. Where would you find this information?
<b>2</b>	You are applying for a job in the United States and you want to know how to create a resume or a cover letter. Where would you find this information?
<b>3</b>	You have just received a job offer from a reputed organization located in the United States. You are new to the U.S. and are unaware of the American workplace culture. You want to learn about this information prior to joining the organization. Where would you find this information?
<b>4</b>	You want to locate links to the job search websites to find a job posting that is relevant to the field of instructional design. Where would you find this information?
<b>5</b>	You want to post a question to the AECT forum regarding instructional design careers. Where would you go to do so?
<b>6</b>	You would like to join the AECT Systems Thinking and Change Division Facebook group. Where would you find the link to this group?
<b>7</b>	You are applying for an academic position and you want to learn how to create a curriculum vitae for academia and an E-portfolio to showcase your work. Where would you find this information?
<b>8</b>	You are an international student in the department of STEM education and professional studies. You are currently on the optional practical training (OPT) which is about to end but you want to extend your OPT. You wanted to access the link to the USCIS website that provides information about how to go about doing so. Where would you find the link that takes you to the USCIS OPT extension website?
<b>9</b>	You are an instructional design student who is currently searching for a job in the field. You want to learn about the recommendations and advise that the professors and professionals have to offer in regards to seeking an instructional design position. Where would you find these recommendations?
<b>10</b>	You are currently searching for a job and you would like to learn how to find suitable job announcements. Where would you find this information?
<b>11</b>	You are an international student who has recently graduated with a Masters degree in Instructional Design from a reputed university in the United States. You are now looking for a job in the U.S. and would like to learn about the legal procedures involved in applying for working in the United States. Where would you find the link to the USCIS website that provides information about working in the United States?
<b>12</b>	You are about to graduate from a Masters program from a reputed university in the United States of America. As you are preparing for a professional career in instructional design, you want to learn about the options that are available in the field and where can you find a place for yourself with instructional design to best suit with your career interests. Where would you find this information?



## APPENDIX B

### Feedback by Page

CATEGORIES	FEEDBACK
HOME PAGE	<ul style="list-style-type: none"> <li>• Provide a description or introduction to the site. Such as: what is the purpose, what resources are there, and so on. This helps to know if the site is for me or not.</li> <li>• The graphic is too large</li> </ul>
JOB SEARCH	<ul style="list-style-type: none"> <li>• The image is too big.</li> <li>• Remove "The" from the "The Job Search". Only one in the list with "The". It looks weird.</li> <li>• ID and Job search could be combined together as there is not much differentiation between the two. The information is almost similar. <ul style="list-style-type: none"> <li>- To look for particular information you have to look in both places.</li> </ul> </li> <li>• Lot of information in the job search</li> <li>• Pictures on the headers are distracting</li> <li>• Links to job search is great.</li> <li>• Documenting your experience section is very helpful.</li> <li>• Where to look for job announcement module is neat.</li> <li>• Resume and Cover letter module is cool. Samples of the letter and resume are good</li> <li>• Managing expectations module is neat. Would help if there are suggestions about improving the social and emotional process and provide support. For instance, you could provide psychological suggestions regarding how to keep a positive attitude.</li> <li>• Has longer list. Would help if they could be grouped (i.e. creating subgroups).</li> <li>• Not sure about correspondence. What is included in it? The word is vague and wouldn't know what to expect.</li> <li>• Recommend changing the name of "Documenting your experiential learning" to "ePortfolio".</li> <li>• Recommend merging "Where to look for a job announcement" and "Link to website for finding jobs in instructional design" in one group or folder.</li> <li>• The interview module could be extended to add information about thanking and dealing with rejection. This is because the information is related and the correspondence information comes after the interview. I would recommend you delete the correspondence module.</li> </ul>
ID CAREERS	<ul style="list-style-type: none"> <li>• Links that provide recommendations for students looking for ID job is good. The fact that it comes from professionals and you recognize them adds weight to it.</li> <li>• Does not serve to the people interested in a faculty position. Include something about faculty careers as ID careers make people interested in faculty positions feel excluded.</li> <li>• All the recommendations are good. Increase the font of the paragraphs. Make the quotation marks smaller.</li> </ul>
NETWORKING	<ul style="list-style-type: none"> <li>• Social Media icons need to be hyperlinked. These images look like buttons and are perceived as being clickable.</li> <li>• Facebook and linked in names should be bolded and font size should be bigger.</li> <li>• The page breaks make it look like these are different sections. Everything above the line is one group and below the line is another group.</li> <li>• There is a twitter logo, but there is nothing about twitter.</li> <li>• Adding a forum where people can post opportunities for job and research collaboration.</li> </ul>

CATEGORIES	FEEDBACK
<b>INTERNATIONAL RESOURCES</b>	<ul style="list-style-type: none"> <li>• Provide information or training on work culture in academia if it is different from industry.</li> <li>• Provide faculty views and their experiences working in academia.</li> <li>• Formal information about working in the United States from the USCIS website is good.</li> <li>• The website links need to state "USCIS" in it. Right now it is guesswork that the links will take us to the USCIS website. <ul style="list-style-type: none"> <li>- Maybe adding a statement that this link takes you to the USCIS website.</li> </ul> </li> <li>• A section where international students share their emotional and social coping strategies and strategies for networking. For instance, they could provide information regarding how they solved a particular problem. This can help other people learn from them if they are facing similar problems. Even consider creating a community for international students where they can share emotional, social, and academic information.</li> </ul>
<b>DISCUSSION BOARD</b>	<ul style="list-style-type: none"> <li>• Add information regarding who is monitoring this. Is it weekly monitored or peers answer questions?</li> <li>• Adding a welcome thread to introduce yourself. It would be nice to have a thread going so people don't feel awkward to start a thread.</li> </ul>
<b>CONTACT US</b>	<ul style="list-style-type: none"> <li>• Provide the contact information of those who created the site rather than the organization. It would help ease the stress.</li> <li>• The information is presented in an image form. Cannot copy paste the email address.</li> </ul>
<b>GENERAL</b>	<ul style="list-style-type: none"> <li>• For the left navigation, it is recommended to have ID Careers listed first then Job search. Going from general to more specific and creating a hierarchy.</li> <li>• Creating a forum where people can post their C.V. and share social media and email information to encourage networking.</li> <li>• Provide more information about the module on the first page itself to inform what it is about.</li> <li>• Some titles are vague. "Where to look for job announcements" is a good title. I know what I will find there.</li> </ul>