Asset-based Pedagogy: A Case Study Evaluating Evidence of Self-identity and Culture in a Higher Education Online Learning Environment.

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Abstract

Learners in higher education settings across the country bring to the classroom a wide array of educational experiences, cultural practices, and individual identities. The cultural differences learners carry into their online learning environments have the potential to influence how they interact with their classmates and instructors as well as how they interpret course content, learning objectives, and assignments (Chita-Tegmark, 2012). An asset-based approach to instruction frames the diverse nature of learner experiences as strengths and provides opportunities for learners to express their individual identities through choice (López, 2017).

Introduction

Identity development can be viewed as the result of the interaction among psychological/individual factors, cultural factors, and contextual factors of a learning environment (Collins, 2018). Implementing an asset-based pedagogical approach can encourage learners to see themselves reflected in their work. Further, opportunities for learners to build upon prior knowledge can serve to validate their experiences and help develop and strengthen their identities as learners (Darder, 2012). Asset-based approaches to instruction view students' prior knowledge and lived experiences as valuable tools that can be utilized to solve problems that are both meaningful and relevant to their lives. This instructional approach positions

students' lived experiences, their interests, geographic locations, familial and cultural values, and social concerns as central components of the learning process (Wright et al., 2016; Yosso, 2005).

Exposure to asset-based instructional strategies that are problem-based can encourage and support the identity development of all learners, particularly for those interested in pursuing careers where they are often underrepresented such as those in STEM fields. Problem-based learning challenges can provide educators an opportunity to not only leverage students' social and cultural capital, but also develop agency and strengthen identity through the process of working on a project that is both relevant and meaningful to them (Freire, 1970).

Purpose and Research Questions

This study examined the ways in which learners express their identity and culture when provided opportunities for voice and choice in an online learning environment. The study addressed the following research questions:

- When given choice in learning outcomes, in what ways if any do learners express aspects of self-identity?
- How are opportunities for identity expression perceived by learners in an online learning environment as they relate to agency, voice, and choice?

Methodology
Participants

Participants ($N=105$) were a convenience sampling of learners from three sections of an introductory education technology course offered in a college of education at a large public, southeastern university. The first two sections were held in Fall 2020, and the third section was held in Spring 2021. All participants were enrolled in undergraduate education degree programs, including early childhood education, elementary education, and exceptional education. The course titled *Introduction to Technology for Educators* included modules related to classroom management tools, multimedia, communication networks, interactivity, educational software and legal, ethical and social issues related to educational technology tools. The purpose of the course was to prepare learners to be competent computer-based technologists. Throughout the course, students learned how to successfully integrate instructional technology tools into their teaching approach and cultivated their own sense of the importance of effective instructional technology modeling as part of their teaching and learning strategies.

Procedure

This study examined data collected from an introductory education technology course for undergraduate learners. In the first module of the course, learners were asked to complete a digital T-shirt assignment to introduce themselves to their classmates. The purpose of the introductory digital T-shirt assignment provided learners an opportunity to utilize technology to create and present T-shirts that incorporated images they felt represented salient aspects of their identity. The importance of each image was described by the learners and a rationale for the images, words, and hashtags included on the digital T-shirt was posted in a public discussion forum. Learners in the class were asked to comment on the work of other classmates. The submissions from this assignment were used as the baseline to determine how learners self-

identified aspects of their identity such as their personality traits, ethnicities, religions, hobbies, and family structures (see Figure 1). In addition to the creation of a t-shirt, learners were asked to post a response that included what their image represented about them and if they had a hashtag to describe themselves, what would it be (see Figure 2). Learners were also asked to respond to at least two other classmates.

Figure 1
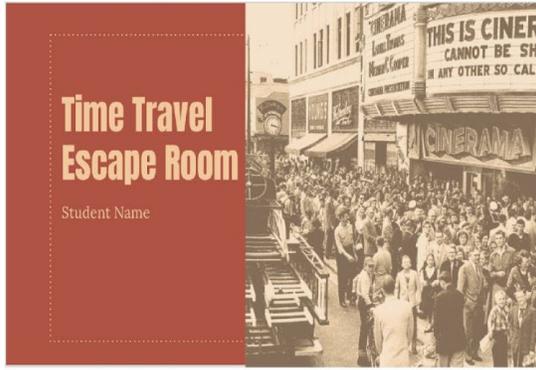
Example of student T-shirt Image

The next opportunity for the expression of student identity occurred during the second module of the course. Learners were tasked with creating their own digital Escape Rooms**.** This activity required learners to develop and create their own digital escape room based on a topic of their choosing (see Figure 3). Learners then shared their work with others in the course as well as friends, coworkers, and spouses to receive feedback and revise if necessary. At the conclusion of the assignment, learners reflected on their experience creating an escape room and how they anticipated this activity could be used in the future. They were asked to respond to the following questions:

- What did you learn as a result of completing the digital escape room?
- How can you use this innovative assignment now as a student?
- How will you use this assignment in the future with your own classroom?
- What did you improve as a result of the test/retest step in the creation of the digital escape room?
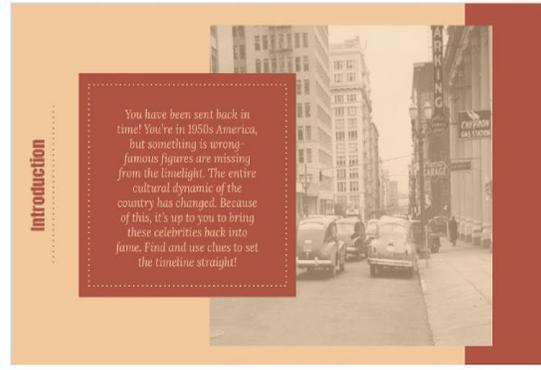
Figure 3
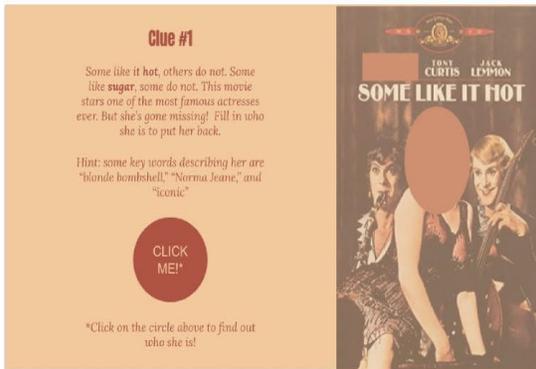
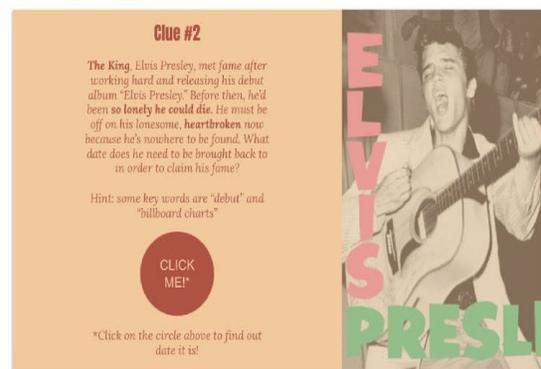*Examples of students' digital Escape Room Submissions*

Slide 1 — Civil War Escape Room (Student Name)

Slide 2 — You are leaving your grandparents house in 30 minutes! Quick, press play and break the code in time before the clock runs out. You must see what's inside!! Go quick!! Your mom wants to leave soon! Click here!

Slide 3 — You are at your grandparents house and exploring through their bookshelf. You come across their parents, your great-grandparents, photo album. The outside looks old and worn and you move to turn the first page, however there is a lock on the photo album. You must explore and crack the codes in order to gain access to the photo album.

Slide 4 — You begin to shake the album trying to open it, out of the small crack falls a newspaper clipping. Read the clipping for clues! Click the link and read "Reporting and Reporters" for clues! https://americanantiquarian.org/earlyamericannewsmedia/exhibits/show/news-and-the-civil-war Hint: As war began, the North and **South** created their own Press Associations. Find the four digit code. Link to the locks on the next page!
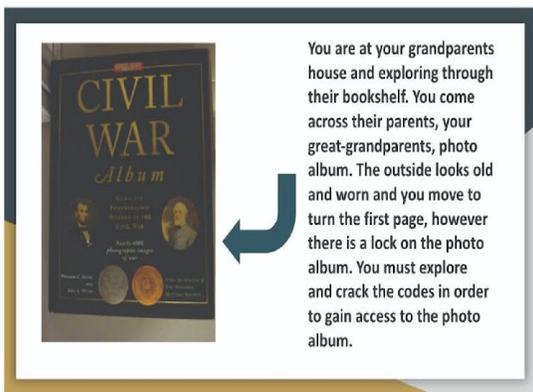
Data Analysis

After conducting a comprehensive literature review related to topics such as culturally relevant instructional approaches (CRIA), asset-based pedagogy (ABP). voice and choice in online learning environments, research questions were developed. In order to answer the identified research questions, a descriptive content analysis was conducted. First, learner assignments were curated from the Learning Management System (LMS). Data that met the following criteria were considered for analysis (a) submissions that evidenced learners' self-described identity in initial activity, (b) submissions that incorporated learners' identity and culture in the second activity and (c) reflections that included learners' perceptions of the affordances of voice and choice in an online learning activity.

Next, submissions, artifacts, images, and reflections were coded, and a coding frame was constructed based on the data. After initial data analysis and coding commenced, general variables were determined by the research team to be included in the coding scheme. These included aspects of identity such as: (a) family, (b) country of origin, (c) faith, (d) personal affiliations, (e) affections, and (f) popular culture. Evidence of agency such as self-efficacy, choice, and collaboration were also considered as these themes frequently found throughout the data. Hashtags included as part of the t-shirt assignment were also collected and analyzed (See Figure 3). The following themes emerged through the coding process: (a) perseverance, (b) personal identity, (c) positivity, and (d) authenticity.

Figure 3

Student-generated Hashtags

Perseverance	Personal Identity	Positivity	Authenticity
#yougotthis	#gettoknowhannah	#goodvibes	#beyourself
#nevergiveup	#hippieteacher	#CAREFREE!	#Natural
#ambitious	#Articulate360Newbie	#Everythingisokay	#beintentional
#getitgirl	#organized	#bright	#truthful
#queenoffreshstarts	#Nurturing	#cares	#compassion (2x)
#determined (5x)	#lucky	#passionate	#authentic
#motivated	#wildchild	#blessed (4x)	#authenticity
#perseverance (2x)	#SweetAsPie	#easygoing	#BeHonestAndReal
#strong	#readmyface	#empathetic	
	#SapereAude (dare to know - learning and striving in education)	#ChooseJoy	
		#grateful (2x)	

Findings and Discussion

Based on the coding frame, 29% of the potential responses were related to self-identity and 27% were evidence of learners' acknowledging that they had a voice and choice in choosing the direction of their learning. Data from this study demonstrated that learners frequently made efforts to connect their work with their own experiences and funds of knowledge. When learners were given agency and the power to determine the topics for their assignments, many noted in reflections that it improved their learning experience. One learner made the following comment:

> The assignment was nice in that we were allowed to choose any moment in the United States of America to choose from for our escape rooms. I was glad we could be creative in choosing topics, riddles, and questions for our escape rooms. I look forward to making many more escape rooms!

The introductory T-shirt assignment detailed in this study presented a learning context that utilized technology to provide opportunities for learners to authenticity express their identities to their peers. Learners oftentimes chose to weave aspects of their identities into assignments that allowed for voice and choice throughout the course (See Figure 3).

Figure 3

Example of student identity across assignments.

In addition to aspects of identity and agency evidenced in assignment submissions, learners also frequently discussed how the opportunities for voice and choice embedded in the tasks positively contributed to their self-efficacy, creativity, and overall engagement in the course. The student who created the examples in Figure 3 reflected on the assignment and commented:

> The things I put on my shirt are what make me, me! On the left sleeve I have a rainbow heart because I am a very proud member of the LGBTQ+ community. This is something that is very important to me not only because it's a community that I'm apart of but also because I always want others to know that I will be supportive of them and that I am always a trustworthy person that they can come to. On the right sleeve of my shirt is a picture of my family and I because they are my everything. The top of my shirt has a headphone with music coming from it because music is my escape and something that always helps me when I'm feeling down, or even just happy! Below that is the beach because when I'm not doing school or watching my sister play softball, I'm definitely at the beach! …. And lastly, the hashtag I would use is #beyourself. I have struggled a lot with knowing when to be myself and when to kind of hide who I want to be from others but I'm proud to be me and I always want to be myself!

The Escape Room Breakout challenge provided multiple examples of identity expression as students choose which topics they integrated into their digital projects and the images and storylines they included. The Escape Room challenge utilized a problem-based instructional approach to provide students with an opportunity to apply their personal knowledge and lived experiences to design a problem, develop a storyline, work towards finding solutions, and reflect on the process as a whole. One learner remarked:

> While forming questions I would switch back and forth between the slides and the form to make sure everything lined up well and decided to make my last question about LGBTQ+ rights because those are especially important to me as a queer woman. So, I found a website that showed me a map of the penalties/protections different countries have in place for members of the LGBTQ+ community and asked participants to pick which two continents had the harshest consequences according to the map.

Providing opportunities for identity building experiences in higher education courses can encourage meaningful participation in course activities. The inclusion of problem-based learning challenges that utilize an asset-based approach can cultivate deeper learning by centering problems within a context that is meaningful to students (Baeten et al., 2010). Several participants noted their intention to incorporate asset-based instructional approaches with their own students in the future. One student noted:

> This digital escape room had myself, as the creator, thinking outside the box and using my creativity to enhance the design of it. This project expanded my knowledge in various ways, and I am becoming more comfortable in using these particular technological platforms.

The use of technology tools can support authentic identity expression and encourage learners to make connections to their own experiences and the experiences of others in the context of the course. Identity expression was evidenced across multiple assignment submissions throughout the course and students noted how the opportunities for voice and choice positively impacted their motivation, self-efficacy to use technology tools, as well as overall impression of the course.

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