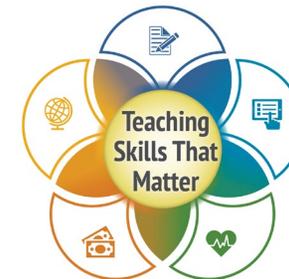# Digital Literacy: Problem-Based Learning

Technology can be a powerful tool in combating stereotypes and negative representations of one's own culture online. Although the internet allows erroneous portrayals of a culture and identity to be disseminated, it also provides a forum for response. This problem-based task is a tech-rich follow-up that can come on the heels of a separate lesson on cultural stereotypes and bias. The activities offer the students a means of learning how to employ technologies to add their "voice" to the web and speak against stereotyped representations like those they previously learned about. The opportunity to speak one's own truth can raise awareness in the broader community about cultural practices, linguistic identity, and shared values.

Note: The activities for this task are based on content created by the author, Jen Vanek, and Martha Bigelow in 2016 in support of their classroom research with refugee youth and young adults. The resulting paper was published as "Literacy as Social (Media) Practice: Refugee Youth and Native Language Literacy at School," by M. Bigelow, J. Vanek, K. King, & N. Abdi, 2017, *International Journal of Intercultural Relations*, *60,* 11 (https://doi.org/10.1016/j.ijintrel.2017.04.002).

Ideal class: English Language Arts

Ideal level: Low Adult Secondary Education or High Intermediate ESL

Process for Students	Role of the Teacher	Activity/Task Descriptions and Possible Materials	The Skills That Matter Addressed or Evident
Build understanding of problem-based learning. **Warm up to the topic/issue at hand.**	**Preteach: Summarize the problem at hand.** Make sure students understand the goals and benefits of a problem-based approach to learning and how solving problems inevitably requires gathering information, which is often sought online and organized or communicated using digital technologies.	The teacher shares an experience in which he or she saw online a negative portrayal of his or her race or religion or another important characteristic. The teacher asks this question: "What, if anything, can I do or might you do in this situation?" **Think and share.** **Teacher:** *Think of a time when you encountered online or in other media a negative stereotype that related to you. How did you react? Did you think you could do anything about it? Share any steps you took to address the issue. Find a partner; describe the situation, how it made you feel, and what you did about it. If you did nothing and the problem is unresolved, ask your partner what he or she might have done.* The teacher can introduce sample questions to support conversation, providing as much instruction and practice as required by the class. "What did you see?" "What is the stereotype?" "How did it make you feel?" The teacher elicits one or two examples from the class. The teacher also asks the class to consider how sharing problems with one another was helpful (or not).	**Respecting differences and diversity** **Interpersonal skills** Learners listen to the teacher's description of the unsettling stereotype and can engage in constructive and empathetic dialog, probing with questions to better understand what was pictured and why the teacher believed it represented a stereotype. **Self-awareness** Learners are asked to reflect on memories and experiences where they were forced to reconcile representations of their culture(s) with their own understanding of their culture. Articulating these differences encourages development of awareness of how they feel about such representations found in public or popular media.

Process for Students	Role of the Teacher	Activity/Task Descriptions and Possible Materials	The Skills That Matter Addressed or Evident
Meet the problem.	**Fully introduce the problem.** Introduce students to the problem, using as an example a somewhat controversial picture, video, or text. Ask students about previous personal experiences with the problem. Introduce vocabulary related to the problem as challenging or unknown words come up.	**Teacher:** *Let's explore this issue more deeply. We know that people use social media to communicate with specific audiences for specific purposes, but sometimes these audiences and purposes can be broad, depending on your share settings and the people in your network—in Facebook, for example, how many friends you have and what you let them share about you. This may create opportunities for you to see ideas about your culture, language, and values that you don't agree with. Even if you don't use social media, you likely encounter such imagery and messages on TV, in magazines, or on the radio.* The teacher at some point presents the example of misleading information given in Appendix A (Somali House Example of Cultural Misinformation). The teacher asks the students what they might have done in the class where the misidentification occurred or in response to the online publication of the misidentified image. **Teacher:** *"Here's a challenge for our class: How can we respond when we see negative or untrue ideas about our culture, language, and values in media and online?"* The teacher should project these questions: • What examples do you recall of your culture, language, or values being misrepresented online? • Did you have a chance to respond to the person who shared these misrepresentations or the organization that published them? • What opportunities do you have to add positive representations of your culture, language, and values?	In addition to those mentioned above, this part of the activity requires these skills: **Critical thinking** Students will be prompted to think critically about information and media found online. **Communication** Student attend to framing the problem-based task, ask questions, and discuss with each other. **Navigating systems** Students will begin to consider the means by which they will respond to the problem, including relevant technologies for learning more about the issue and channels for sharing what they want to communicate.

Process for Students	Role of the Teacher	Activity/Task Descriptions and Possible Materials	The Skills That Matter Addressed or Evident
Meet the problem. (continued)		The students then respond to these questions as a group. The teacher should have the students brainstorm possible responses to cultural misrepresentation. She could present the two responses in Appendix B–writing a letter to the editor and creating an infographic—as well as suggest others, such as creating videos or images that show true depictions, producing flyers or documents for sharing information, building an online community forum to extend the conversation, and using Facebook Live or another webinar tool to educate others. **Teacher:** *You need to decide what you can do the next time you see misrepresentations of your culture online, in shared media, or in your school environment or community. You and your classmates will discuss different options, consider what is doable and likely to have impact and on whom, and then map out your response.*	

Process for Students	Role of the Teacher	Activity/Task Descriptions and Possible Materials	The Skills That Matter Addressed or Evident
Explore knowns and unknowns.	**Group students and provide resources.** Make sure that students understand the problem and what is expected of them. Emphasize that there is no single answer or solution and that they need to choose what appears to be the most viable solution to them and be prepared to explain why they chose that solution. Group students according to their strengths. As with project-based learning, students can take on different roles based on their strengths. Provide access to resources such as the internet, Wi-Fi, and a shared online discussion forum where the students can share their work, like the class secret Facebook group.	The teacher asks the students to go online and find pictures of things that represent their culture. If necessary, the teacher can provide key search terms that align with the students' cultural and national identities. The students should search until they find images that do not seem to align with their own understanding of what their culture represents. If they cannot find something on their own, the teacher directs the students to do an internet search for "teachers in sombreros and news." In 2018 and 2019, there were well-publicized incidents in which teachers took a picture inappropriately portraying them as "Mexican" because they wore sombreros and put on paper mustaches. Students can post a picture from one of the news stories that appear on the results page. The teacher has the students log in to the class secret Facebook group and post their pictures, sharing why the pictures caught their attention and describing the negative stereotype they think the pictures perpetuate. If the class is using Canvas, Moodle, Schoology, or some other learning management system, the teacher can set up a discussion there for this activity. However, with that option, the advantage of using social media that is relevant in most students' daily life is lost. The teacher circulates around the room to help the students with the technical aspects of posting and of writing their descriptions.	In addition to those mentioned above, this part of the activity requires this skill: **Processing and analyzing information** Students will engage in a web search, during which they will make decisions about whether what they find is relevant for the activity. This will require an analysis of results of the web search and some process for gathering and organizing the information and media that the students rule in.

Process for Students	Role of the Teacher	Activity/Task Descriptions and Possible Materials	The Skills That Matter Addressed or Evident
Generate possible solutions. **Consider consequences and choose the most viable solution.**	**Observe and support.** Observe students and provide support as needed, but do not attempt to direct their efforts or control their activity in solving the problem. Observe, take notes, and provide feedback on student participation in the activity and on language used during the activity.	The students' objectives include • choosing a course of action; • deciding on the message, format, and means of delivery; and • collaborating to enact the chosen plan. The teacher's objectives include • observing the students while they are developing plans; • assisting as necessary with finding resources; • helping the students overcome the technical challenges of designing infographics, crafting letters to the editor, producing short videos, etc.; and • assessing the students' level of engagement, collaboration, and problem solving using the Engagement and Collaboration Rubric (Appendix C).	In addition to those mentioned above, this part of the activity requires these skills: **Adaptability and willingness to learn** As students collaborate and employ possibly new technologies, they will need a flexible mindset to weather problems or challenges caused by the technologies. **Problem solving** As students enact their plans, they will inevitably encounter impasses (e.g., not finding sufficient information, technology not working as expected). They may need to adjust their plans to complete the assignment.

Process for Students	Role of the Teacher	Activity/Task Descriptions and Possible Materials	The Skills That Matter Addressed or Evident
	Follow up and assess progress Provide students with opportunities to present and share the results of their work. Provide follow-up activities based on your observations, possibly instruction on grammar, academic language, pronunciation, or pragmatic issues. Assess students' participation and success in the activity and provide opportunities for peer assessment.	Students share the results of their work using the channels they identified. These channels could be as narrow as the class Facebook group, the school website, or the school environment or could include means of reaching the larger community. The teacher provides feedback to the students using the Engagement and Collaboration Rubric (Appendix C).	**Communication** In preparing and presenting their work, learners gain valuable technology-rich communication skills.

Recommended steps for problem posing adapted from *Problem-Based Learning and Adult English Language Learners,* by J. Mathews-Aydinli, 2007, Center for Adult English Language Acquisition, Washington, D.C. (http://www.cal.org/caela/esl_resources/briefs/Problem-based.pdf).

Appendix A. Somali House Example of Cultural Misinformation

The picture below was shared by a student in a class a few years ago. The student described the picture as showing an example of a "Somali house." The Somali students in the class were very upset because it is a picture of a shelter in a refugee camp. They insisted that this was a refugee house, not a traditional Somali dwelling. What would you have done if you were in the class?

Source. "Literacy as Social (Media) Practice: Refugee Youth and Native Language Literacy at School," by M. Bigelow, J. Vanek, K. King, & N. Abdi, 2017, *International Journal of Intercultural Relations*, *60,* 11 (https://doi.org/10.1016/j.ijintrel.2017.04.002).

Appendix B. Sample Response Activities

Check out these two examples of ways to share your voice and educate others.

Letter to the Editor

Newspaper Name

Address

Date

Dear [name of newspaper] Editor,

I just read "[name of article]." The article showed/presented/depicted [the images or ideas that you think are stereotypes]. I think [why you believe this is incorrect]. [In the rest of the paragraph you can share your concern about presenting stereotypical images, including your past experiences with the stereotypes and why they are damaging.]

[End the letter with a request not to share such information in the future or maybe a different request for future action.]
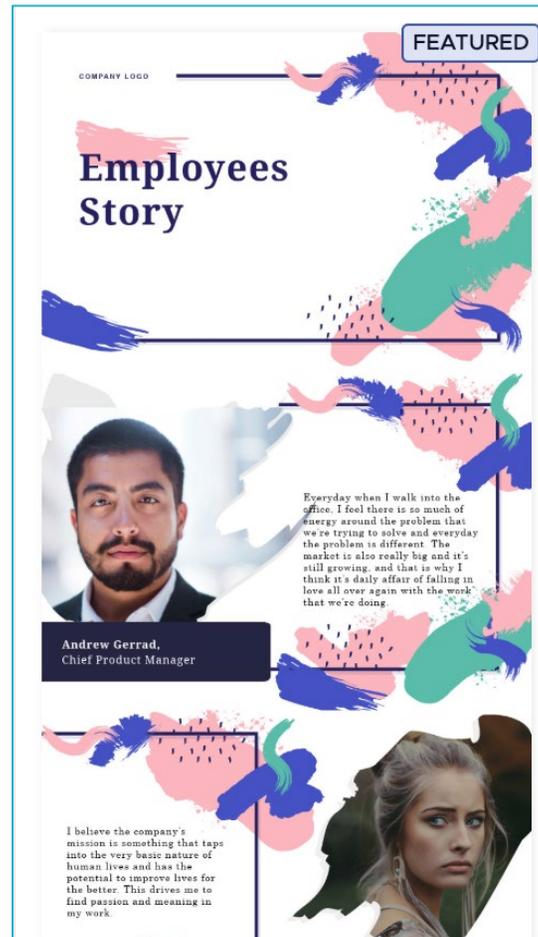
Sincerely,

Name

E-mail

Infographic From PiktoChart

Log in to www.piktochart.com, choose infographic, poster, or flyer and view sample templates, including the following infographic template posted on the Piktochart website.

Appendix C. Engagement and Collaboration Rubric

Student name: _____	3	2	1	Comments
Engagement	Very positive. Showed interest, enthusiasm, and a willingness to participate.	Somewhat positive. Showed some interest and willingness to learn.	Indifferent. Was minimally responsive or unresponsive.	
Class involvement	Made appropriate contributions. Listened attentively to others, was alert and on task, and made an effort to contribute.	At times contributed. Listened to others most of the time; needed reminders to use time productively.	Seldom contributed or listened to others.	
Class conduct and respect for others	Was respectful and considerate to other students and the teacher. Demonstrated interest in others' cultures and values.	Was respectful at times. Expressed adequate interest in others' cultures and values.	Indifferent to concerns of others. Engaged in unrelated activities.	
Cooperative learning	Used time productively when working in a pair or a group. Participated fully as a member of a group.	Used time somewhat productively when working in a pair or a group. Partially contributed.	Made minimal contribution in a pair or a group.	

Student name: _____	3	2	1	Comments
Use of language and discourse useful for problem solving	Described problem and possible solutions clearly. Responded thoughtfully to feedback and contributions of others.	Described problem and possible solutions adequately. Minimally acknowledged feedback and contributions of others.	Struggled to communicate problem or possible solutions. Was unable to respond to feedback from others.	
Use of technology and media	Accessed suggested media and employed technologies fluently. Drew on a range of media and digital strategies in response to problem.	Accessed suggested media and employed technologies adequately with support. Stuck to teacher-suggested media and digital strategies in response to problem.	Struggled with media and technologies used. Struggled with teacher-provided strategies and resources.	
			Total: _____/18	