

Building ESL Learners' Digital Literacy Skills Using Internet Memes

Hanh Nguyen, Wendy Chambers, and Marilyn Abbott

Digital literacy skills are crucial twenty-first-century skills that are required for the successful use of technology and active engagement in today's world. However, there is a lack of effective resources and guidelines for developing English as a second language (ESL) learners' digital literacy skills. Due to their increasingly important and influential role in contemporary society, Internet memes hold great potential for language teaching and learning, particularly given their infectious nature. Internet memes are digital compositions that convey concepts and ideas via a variety of media types, including image, text, audio, and video. In this article, we describe the characteristics and value of memes as a digital resource and explore the ways in which memes can be used to enhance ESL learners' digital skills. Pegrum et al.'s digital literacies framework provides the lens to both examine memes and inform the development of a detailed guide that teachers can use when selecting appropriate memes for use in the ESL classroom. We also provide an exemplar task for using memes to build intermediate ESL learners' language and digital literacy skills based on the guide and include links to some useful websites for meme resources and meme-related activities.

Les compétences en littératie numérique constituent des compétences cruciales du 21^e siècle qui sont essentielles pour utiliser la technologie avec succès et s'engager activement dans le monde d'aujourd'hui. Cependant, il existe un manque de ressources efficaces et de lignes directrices pour développer les compétences en littératie numérique des apprenants de l'anglais langue seconde (ALS). En raison de leur rôle important et croissant dans la société contemporaine, les mèmes de l'Internet représentent un grand potentiel pour l'apprentissage et l'enseignement des langues, particulièrement à cause de leur nature contagieuse. Les mèmes sont des œuvres numériques qui transmettent des concepts et des idées à travers des types variés de médias, y compris l'image, le texte, l'audio et la vidéo. Dans cet article, nous décrivons les caractéristiques et la valeur des mèmes en tant que ressources numériques et nous explorons leurs utilisations potentielles pour promouvoir les compétences numériques des apprenants. Nous utilisons le cadre des compétences numériques de Pegrum et al. pour examiner les mèmes et soutenir l'élaboration d'un guide détaillé sur lequel les enseignants pourraient s'appuyer pour sélectionner les mèmes appropriés pour une classe d'ALS. Nous présentons également une tâche modèle, basée sur le guide, pour l'utilisation des mèmes dans la promotion des compétences langagières et de littératie numérique d'apprenants

intermédiaires d'ALS. De plus, nous suggérons des liens de sites web utiles contenant des ressources sur les mèmes et des activités liées aux mèmes.

Keywords: digital literacy, memes, multimodality

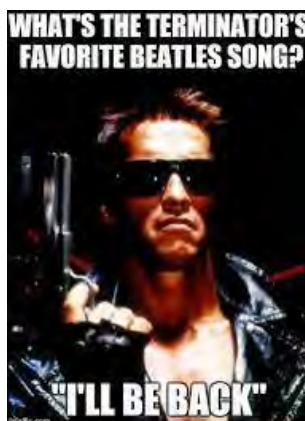
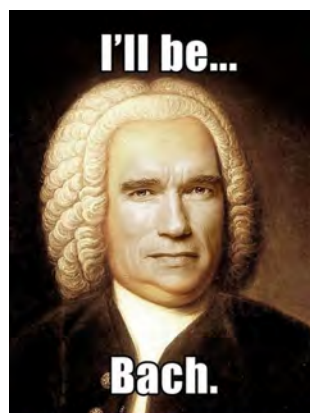
As a result of today's ever-evolving technology and globalization, digital literacy has been identified as one of the essential skills required in the ESL classroom (Gee & Hayes, 2011; Hockly, 2012; Kessler, 2018; Tour, 2020). Being able to use multiple technological and Internet-mediated resources facilitates not only effective communication but also numerous everyday activities (e.g., finding bus routes on a phone). A popular Internet-mediated resource is the meme (see examples in the next section). In 1976, Dawkins coined the term *meme* and compared the role of genes as the mechanism of biological evolution to memes as the mechanism of cultural evolution, in the sense that they replicate, evolve, and mutate to increase their chances of survival and fecundity. Today, memes replicate primarily on the Internet. Internet memes are digital compositions or hybridities, which transmit cultural concepts and ideas by combining different types of media, including image, text, audio, and video (Shifman, 2014). Popular memes often evolve over time through the addition of subtle nuances. Because Internet memes are means of communicating in diverse online communities, they provide authentic linguistic and social contexts for language learning that promote learners' motivation and engagement (Han, 2019; Navera et al., 2019; Purnama, 2017). For these reasons, memes hold great potential for fostering students' digital literacy, their understanding of technology and digital content, as well as their linguistic competence. However, guidelines to assist ESL instructors in using memes to enhance learners' English language and digital literacy skills are yet to be developed. In this article, we provide an overview of Pegrum et al.'s (2018) digital literacies framework for language teaching, delineate the characteristics of Internet memes and provide examples of each characteristic, present a meme selection guide to assist teachers in selecting appropriate memes and designing activities to enhance ESL learners' English language and digital literacies, and demonstrate how the guide could be used to create a meme task.

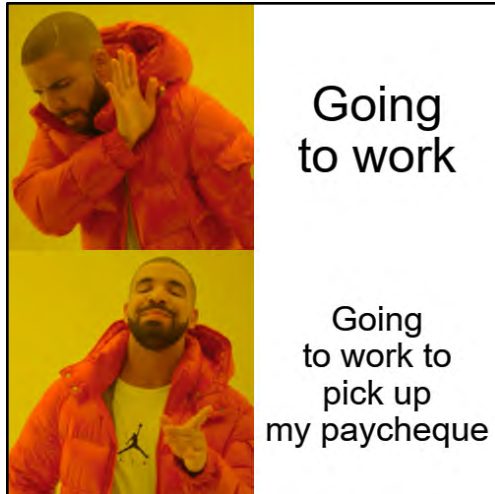
Popular Internet Memes

The study of humorous memes can increase students' engagement in the ESL classroom. The sample memes in Figure 1 were selected because they represent the main characteristics of memes, including references to popular culture, specifically in the North American context (e.g., Arnold Schwarzenegger, Drake, and COVID-19), and humorous linguistic (e.g., polysemy, word stress, puns) and visual cues (e.g., Bach's wig, Drake's body language) that are easily interpretable by a broad audience. They can also be easily remixed by having students add or replace the text and/or layer them with new images, audio, or video. By studying and remixing memes, students can develop their awareness of popular cultural artifacts and foster their digital, linguistic, and critical literacy skills. Definitions of each of the skills are included in the next section, and suggestions for ways to use memes to develop these skills are provided in Tables 1 and 2.

Figure 1

Sample memes









Digital Literacies Framework

Pegrum et al.'s (2018) digital literacies framework describes the skills required to access, use, interpret, and design multimodal, Internet-mediated content. This framework was selected for use in this article because it was specifically designed to support the process of language teaching and learning, as the authors outline the skills needed to fully participate in a digital society. Their framework focuses on four competencies, which include the ability to communicate, use information, collaborate, and (re-)design or create new meanings through new technologies:

1. Communication includes traditional (print) literacy, computer/mobile literacy (i.e., texting, hypertexts, Internet-mediated applications, etc.), and visual/multimodal literacy, which involves the knowledge and skill to understand and use hybridities of images, audios, videos, and texts to communicate online.
2. Information encompasses the ability to use technological tools (e.g., search/filtering engines, tags or hashtags, and keywords) to search for and critically select information, as well as to reduce information overload using online social networks.
3. Collaboration involves interactions on social networking sites where individuals manage their personal online identities (personal literacy) while they engage in virtual spaces with other users (network literacy). Personal and network literacies include participatory literacy (the level of engagement in the online networking environment) and intercultural literacy (the ability to interact effectively with users of different cultural backgrounds).
4. (Re-)design is explicitly concerned with the practices of changing (remixing) and combining additional media and artifacts/ideas to create new multimodal media productions for the purposes of online socializing and self-expression. A hallmark of (re-)design is critical literacy, which is defined as "understanding how the representation of possible worlds through language and image, texts and discourses shapes and alters the material and social, bio-ecological and economic realities and facts of these worlds" (Luke, 2019, p. 7) and, therefore, is integral to the practices of both the creators and consumers of digital products.

The indispensable role of technology in modern society necessitates digital literacies instruction in language learning (Hockly, 2012; Kessler, 2018), and meme-related activities can be used to enhance ESL learners' digital literacies while also building their English language skills.

Characteristics of Internet Memes

Internet memes that are shared extensively on social media (e.g., Facebook, Twitter, Instagram, YouTube, Reddit, Tumblr) can transcend physical spaces, countries, and communities, but the extent of their proliferation and pervasiveness depends on their humour, their inclusion of popular culture, the ease with which users can transform them (Knobel & Lankshear, 2007), and their shared understandings across communities (Yang, 2017). Humorous memes typically include sarcastic or ironic images, captions, or texts superimposed on top of the images that build social bonds between members of online communities (Knobel & Lankshear, 2007). The use of memes with an element of humour in the English classroom can have the added effect of reducing students' anxiety and enhancing their motivation (Harshavardhan et al., 2019). A second characteristic of prolific, pervasive memes is their inclusion and reflection of popular cultural and political events, artifacts, and practices (Knobel & Lankshear, 2007). When memes spread to different online or cultural communities, members of these communities often customize the memes by superimposing new visual and/or verbal references to pop culture onto the memes, and as a result they create versions of the memes with new meanings that are relevant to those communities. The successful transmission and reception of memes between cultures is also dependent on the richness of their intertextuality, which can include a combination of text, images, audio, and video modalities in context (Knobel & Lankshear, 2007). Rich intertextuality refers to the ease with which users can transform memes, especially the written components, to match their intentions and contexts. The underlying ideas and themes that are shared within the distinct spaces, countries, or communities also play an important role in their propagation and evolution (Yang, 2017). In essence, Internet memes are multimodal, digital productions created by members of diverse online communities that are often humorous, include references to popular culture, and may transcend communities.

ESL learners can explore the nuanced meanings conveyed within the hybridities of text, image, and audio/video embedded in Internet memes by discussing the cultural references, sharing interpretations, co-constructing meaning, and creating new memes. The process of understanding, critically analyzing, and remixing Internet memes offers students an opportunity to learn English while actively engaging with relatable, humorous, popular cultural phenomena in the ESL classroom. Critical thinking and discussion revolving around ideological and cultural diversity can promote the valuing and respecting of difference and help students to effectively negotiate the complexities of intercultural communication in the classroom (Byram & Wagner, 2018) and in digital communities through encounters with memes (Abdel-Raheem, 2020). Through these activities, learners can develop their language and critical digital literacy skills, build critical (inter)cultural awareness and literacy, and strengthen their social bonds both within the classroom and in the online communities in which they interact. Consequently, Internet memes have great potential as engaging, relevant digital resources that can be incorporated into ESL pedagogical tasks designed to promote the four competencies identified in Pegrum et al.'s (2018) digital literacy framework, which include symbolic/print, visual/multimodal, personal, and network/critical (inter)cultural literacy.

Using Memes to Enhance Learners' English Language and Digital Skills

Meme Selection and Implementation Guide

The four competencies in Pegrum et al.'s (2018) framework (i.e., communication, information, collaboration, and (re-)design) informed the development of our Meme Selection and Implementation Guide (see Table 1). The guide consists of two sections designed to assist instructors in selecting appropriate memes and creating meme activities that can enhance students' language learning and digital literacies in their ESL classes. Part 1, Selection, includes a set of yes/no questions, to which if instructors answer yes, the meme is deemed appropriate for the context of teaching. Part 2, Implementation, contains four sets of questions to help instructors use the meme they selected to develop students' digital competencies. The questions in Competency 1, Communication, focus on how the text and visual(s) communicate the meaning, purpose, and topic of the meme. In Competency 2, Information, the questions refer to the background knowledge needed to understand the meme and how to search for information that relates to this knowledge. The questions in Competency 3, Collaboration, address the context of the meme (e.g., where and by whom it is shared) and appropriate meme-related interactions (e.g., expectations for comments and conversations about the meme). Competency 4, (Re-)design, includes questions about the meme's content, context, and capacity for creating novel memes. The two sections in the guide were designed to help instructors create appropriate meme tasks for the ESL classroom, including interpretation and analysis tasks, critical and collaborative discussion tasks, and meme creation tasks.

The instructor's answers to the questions in the Guide will determine whether the meme is appropriate and can be used to develop only one, two, three, or all four of Pegrum et al.'s (2018) digital competencies. Each competency contains implementation goals and suggestions for relevant meme activities. Links to useful websites are also provided to assist instructors in locating suitable memes. The Guide was a work in progress when it was initially implemented in the lead author's Language Instruction for Newcomers to Canada (LINC)¹ class, which was held at a mid-sized college in a large Western Canadian city. The 18 students enrolled in the class were working towards Canadian Language Benchmark (CLB; CCLB, 2012) level 5.²

Table 1

Meme Selection and Implementation Guide

Part 1: Meme Selection

Choose a meme and answer the questions below to determine if it is appropriate for use in your class. If you answer "yes" to all of the questions in this section, the meme is appropriate for use in your class.

Popular meme sites: Grammar Catz, Reddit, GIPHY.

¹ The LINC program is a federally funded program that provides free basic settlement language training for adult immigrants.

² CLB 5 is comparable to B1 in the Common European Framework of Reference (CEFR) (North & Piccardo, 2018).

<p>1.* Is it a meme with a textual component (text or speech)?</p> <p style="text-align: right;">Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>*If no, skip Questions 2 and 3.</p>
<p>2. Are the potential target vocabulary and/or grammatical features suitable for your lesson objectives and class level?</p> <p style="text-align: right;">Yes <input type="checkbox"/> No <input type="checkbox"/></p>
<p>3. Text (spoken and written)</p> <p>a) Is the language appropriate (e.g., not offensive) for your teaching context?</p> <p style="text-align: right;">Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>b) Are the font and size of written text appropriate for your teaching context?</p> <p style="text-align: right;">Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>c) If the meme has audio, are the speed and sound quality appropriate for your teaching context?</p> <p style="text-align: right;">Yes <input type="checkbox"/> No <input type="checkbox"/></p>
<p>4. Visual (image or video):</p> <p>a) Are the images and/or videos free of inappropriate content (e.g., violent, profane, culturally inappropriate content)?</p> <p style="text-align: right;">Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>b) Are the animation speed and/or quality appropriate for the learners (e.g., not overly distracting)?</p> <p style="text-align: right;">Yes <input type="checkbox"/> No <input type="checkbox"/></p>

5. Are the event(s) / artifact(s) / practice(s) presented in the meme related to content that will be taught/covered in the lesson/class? Yes ☐ No ☐

Part 2: Meme Implementation

Once you have selected an appropriate meme, answer the questions in the sections below to determine how you could use the meme to develop the four competencies in Pegrum et al.'s (2018) digital literacies framework (i.e., communication, information, collaboration, and (re-)design).

Competency 1. Communication

Goal: To facilitate students' understanding of what the participants of the online community that created the meme is trying to communicate through the meme (i.e., the intent of the meme).

In what order should students read the meme (e.g., viewing left to right, top to bottom, or clockwise)?

If the meme includes text,

- What are the key language forms (vocabulary, grammar, and features of phonetic awareness or pronunciation) and functions (agreeing/disagreeing, sympathizing criticizing) used in the meme?
- How does the text support the visual in communicating the purpose, topic, and meaning of the meme?

Suggested activities:

- Students identify and correct incorrect language forms in a related set of memes.
- Students identify the purpose, topic, and meaning of a related set of memes.

Competency 2. Information

Goal: To develop students' ability to use technological tools to access a meme online, and to critically select key information using online social networks.

Helpful website: Know your meme (knowyourmeme.com)—meme database for learning about memes.

What background knowledge (i.e., cultural, linguistic, pragmatic) do students need to understand this meme?

What are the keywords or information (i.e., hashtags) extracted from the text and/or the visual that help students find related versions of the meme or more information about the popular event, idea, theme, culture, or person that is referenced in the meme?

Where can students search for related memes or find information about references in the meme (e.g., search engines, search functions, hashtags)?

What helps students to discern facts from opinions in the meme?

Suggested activities:

- Students identify key words and phrases referenced in the text and the visual, and then search for related memes online.
- Students identify the event, idea, theme, culture, or person referenced in the meme, search for more information, and then compare and contrast the information across the memes.

Competency 3. Collaboration

Goals: To foster students' ability to discuss the meme and to engage in collaborative virtual interactions, including posting, sharing, and discussing the meme and/or the popular event, idea, theme, culture, or person referenced in the memes.

On which platforms (e.g., Instagram, Facebook, LinkedIn) is the meme shared?

Who are the members of the online communities in which the meme is shared?

How do the platform and the community inform how members are expected to interact (share, respond - ❤️👍, comment) and collaborate?

What background knowledge about the online platform and its community do students need to know when interacting appropriately within the discourse community?

What cultural knowledge and biases are embedded within the meme? If there is potential for polarizing viewpoints to challenge collaborative efforts, how will this be contextually framed for students and pedagogically managed?

What are the discourse skills and technical knowledge required for discussing the meme in an online community?

Suggested activities:

- Students rate a meme (like/dislike) on the virtual platform and share similar experiences related to the meme by posting comments on the meme.
- In small groups, students choose a meme that depicts an event, idea, or theme related to what they've been studying in class and then share it on a class Twitter feed including the keywords as hashtags.
- In small groups, students select a meme, discuss it, summarize their discussion, write a one-sentence response, and post it as a thread on the meme's social media platform.

Competency 4. (Re-)Design

Goal: To develop students' ability to critically evaluate and remix existing memes or create new memes for a particular online community.

Helpful website: Meme Generator (imgflip.com/memegenerator)—create new memes with templates.

What are the characteristics of the meme (e.g., humour, inclusion of popular culture, cultural transferability)?

How is the meme communicating the message via discourse style and use of image and text? How does the remixed meme represent the linguistic and intercultural characteristics of the target online community?

What are the aspects of the meme that are factual or fictional, given what they have learned about the popular event, idea, theme, culture, or person and the online community where the meme is shared?

What are the discourse and digital literacy skills students need in order to create their own memes?

Suggested activities:

- Students compare a provided series of memes to find out the norms of the series; then, based on that, they create a meme with their personal references using a provided template.
- In small groups, students select a meme and create a new meme that is similar in style, intent, and signature to the chosen meme. Then the groups post their new memes on a social media platform (selected by the instructor or the students). Next, the groups critically evaluate whether the memes generated by the other groups are appropriate for the online discourse community. Finally, the groups post their comments on the other groups' memes.

Exemplar Meme Task

In Table 2, we provide a 90-minute exemplar task for use with intermediate (CLBs 5–8; CEFR B1–2) ESL learners to develop their language and digital literacy skills. The task was piloted in a CLB 5 LINC class of 18 adult students representing different linguistic and cultural backgrounds as part of a module on Canadian workplace culture. The memes selected for the task were identified as appropriate because the answers to the questions in part 1 of the guide were all “yes” (i.e., the memes included text, relevant grammatical features, appropriate and comprehensible language, and visuals that were relevant to the task). The task was designed to build all four digital competencies (Pegrum et al., 2018) outlined in part 2

of the guide using Internet memes, including viewing and interpreting memes, identifying the related references or topics, sharing related experiences related, and remixing the memes. In this task, memes are used to engage learners in conversation and exploration of a familiar personal experience while advancing digital competencies and language skills.

Table 2

Exemplar Meme Task

<p>Task: Students view a meme, and then pair up and share a related personal experience.</p> <p>Multi-level: Intermediate</p> <p>Skill: Speaking and Reading</p> <p>Duration: 90 minutes</p> <p>Learning outcomes:</p> <p style="padding-left: 40px;">Language Skills:</p> <p>Students will be able to identify keywords, and share their experiences, feelings, and opinions about a familiar situation.</p> <p style="padding-left: 40px;">Digital Literacy Skills:</p> <p>A. Communication: Identify “When” clause structures and emotions illustrated in the memes.</p> <p>B. Information: Identify the topic/theme of the memes based on the keywords in the text and discuss the topic.</p> <p>C. Collaboration: Interpret the memes based on the context of sharing by reading the comments. Discuss the reference/topic in the meme and share one’s experience relating to the meme.</p> <p>D. (Re-)Design: Create new memes by captioning the memes with your own references.</p> <p>Procedures</p>	
<p>Warm-up</p> <p>(10 minutes)</p>	<p>Competency 1. Communication</p> <ol style="list-style-type: none"> 1. Show students a set of three images (memes with text removed; Figure 2) and ask them to identify the emotion depicted in each and share their answers with a partner. 2. As a whole class, discuss when people feel the emotion depicted in each image.

<p>Pre-task (40 minutes)</p>	<p>3. In pairs, ask students to match each image with its caption below and explain their choice:</p> <ol style="list-style-type: none"> When someone steps on your foot and does not say sorry When you're one minute late to a party and everybody is eating When someone holds the door for you <p>Competency 1. Communication (10 minutes)</p> <p>Introduce the “When you” memes. Phrasal-template “When you” memes are popular due to (a) their humorous images and captions that evoke universal feelings such as happiness or sadness, and (b) the fact that they can be easily interpreted and/or modified for personal reproduction.</p> <p>Lead into the subordinating conjunction “when” in a sentence.</p> <p>Grammar structure:</p> <p>When _____, S + V (to be / feel) + _____.</p> <p>or S + V (to be / feel) _____ when _____.</p> <p>Competency 2. Information (15 minutes)</p> <p>In pairs, students</p> <ol style="list-style-type: none"> Read the memes and identify the keywords related to the meme, for example, “when you” memes, Canada, politeness, punctuality. Match the memes with the topics below: <ol style="list-style-type: none"> Politeness (saying “sorry”). Politeness (saying “thank you”). Punctuality. Search the Internet for additional “When you” memes related to the topics above or information about the topics using the keywords. <p>Competency 3. Collaboration (15 minutes)</p> <p>Break the class into small groups of 3–4 students, and then assign and share one meme with each group using an online tool such as Padlet.</p> <ol style="list-style-type: none"> In each group, students read the meme and its accompanying comment (see Figure 3) and then discuss the following questions: <ol style="list-style-type: none"> What happened to the commenter? When and where did the commenter’s experience happen?
---	---

<p>Task</p> <p>(20 minutes)</p>	<ol style="list-style-type: none"> c. How did the commenter feel when it happened? d. Does the commenter agree with the meme? Why/Why not? <ol style="list-style-type: none"> 2. Students share their own opinions about the situation in the meme, and then post their comments under their assigned meme on Padlet. 3. Students read others' comments and click ♥ if they like the comments or post replies to those comments. <p>Competencies 1 and 2. Communication and Information.</p> <ol style="list-style-type: none"> 1. Share the link to the meme (see Figure 4) with the class on Padlet. 2. Students view the meme individually, and then identify keywords and search the Internet (using Google, Bing, etc.) for additional related memes or information about the topic (personal space, social distancing) in Canada. <p>Competency 3. Collaboration</p> <ol style="list-style-type: none"> 3. Based on what they learned about the topic, students post a comment under the meme on Padlet about <i>when</i> they had a similar experience and/or feeling in Canada to what is shown in the meme. 4. Students read each other's comments and click ♥ if they like the comments or post replies to those comments.
<p>Post-task</p> <p>(20 minutes)</p>	<p>Competency 3. Collaboration (10 minutes)</p> <p>As a whole class:</p> <ol style="list-style-type: none"> 1. Review the meme and discuss the expectation of personal space by members of the community in which they live. 2. Compare how personal space may differ between different people and/or different cultures (in pre-COVID-19 North America, typically 2–3 feet, or 6 feet during a pandemic). 3. Discuss personal space and physical distancing, and how each may be relevant to the meme. <p>In small groups (3–4 students):</p>

1. Choose and discuss one of the cultural values/norms (i.e., apology, politeness, or punctuality) depicted in a different meme from the set provided.
2. Compare the cultural value or norm in their home cultures or countries with the host culture or country in which they are currently living.
3. Summarize their discussion and post a reply under one of the original meme posts on Padlet.

Competency 4. (Re-)Design (10 minutes)

Individually, students

1. Access the Meme Generator website: <https://imgflip.com/memegenerator>.
2. Search for one of the three images using the search tool and the keywords (shocked dog, crying woman / First World Problems, happy Leo, grumpy cat).
3. Choose the image template.
4. Type their own caption using “when” to describe when they typically experience such emotion.
5. Copy the meme and paste it to the class Padlet.
6. Vote for their favorite memes by clicking ♥.

Figure 2

Three Images of Memes with the Text Removed

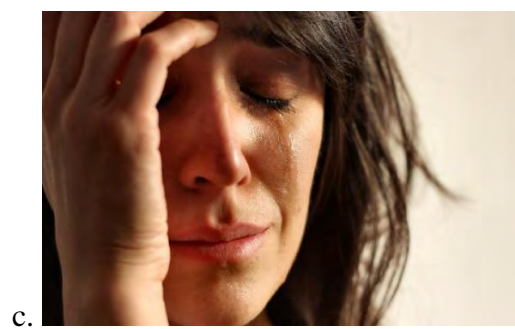
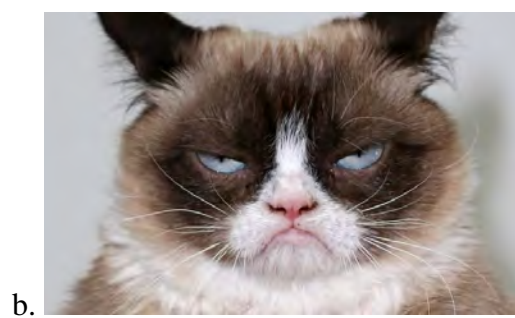


Figure 3

Mememes with Comments





c.

Figure 4

Meme for the Main Task



Conclusion

Although previous research has focused on the use of memes in education to promote literacy and language development, a connection to digital literacies is lacking and there are no practical guidelines for locating, selecting, and using memes to develop ESL learners' language skills and digital literacy competencies. In this article, we have addressed these gaps by connecting Pegrum et al.'s (2018) digital literacies framework to practice. We accomplished this by developing a Meme Selection and Implementation Guide that provides a set of questions that English language instructors may use when choosing appropriate memes and designing meme-related activities for building students' digital competencies, including communication, information, collaboration, and (re)design. We recognize that it may be difficult for instructors to use memes to develop their students' digital literacy skills if they are not familiar with memes and do not have strong digital literacy skills themselves. However, we encourage instructors to consider the use of the guide and the exemplar task as a starting point to address challenges they may experience when trying to locate, select, and use memes to advance the language and digital skills that students need to participate effectively in online communities.

The Authors

Hanh L. N. Nguyen is a graduate of the TESL Master's program at the University of Alberta and is a LINC instructor in the Faculty of Skill and Foundational Studies at NorQuest College.

Wendy Chambers is Academic Program Manager, Language and Settlement Studies in the Faculty of Skill and Foundational Studies at NorQuest College.

Marilyn L. Abbott is a professor in the TESL Program in the College of Social Sciences and Humanities at the University of Alberta.

References

- Abdel-Raheem, A. (2020). Mental model theory as a model for analysing visual and multimodal discourse. *Journal of Pragmatics*, 155, 303–320. <https://doi.org/10.1016/j.pragma.2019.09.012>
- Byram, M., & Wagner, M. (2018). Making a difference: Language teaching for intercultural and international dialogue. *Foreign Language Annals*, 51(1), 140–151. <https://doi.org/10.1111/flan.12319>
- Centre for Canadian Language Benchmarks (CCLB). (2012). *Canadian Language Benchmarks: English as a second language for adults* (rev. ed.). <https://www.canada.ca/content/dam/ircc/migration/ircc/english/pdf/pub/language-benchmarks.pdf>
- Dawkins, R. (1976). *The selfish gene*. Oxford University Press.
- Gee, J. P., & Hayes, E. R. (2011). *Language and learning in the digital age*. Routledge.
- Han, Y. (2019). Memeing to learning: Exploring meaning-making in a language-learning chat group. *Technology in Language Teaching & Learning*, 1(2), 68–90. <https://doi.org/10.29140/tltl.v1n2.191>
- Harshavardhan, V., Wilson, D., & Kumar, M. V. (2019). Humour discourse in internet memes: An aid in ESL classrooms. *Asia Pacific Media Educator*, 29(1), 41–53. <https://doi.org/10.1177/1326365X19842023>

- Hockly, N. (2012). Digital literacies. *ELT Journal*, 66(1), 108–112. <https://doi.org/10.1093/elt/ccr077>
- Kessler, G. (2018). Technology and the future of language teaching. *Foreign Language Annals*, 51(1), 205–218. <https://doi.org/10.1111/flan.12318>
- Knobel, M., & Lankshear, C. (2007). *A new literacies sampler*. Peter Lang.
- Luke, A. (2019). Regrounding critical literacy: Representation, facts, and reality. In D. E. Alvermann, N. J. Unrau, M. Sailors, & R. B. Ruddell (Eds.), *Theoretical models and processes of literacy* (7th ed., pp. 554–574). Routledge.
- Navera, J. A. S., Garinto, L. A. B., & Valdez, P. N. M. (2019). Teaching against the meme: Politics, argumentation and engagement in an ESL classroom in the Philippines. *The Journal of Asia TEFL*, 16(1), 393–400. <http://dx.doi.org/10.18823/asiatefl.2019.16.1.29.393>
- North, B., & Piccardo, E. (2018). *Aligning the Canadian Language Benchmarks (CLB) to the Common European Framework of Reference (CEFR): Research report*. Centre for Canadian Language Benchmarks. <https://www.language.ca/wp-content/uploads/2019/01/Aligning-the-CLB-and-CEFR.pdf>
- Pegrum, M., Dudeney, G., & Hockly, N. (2018). Digital literacies revisited. *European Journal of Applied Linguistics and TEFL*, 7(2), 3–24.
- Purnama, A. D. (2017). Incorporating memes and Instagram to enhance students participation. *LLT Journal*, 20(1), 1–14. <https://doi.org/10.24071/llt.2017.200101>
- Shifman, L. (2014). *Memes in digital culture*. MIT Press.
- Tour, E. (2020). Teaching digital literacies in EAL/ESL classrooms: Practical strategies. *TESOL Journal*, 11(1), 1–12. <https://doi.org/10.1002/tesj.458>
- Yang, S. (2017). An analysis of factors influencing transmission of Internet memes of English-speaking origin in Chinese online communities. *Journal of Language Teaching and Research*, 8(5), 969–977. <http://dx.doi.org/10.17507/jltr.0805.19>