ACADEMIC LANGUAGE IN AN EMOJI WORLD

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Abstract: Academic language is the formal language that is common in books and at school, but that students are unlikely to encounter in everyday conversations with friends and family. Not only is academic language critical to school achievement but it is also foundational for the true comprehension of content-rich subjects. Academic language should permeate the classroom learning environment, and inventive strategies to accomplish this important goal facilitate student progress. This article describes intentional instruction in activities using emoji to develop academic language, higher level thinking ability, and comprehension skills. Educators can create rich academic language classrooms—with or without the use of the emoji—by purposefully incorporating it into everyday instructional conversation. However, since emoji are omnipresent in students' everyday lives, it behooves educators to explore ways to make emoji work more productively in this critical foundational skill. This article examines the history of emoji use, defines academic language, and discusses the importance of academic language to reading and content comprehension. Additionally, several classroom strategies using emoji to improve academic language and reading comprehension are delineated.

Emoji is a language of pictures that is understood and frequently used by students of all ages. "Sometimes called 'modern-day hieroglyphics,' emoji have evolved from an easy way to indicate sarcasm or a joke into a nearly complete mode of communication" (Netsanity, 2018). As the popularity of emoji continues to grow, how can teachers capitalize on their use to improve the academic language of their students? Perhaps emoji can be harnessed to help students connect to their emotions, improve communication, and deepen understanding. This article examines the history of emoji use, defines academic language, and discusses the importance of academic language to reading and content comprehension. Additionally, several classroom strategies using emoji to improve academic language and reading comprehension are delineated.

History of Emoji Use

Merriam-Webster (https://www.merriam-webster.com) defines emoji as "any of various small images, symbols, or icons used in text fields in electronic communication . . . to express the emotional attitude of the writer, convey information succinctly, communicate a message playfully without using words, etc." In 1999, Shigetaka Kurita invented a set of 176 simple pictograms which are considered the beginnings of modern-day emoji (Buchholz, 2020). In 2015, Oxford Dictionaries named the "face with tears of joy" emoji (see Figure 1) its Word of the Year, due to its extensive use.
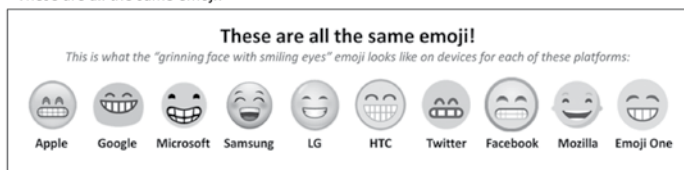
Figure 1:
Face with tears of joy

Note: This emoji, named *face with tears of joy,* was named the Word of the Year in 2015.

Now, in 2020, there are over 3000 emoji selected by the Unicode Consortium (https://home.unicode.org), which sets the standard

for character encoding and ensures that the same basic symbols work across all computers and other devices worldwide (NPR Staff, 2015). Emoji make up an increasingly larger portion of written language. In fact, "about half of the characters used on Instagram are emoji" (Miller et al., 2016).

Educators have been using symbols similar to emoji for decades. Consider the smiley faces and frowny faces put on student work, rebus stories, and behavior charts. However, educators have been slow to integrate the regular use of emoji into classroom instruction. After all, some see emoji as little more than an adolescent grunt, taking us back to the dark ages of illiteracy (Evans, 2017). Another challenge is that emoji can be misinterpreted. There are three potential reasons for this. First, emoji do not necessarily look the same across different devices or systems. A "Grinning Face" on Apple looks slightly different than the same emoji on Google or Facebook. One that is commonly misinterpreted is "the 'grinning face with smiling eyes' emoji, which—depending on the platform—can range from the rosy-cheeked cherubic face of glee to the anguished clenched-teeth look of constipation" (Walker, 2016). (See Figure 2.)

Figure 2:
These are all the same emoji!

These are all the same emoji!
This is what the "grinning face with smiling eyes" emoji looks like on devices for each of these platforms:

Apple   Google   Microsoft   Samsung   LG   HTC   Twitter   Facebook   Mozilla   Emoji One

Note: This figure represents a single emoji—grinning face with smiling eyes—across multiple platforms.

Another reason for reluctance is that people's interpretations of emoji may differ from person to person. Even when sending a particular emoji across the same platform, the likelihood that the sender's sentiment and the receiver's sentiment concerning the emoji—the degree to which they interpret the emoji as positive or negative—can vary widely.

Finally, and possibly the most concerning, the meaning the creator of an emoji places on it may not remain the meaning of the emoji as it is used in society. In fact, many emoji are ascribed hidden meanings by certain populations which may be vastly different than the original intended meaning—which may be a good reason for teachers to avoid using emoji such as "winking face with tongue." True, written text also has the potential to be misinterpreted, but it also has the advantage of containing words that have standardized dictionary definitions. In contrast, "emoji are nuanced, visually-detailed graphics that may be more open to interpretation" (Miller et al., 2016).

However, there are reasons to support the use of emoji in the classroom. Emoji are fun. They're eye-catching. Emoji can also help students express their thoughts and feelings. Since emoji can carry multiple meanings, their use gives students the opportunity to analyze and infer meanings depending on context. Emoji provide a method for teachers to extend opportunities to use and discuss words, as discussed here:

> Digital communication is vital to our daily lives today, and embracing the languages used within it and incorporating them into education can be powerful tools. Rather than looking at emoji as the downfall of the English language, we should look at them as a way to build learning about our language and as a tool to teach other concepts. (Dictionary.com, 2020)

Students use the emoji language on a daily basis and teachers can connect this known graphic language to the academic language that leads to school achievement and success.

Academic Language

Academic language is the formal language that is common in books and at school, but that students are unlikely to encounter in everyday conversations with friends and family. It is critical to school achievement and success. *Academic language skills* encompass both oral and written language skills. These skills include the ability to articulate complex ideas, the ability to relate a series of events comprehensibly, and the ability to use and comprehend a wide range of vocabulary and grammatical structures. Academic vocabulary is a subset of academic language skills and includes both general and content-specific vocabulary words. Academic vocabulary consists of words and grammatical structures that students do not use in their daily conversations but that are common in formal settings and, therefore, need to be taught if students are to successfully understand written text.

According to several studies, language is one of the biggest predictors of achievement for adolescents in the areas of reading achievement and content area achievement (Catts et al., 2006; Foorman et al., 2015; Foorman et al., 2017; Mehta et al., 2005). The What Works Clearinghouse (https://ies.ed.gov/ncee/wwc) recommends that "students of all ages and text-reading abilities need to engage in activities that purposefully develop academic language skills" (Foorman et al., 2016, p. 6).

Uccelli et al. (2015) identified the following components of academic language.

- *General and content-specific academic vocabulary* are the words that expedite comprehension for students as they study and learn and are most often used in school. To support the instruction of academic vocabulary, Beck et al. (2002) defined three tiers of vocabulary instruction. Tier 1 consists of the most basic words, Tier 2 of high frequency words that appear across a range of domains and are important for understanding (industrious, measure, benevolent) and Tier 3 of context/content specific words (economics, isotope, condensation). Academic vocabulary is composed of Tier 2 and Tier 3 words.

- *Morphology* is the study of word units (root words and affixes) and how they are combined. These units have implications for pronunciation, meaning, parts of speech, and spelling (Goodwin & Ahn, 2013).

- *Syntax* denotes the sentence structure and grammatical rules of a language.

- *Text structure* refers to how the details and information in a text are organized. Special emphasis is given to narrative and inferential text structures because of their importance to reading comprehension.

Classroom Strategies and Activities

Examples of classroom activities that highlight each of Uccelli's et al. (2015) components of academic language (academic vocabulary, morphology, syntax, and text structure) are detailed below. Additionally, these activities exemplify ways that the classroom teacher can use emoji to design academic language instruction that capitalizes on students' use of abbreviated texts.

Activities That Build Academic Vocabulary

Students must be able to infer character feelings in text. To infer feelings, they need a strong bank of words describing emotions. Create four posters, each with an emoji printed at the top representing a basic emotion. Figure 3 shows emoji for happy, sad, mad, and scared.

Figure 3:
Examples of emotion emoji

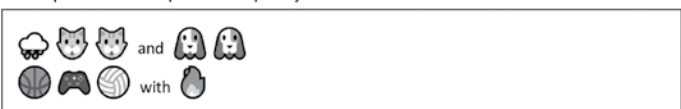Happy   sad   mad   scared

Note: This figure represents emoji for four basic emotions.

Depending on the grade level, you may introduce one new emoji poster at a time, or all four at the same time. Directly teach students the primary word associated with each emoji and write it on the poster. Across several days, ask students to identify additional words they know that are synonymous with a particular emotion and write each on the corresponding poster. Every day, read and review all the words on each poster. When students are not able to determine a synonym for a feeling, teach them a new word. For example, *exuberant, despondent, livid*, and *petrified* are excellent general-academic words that will help students more explicitly infer and describe a character's feelings.

Idiomatic expressions are another part of academic language that can be taught and practiced using emoji. Preteach several common idiomatic expressions and their meanings. Then, show students an emoji string representing a common idiom. Figure 4 shows emoji strings for *raining cats and dogs* and *playing with fire*. Students state the idiom represented and explain its meaning.

Figure 4:
Examples of idioms represented by emoji

Note: This figure represents emoji strings for two common idioms, including raining cats and dogs *and* playing with fire.

Another activity which promotes academic vocabulary through emoji involves creating an emoji string that represents a process or cycle students have been taught. Examples include the metamorphosis of a butterfly, the life cycle of a frog, and the germination of seeds. Students must explain the concept using the emoji string as a scaffold. For example, if students have been learning about the water cycle, they would need to be able to explain the emoji string in Figure 5 using discipline-specific words such as *evaporation*, *condensation*, and *precipitation*.

Figure 5:
Example of emoji representing a process or cycle

Note: This emoji string represents the water cycle.

Activities That Build Morphology

Emoji can be used to teach morphology. At the simplest level, emoji can represent the parts of a compound word. First, teach that a compound word is two words that are put together to make one word. Then, students say or write the compound word represented by emoji pairs. Figure 6 shows emoji pairs for *earring, cheesecake, pineapple,* and *doghouse.*

Figure 6:
Example of emoji representing compound words

Note: These emoji pairs represent the words earring, cheesecake, pineapple, and

Use emoji to represent a prefix, such as un-, meaning *not*. Pair the emoji with one representing a base word, like *happy* or *afraid*. Teach the meaning of the prefix. Then, using the emoji pairs as a scaffold, students determine the word represented by the emoji. Extend the activity, if appropriate, by having students write the word represented by each emoji pair, or by having students create additional emoji pairs by adding the prefix to other base words, like *unearth*, *unbutton*, and *undress*. Other prefixes may also be used, such as *pre-* and *dis-*. Figure 7 shows examples of emoji used to represent the prefix *un-* and base words.

Figure 7:
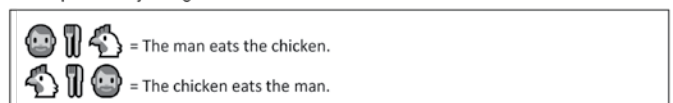Example of emoji representing prefixes and base words

= unhappy
= unafraid
= unearth
= unbutton
= undress

Note: These emoji represent pairing the prefix un- with base words.

Activities That Build Syntax

Emoji can be used to teach and practice using correct word order in a sentence. For example, show students a string of emoji representing a simple subject, verb, and object, such as *The man eats the chicken*. (See Figure 8.) Students state the sentence represented by the emoji string. Then, rearrange the emoji to reflect a different word order. For example, switch the subject and the object so that the emoji look like the second row of Figure 8. Students explain the difference word order makes in the sentence.

Figure 8:
Example of emoji strings used to teach word order

= The man eats the chicken.
= The chicken eats the man.

Note: These emoji strings represent the way changing the order of words in a sentence can affect the meaning of the sentence.

Past, present, and future tense can be practiced using emoji. Students describe what they did last weekend using five emoji. Then, students pair up. Each partner "reads" the other's emoji string using the past tense. Alternatively, students can tell what they are currently doing, or they can predict what they will be doing next weekend using emoji strings, and their partner "reads" the string using the appropriate tense. See Figure 9 for an example of a student's emoji string and its interpretation in past tense.

Figure 9:
Example of emoji strings used to teach and practice tense

Note: This emoji string represents a student's activities over the weekend and is used to practice retelling the events using the past tense.

Activities That Build Narrative and Inferential Text Structure

Students can use emoji scaffolds to help them retell a story. As they read, they select emoji that represent characters, setting, actions, and other story elements and create an emoji string. Then, they use their emoji string to help them retell the story in sequential order. Figure 10 shows an emoji string for the fable "The Three Little Pigs."

Figure 10:
Example of emoji string used for retelling

Note: This emoji string represents the story of the *Three Little Pigs*.

Emoji can be used as a reference to assist students in inferring character feelings. Give students a chart showing some common "smiley face"-type emoji. As students read, ask them to identify what a character is doing and saying at a particular point in the text, and infer from that what the character is feeling. Students point to or circle the emoji that best indicates how they think the character feels. They should also explain why they believe the character feels that way. Figure 11 shows an emoji chart that could be used for this purpose.

Figure 11:
Sample character emoji chart

Note: See Curts, E. (2017, January 21). Character emojis. ControlAltAchieve.com. https://docs.google.com/document/d/1aDLoKZXC8l-tbXXqMDCUKv8upEldtL3MSOwFWEpriS4/edit

For a novel way to complete a summary of a book, students can use an electronic platform to create an emoji-based summary. First, students write the title of the book, and then list emoji representing the main characters, the setting, the problem, and the solution. They can also create emoji strings that capture the beginning, middle, and end of the story. Finally, students create a string using five to twenty emoji that best sum up the events in the story. Using emoji to encapsulate ideas into icons is an activity that requires students to think critically.

Activities using emoji are often adaptable to use with students of any age and at any grade level. Since the language of emoji is pictorial rather than alphabetic, even pre-emergent readers can use them to interpret or convey ideas. Emoji can also serve as scaffolding for struggling readers as well as supports for English language learners. Not only can the use of emoji benefit a wide range of students, but it

can also benefit teachers, according to a study done by researchers at the University of Edinburgh, who found that educators who use emoticons are perceived as warmer and deemed to have more of a positive influence on students (Marder et al., 2019).

Closing

Academic language should permeate the classroom lessons of students. It is the foundation for comprehension and understanding of content-rich subjects and written text. Intentional instruction in activities that use emoji to develop academic language supports students' ability to develop higher level thinking and comprehension skills. Emoji activities can be utilized across age and ability levels while providing scaffolds to learners with differences and challenge to advanced learners. Educators can create rich academic language classrooms—with or without the use of the emoji—by purposefully incorporating it into everyday instructional conversation. However, since emoji are omnipresent in students' everyday lives, it behooves educators to explore ways to make emoji work more productively in this critical foundational skill.

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