




## Using Emotion Regulation to Support Informed Literacy

Rachael A. VanDonkelaar, PhD candidate

*Mercer University, Georgia, United States*

 <https://orcid.org/0000-0002-2015-7801>

Contact: [vandonkelaar11@gmail.com](mailto:vandonkelaar11@gmail.com)

### Abstract

When it comes to fake news, no medium circulates and reaches more youth than social media. Social media can provide an opportunity for students to create and post with an authentic audience; however, social media can also perpetuate the danger of fake news. Youth across the globe emotionally engage with content several hours a day and can become vulnerable to the clickbait style of news. Therefore, although research has studied how critical literacy instruction supports informed reading, literacy instruction must also address students' emotional regulation needs. This research-to-practice article describes the dangers of fake news on youth interactions and provides practical emotional regulation tips for teachers. Emotional regulation strategies in this paper specifically concentrate on implementing affect labeling and mindful breathing in classrooms in order to support informed literacy.

Keywords: *fake news, critical literacy, reading, emotion regulation, affect labeling, mindful breathing*

Date Submitted: July 18, 2022 | Date Published: April 30, 2023

### Recommended Citation

VanDonkelaar, A. R. (2023). Using emotion regulation to support informed literacy. *Journal of Educational Research and Practice, 13*(1), 87–98. <https://doi.org/10.5590/JERAP.2023.13.1.08>

### Introduction

Tweeting, posting, and sharing are new contexts to consider with the birth and dramatic rise of social media (Allcott & Gentzkow, 2017). Researchers have recognized that out of all the digital platforms available for youth, social media is the most dominant news source (Kahne & Bowyer, 2017; Cherner & Curry, 2019) and the most complex digital platform (Boczkowski et al., 2018; Wittebols, 2020). The nature and culture of social media enables a mass regurgitation of information (Farmer, 2019; Sommariva et al., 2018; Wittebols, 2020). On social media, 50% of all sharing can happen in less than three hours after content is originally published, and 90% of total sharing can happen in less than 16 hours (Bright, 2016). Here, sharing refers to the **recirculation of a post such as a comment, video, link, or picture from one person's social media profile to another's. Although each social** media platform is designed with its own features, users engage with social media differently depending on the target audience of that platform, not necessarily on the social media's design and technology (Boczkowski et al., 2018). Adolescents knowingly make public and private decisions about what to share in the context of their emotions (Vermeulen et al., 2018). However, even if users turn to social media for momentary entertainment, users may unintentionally start reading political content posted there by others (Villi et al., 2022).

Unfortunately, not everything readers engage with is true, and fake news dangers both democracy and journalism as it impacts the reality of an informed citizen (Kahne & Bowyer, 2017; Johnson et al., 2021). Fake news, or intentionally misrepresentative or misinformed news, is especially problematic for youth as they grow up and tune into a digital world lacking accountability (Sommariva et al., 2018). Today, an influential teen can post an ill-informed opinion and, within a few hours, that post can receive thousands of interactions **(Farmer, 2019)**. Research has also indicated that youth struggle to identify reliable sources and that youth's self-created metrics for reliability can be problematic (Plaisime et al., 2020). Youths prefer to relate to stories, and since they are more likely to turn to digital platforms for difficult topics, they can be vulnerable to the narrative yet misinformed content posted online (Plaisime et al., 2020). Additionally, researchers consider fake news **"a viral success" since social media platforms encourage users to create and post with emotions** rather than with logic (Martel et al., 2020, p. 16). This heightened emotionality can place teenagers in a vulnerable position since they are developmentally managing drastic changes on the inside and outside **(Guyer et al., 2016)**. Yet despite the impact that social media can have on youth, and despite youth's proclivity to use social media all hours of the day, social media literacy remains largely outside of the classroom curriculum (Rutledge et al., 2019).

Additionally, research has indicated that emotions impact how individuals consume misinformation. Although media literacy education has helped individuals discern between real and false information, people are less likely to analyze an emotive-**based argument that aligns with the participant's political preference** (Kahne & Bowyer, 2017). Furthermore, researchers have found that the interests, emotions, and popularity behind news stories or topics can impact fake news circulation (Sommariva et al., 2018). Now there is a social news disconnection between what people will share and what people will read (Bright, 2016). Unfortunately, the nature of sharing posts on social media becomes more complicated when emotions are involved. Specifically, feelings such as distress, hostility, nervousness, jitters, excitement, or being upset can lead to a belief in fake news (Martel et al., 2020). Meanwhile, emotions such as determination, interest, and attentiveness can lead to analytical thinking (Martel et al., 2020). Researchers have also found that teenagers are more susceptible to believing fake news on their topic of interest (Papapicco et al., 2022). In turn, heightened emotional arousal can debilitate cognitive tasks necessary for reading (Mason et al., 2018). This happens due to the heightened emotional thoughts that distracted the participants' cognitive performances on multi-text comprehension (Mason et al., 2018).

To target emotional stabilization, or the ability to regulate emotions, teachers need to implement emotion behavior regulations connected to reading. Researchers have found how specific emotions and emotional dysregulation affect literacy comprehension (Liew et al., 2020; Mason et al., 2018; Mason et al., 2017). Furthermore, students are able to perform complex cognitive functions in the digital world when they have a greater psychophysiological state that is calm and concentrated (Mason et al., 2018). This connects to the concept of analytical thinking or the ability to critically evaluate, break apart, and analyze information. When participants are emotion regulated, they can notice different perspectives on a controversial topic (Mason et al., 2018). Furthermore, emotional self-regulation has helped students overcome frustration and obstacles by encouraging students to stay persistent and focused (Liew et al., 2020). In turn, emotional self-regulation also helped students achieve reading outcomes (Liew et al., 2020).

Critical literacy teachers talk often about how students are thinking, but how often are we asking students how they are feeling? Emotions can heighten, exacerbate, or manipulate fake news literacy online (Sommariva et al., 2018), and students must be cognizant of how their emotional states affect their reading and sourcing online (Mason et al., 2018). The more that students are emotionally aware of their affective state, the more that they will be able to regulate themselves (Penza-Clyve & Zeman, 2002). Furthermore, students need to correctly identify their affective state in order to effectively cope with their emotions (Ciarrochi et al., 2008).

Since fake news thrives when individuals rely on their emotions (Martel et al., 2020), emotional regulation strategies are needed to support reading comprehension. Once students can better identify and neutralize their emotions, the better they will be at critically interacting with fake news online. Students need to be supported emotionally so that they can read curiously in an emotionally charged fake-news digital world.

**Without the regulation strategies to support them, students' emotions will suppress any cultivating literacy skills.** As a result, the purpose of this paper is to provide instruction on how to help middle-school classroom teachers support students with emotional behavior needs by identifying emotions through affect labeling and mindful breathing.

## Emotional Regulation Strategies

To support emotional regulation in the classroom, this article will discuss primarily two emotional regulation strategies: **affect labeling and mindful breathing.** **Being able to name emotions, otherwise known as “affect labeling,” can be a helpful strategy** in emotion regulation (Torre & Lieberman, 2018; Herwig et al., 2010). Meanwhile, mindful breathing is an emotion regulation strategy that has been connected to emotional well-being (Keng et al., 2011). Rooted in ancient Eastern traditions and religions like Buddhism, mindful breathing encourages individuals to meditatively and introspectively be aware (Keng et al., 2011). It is through this self-awareness that people are able to connect with themselves through a newly perceived place and ultimately control regulation (Shapiro et al., 2006).

### Affect Labeling

Affect labeling can reduce heightened feelings of either negative or positive affect (Torre & Lieberman, 2018), and it can be accompanied with the help of graphics or visuals (Guo et al., 2020). Specifically, emoji depictions can help students recognize emotions since emojis can represent emotions that otherwise may be ambiguous (Fischer & Herbert, 2021). To do this in the classroom, use picture charts that feature emojis or graphics demonstrating emotions (see Figure 1). As you discuss the emoji feelings, make sure that students understand which one you are talking about. Visual representations and explanations help student understanding more so than solely verbal ones (Bobek & Tversky, 2016). Therefore, place the emoji emotions anywhere that may be convenient for students; it can be a poster on the wall, a bookmark students keep, or a slide within a PowerPoint presentation. Ironically, emojis are especially an appropriate literacy tool in this context since they are often used on social media (Li & Yang, 2018), the very platform that predominantly spreads fake news (Sommariva et al., 2018).

Figure 1. *Emoji Emotion Recognition*



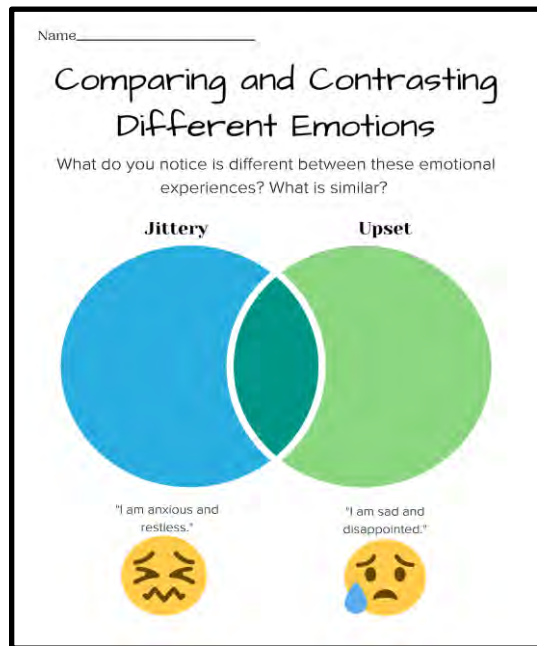
As the emojis are presented to students, ask questions that foster conversation and conceptual understanding of the emotions (see Table 1). It is important to analyze specific types of negative and positive emotions rather than broad categories to clarify the connection between emotions and achievement (Valiente et al., 2012). In these activities, try not to use language that places judgment on emotion or labels it good or bad (Lambie et al., 2020). People often perceive negative emotions as more problematic (Valiente et al., 2012), so steer students toward defining and differentiating all emotions. Emotions of arousal, like excitement, can influence reading too (Martel et al., 2020).

Table 1. *Emotional Identification Questions to Ask Students*

Emoji Emotions	Questions to Ask Students
Interested	How is feeling interested different from feeling curious?
Determined	What may it look like when someone is determined?
Attentive	How does feeling attentive compare to feeling alert?
Jittery and Nervous	How are jittery and nervous similar? How are they different?
Hostile	How does feeling hostile compare to feeling angry?
Upset	What are signs that someone may be upset over something?
Distressed	When might someone feel distressed about something?
Excited	When would someone feel excited about something and why?

Although many students might be able to clearly articulate the expression or definition of an emotion, other students may struggle to specify them (Nook, 2021). Researchers have found that students who are able to distinguish between negative emotions are more likely to experience negative emotions on a subdued level (Lennarz et al., 2016). See Figure 2 to find a simple Venn diagram that can be supportive in planning a lesson (Otto & Everett, 2013). A Venn diagram is a graphic organizer that allows students to easily compare and contrast two things. In this case, the two things would be feelings. As students practice recognition of different feelings, the more familiar they will become in identifying what emotion they feel in what circumstance.

To use the Venn diagram for your classroom, pass out worksheet copies to the entire class, and complete the activity as a whole group or in partners. Depending on how students perform, you can continuously develop this activity with other emotions by gradually adding more emotions to the Venn diagram. In turn, you will **build your classes' emotional vocabulary, and the more emotions that students are able to differentiate, the better** (Nook, 2021). Additionally, the Venn diagram provides an opportunity to see student progress and can be used as a formative assessment. Notice if there are certain emotions that seem similar to a particular student. These will be emotions that you need to review either with that student or with the whole group in following days. As students **grow in awareness of their emotions, they can start to identify what they're feeling**. This skill will then help students whenever they read content that creates a strong emotion.

Figure 2. *Emotions Venn Diagram*

After reviewing different emotions and providing a visual representation, increase affect labeling by asking students how they are feeling on a given day. Research shows that interviewing children about their emotions will not likely increase their stress reactivity but rather help students develop their stress regulation (Klemfuss & Musser, 2020). For example, the simple question “How do you feel today?” can provide students the opportunity to reflect on their emotions and monitor them (Leon-Pineda, 2022). To do this in the classroom, allow students to function through their morning routines as typical. Then, at the beginning of class, ask them, “How do you feel today?” The point of “How do you feel today?” is to build students’ self-awareness to check in with how they are and how they are feeling (Leon-Pineda, 2022).

If students struggle feeling comfortable, one way to help them open up is to disclose personal feelings in an appropriate manner. Research shows that when teachers are vulnerable in relevant topics, students may become motivated to participate and ask questions (Cayanus et al., 2009). Additionally, students view their teachers’ self-disclosures as evidence of a safe and open learning environment (Cayanus et al., 2009). Therefore, tell students how your day is going and what made you feel that emotion. Not only does this provide a model example for students, but this also will help students feel comfortable sharing.

As students open up, be sure to validate their feelings without creating judgment of them. If a student feels judged or ashamed of an emotion, it will be harder for that student to accept and identify that emotion (Lambie et al., 2020). See Table 2 for examples of how to support students as they share their feelings. The more students feel that their emotions are acceptable and noticeable, the more that they may begin to calm down, vocalize their emotions, and be more accepting of negative emotions (Lambie et al., 2020).

Sentences to speak after students share about their emotions:

- Thank you so much for sharing.
- I’m so glad to hear that you are doing well.
- I’m so sorry to hear that today has been a difficult day.
- You’re doing a great job.
- That’s very interesting.
- That doesn’t sound fair. I’m sorry.

Although using emotional language discussions or talking about feelings may not seem like an instructional activity, a teacher can regulate these conversations' effectiveness by noticing student responses (Torre & Lieberman, 2018). Specifically, notice whether students open up about a particular story, if their voice register lowers, or if their body language relaxes. Emotional regulation occurs when you can identify the change in intensity, quality, or duration of an emotion (Torre & Lieberman, 2018). If it is manageable, document students' progress daily to see how they are evolving in their regulation and invite students to document their emotions (see Figure 3). Self-monitoring can be an effective strategy in the classroom as students and teachers see how an individual is progressing and if there are any patterns to notice (Menzies et al., 2009). For example, if you notice that a student arrives to class several days in a row feeling angry, and the context of the emotion is the same, you have identified a circumstance that might be worth exploring. As students start to monitor themselves, build it as a routine. Have students come to class, turn to their monitoring sheet, reflect for a few minutes, and then potentially share. The more that this becomes a regular exercise for them, the more that the routine will benefit them (Arlinghaus & Johnston, 2019).

Figure 3. Student Monitoring

Name \_\_\_\_\_

## Documenting My Emotions



Emotion	Context of Emotion <small>Why do I feel this way? (What made me feel this way?) How long did it last?</small>	Date	Time	Location

Page 1

As literary teachers, we can also incorporate emotional monitoring documents into class time by monitoring emotions when reading emotional texts. Emotions that are evoked during reading are likely to have an **immediate influence on individuals' reading processes (Mar et al., 2011)**. Therefore, another recommended strategy for emotional monitoring is to have students recognize their emotions before, during, and after reading that text (Mar et al., 2011). To do this, have students monitor their emotion before they begin reading a text like *The Outsiders* by S. E. Hinton. Then, during the reading of that text, occasionally pause the **student's reading. Perhaps these stops occur after a chapter or in the middle of a turbulent moment. Ask** students how they are feeling during this moment within the text. Be careful to not ask leading questions;



students need to create this self-awareness and not take on any emotions that you, the teacher, may have experienced while reading the story. After students have returned to the text and have completed the reading, then have students reflect on any newly experienced emotions. Be sure to verbally process these emotions with students since emotions produced by a story can color interpretations of a narrative (Mar et al., 2011).

If, of course, a student documents **emotions that lead you to believe that student's life is at risk, be sure to report this exchange to a supervisor or mental health expert at your school as teachers are mandated reporters.**

## Mindfulness

In addition to teaching students to identify and name emotions, helping students develop emotional awareness through mindfulness can be helpful. Mindfulness is a meditative practice that focuses on becoming aware of oneself in a non-judgmental way (Lutz et al., 2014). Although mindfulness originates from Buddhist practices, it can help students become more conscious of their emotions, exercise more non-reactive responses, and be present-oriented (Schussler et al., 2021). Specifically, breathing has been shown to be an influential component of mindfulness as it supports emotional reactions and regulation (Arch & Craske, 2006). In turn, mindfulness **helps with reading comprehension because it helps keep reading “on the right track” (Tarrasch et al., 2016, p. 13).** Furthermore, meditative breathing is an effective small inclusion into classroom routines that can later be encouraged as a self-regulation strategy outside of the building (Schussler et al., 2021).

To accomplish this in the classroom, first let your students know that the class will be practicing awareness and attention. These words provide a more school-tailored vocabulary for students and help avoid misunderstandings that mindfulness may be a spiritual exercise (Felver et al., 2013). It is important to be honest and transparent and stress the secular nature of the mindfulness activity. Words like meditation may convey that mindful breathing is an Eastern religious practice and mislead students in the direction and purpose of the breathing exercise (Felver et al., 2013).

Afterwards, encourage your students to find a comfortable position (Arch & Craske, 2006). Indoor environments can affect mental and physical health (Taylor et al., 2021), and factors like air temperature can impact performance and motivation (Cui et al., 2013). Therefore, recommend that students move around in their seats or around the room. Research has found that when people change their physical position, especially in the left or right direction, it increases their levels of comfort (Fasulo et al., 2019). Acoustics are also important to consider as they can be quite bothersome to students (Bluyssen et al., 2018). To help, consider gently playing music or ocean sounds on a speaker. Researchers have found that music or the sound of rippling water can be beneficial in helping people recover from stress (Thoma et al., 2013).

Then, instruct your students to become aware of what is happening inside of their bodies. This activity helps students to begin self-awareness by not changing anything but by simply observing (Gueldner & Fuererborn, 2016). **Once again, make sure that you avoid judgmental or vague words like “feeling good” or “feeling bad.”** Normalize whatever students are feeling and emphasize their observation skills with neutral language (see Table 3). Emotional awareness comes when individuals become cognizant of their own emotions (Lambie et al., 2020).

### Instructions for Becoming Aware of Body

Sentences to speak while students are getting ready:

- Become aware of how your body feels at this moment
- Notice what your feet are touching
- Recognize the patterns of your current breath
- Notice how you are holding your shoulders
- Become aware of where your hands are at rest

Once students are settled, instruct them to inhale and exhale slowly, paying attention to their breath (Arch & Craske, 2006). The more focused students are on the mindfulness of breathing and not letting their minds wander to miscellaneous worries, the more the exercise will benefit them (Arch & Craske, 2006). Use guided instructions to help students become aware of their body and mindfulness activity (see Table 4). It is important that students stay attentive to the process as they deepen their awareness beyond a passing observation (Shapiro, 2006). Students will eventually find transformation as they re-perceive themselves by stepping back to notice and understand (Shapiro, 2006).

### Guided Breathing Instructions

Sentences to speak while students are breathing :

- Notice the breath passing through your lips.
- Listen to the sound of the long exhale.
- Pay attention to how the rest of your body feels.
- If your attention wanders, notice where it lands, and then bring it back to your breath.
- Let your mind focus on that breath as it fills your lungs.
- Drag the exhale as you let the air pass slowly.

For convenience in the classroom, the initial breathing exercise only needs to be a few minutes (Gueldner & Feuerborn, 2016). Thankfully, regulation strategies like mindful breathing do not require long or invasive **implementations either (Gueldner & Feuerborn, 2016). However, monitor and make sure that students'** breaths are slow and deep, about four seconds of inhale and six seconds of exhale. Researchers have found that this slow and deep breathing is what reduces anxiety and encourages blood flow in the body (Magnon et al., 2021). Although short in time, this breathing activity will require intentional training. Through repetition, youth can learn to notice an emotion as it comes up and let it fade without needing to completely embody the emotion (Shapiro et al., 2006). Therefore, you can repeat this exercise daily or even multiple times a day, and researchers have found it to be a school routine that is feasibly implemented (Schussler et al., 2021).

When you close the mindfulness breathing exercise, relate the breathing activity back to the idea of mindfulness and emotional regulation (Gueldner & Feuerborn, 2016). Here, remind students that emotions are constantly changing as they are experienced throughout the body (Gueldner & Feuerborn, 2016). Emotions will fluctuate in intensity, and there is no correct or incorrect way to feel something. Help students realize that they can acknowledge that emotion and recognize it as a part of themselves in that moment (Lambie et al., 2020). In the future, the goal is for students to be able to recognize these emotions in their online reading, be mindful of that emotion, and then move on from the emotion in order to not let it influence their informed literacy.

## Conclusion

While emotion regulation contains a plethora of information and strategies, helping students name their emotions (Torre & Lieberman, 2018) and practice mindful breathing (Schussler et al., 2021) are helpful first steps. If affect labeling helps students understand what they are feeling, mindful breathing alerts them to their feelings. Then, as students begin to understand and recognize their emotional states, the more they will be able to identify their reading state when reading misinformed texts (Liew et al., 2020). Emotional awareness and emotional recognition are skills that can be learned (Garcia-Garcia et al., 2021), and they are increasingly necessary as social **media's emotionally charged environment fuels misinformation (Sommariva et al., 2018). After all, researchers** have found that critical literacy efforts are not completely helpful in debunking both evidence-based arguments and emotive-based arguments (Kahne & Bowyer, 2017). Therefore, literacy teachers must incorporate emotional regulation strategies as a supplemental reading strategy in order to build reading comprehension and cognitive tasks (Mason et al., 2018). Reading teachers must take an active role in helping students debunk fake news on social media. Global democratic participation depends on it (Kahne & Bowyer, 2017).



## References

- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211–236. <https://doi.org/10.1257/jep.31.2.211>
- Arch, J. J., & Craske, M. G. (2006). Mechanisms of mindfulness: Emotion regulation following a focused breathing induction. *Behaviour Research and Therapy*, 44(12), 1849–1858. <https://doi.org/10.1016/j.brat.2005.12.007>
- Arlinghaus, K. R., & Johnston, C. A. (2019). The importance of creating habits and routine. *American Journal of Lifestyle Medicine*, 13(2), 2019, 142–144. <https://doi.org/10.1177/1559827618818044>
- Bluyssen, P. M., Zhang, D., Kurvers, S., Overtoom, M., & Ortiz-Sanchez, M. (2018). Self-reported health and comfort of school children in 54 classrooms of 21 Dutch school buildings. *Building and Environment*, 138, 106–112. <https://doi.org/10.1016/j.buildenv.2018.04.032>
- Bright, J. (2016). The social news gap: How news reading and news sharing diverge. *Journal of Communication*, 66(3), 343–365. <https://doi.org/10.1111/jcom.12232>
- Bobek, E., & Tversky, B. (2016). Creating visual explanations improves learning. *Cognitive Research: Principles and Implications*, 1(27), 1–14. <https://doi.org/10.1186/s41235-016-0031-6>
- Boczkowski, P. J., Matassi, M., & Mitchelstein, E. (2018). How young users deal with multiple platforms: The role of meaning-making in social media repertoires. *Journal of Computer-Mediated Communication*, 23(5), 245–259. <https://doi.org/10.1093/jcmc/zmy012>
- Cayanus, J. L., Martin, M. M., & Goodboy, A. K. (2009). The relationship between teacher self-disclosure and student motives to communicate. *Communication Research Reports*, 26(2), 105–113. <https://doi.org/10.1080/08824090902861523>
- Cherner, T., & Curry, K. (2019). Preparing pre-service teachers to teach media literacy: **A response to “fake news.”** *Journal of Media Literacy Education*, 11(1), 1–31. <https://doi.org/10.23860/JMLE-2019-11-1-1>
- Ciarrochi, J., Heaven, P. C. L., & Supavadeepravit, S. (2008). The link between emotion identification skills and socio-emotional functioning in early adolescence: A 1-year longitudinal study. *Journal of Adolescence*, 31(5), 565–582. <https://doi.org/10.1016/j.adolescence.2007.10.004>
- Cui, W., Cao, G., Park, J., Ouyang, Q., & Zhu, Y. (2013). Influence of indoor air temperature on human thermal comfort, motivation and performance. *Building and Environment*, 68, 114–122. <https://dx.doi.org/10.1016/j.buildenv.2013.06.012>
- Farmer, L. S. J. (2019). News literacy and fake news curriculum: **School librarians’** perceptions of pedagogical practices. *Journal of Media Literacy Education*, 11(3), 1–11. <https://doi.org/10.23860/JMLE-2019-11-3-1>
- Fasulo, L., Naddeo, A., & Cappetti, N. (2019). A study on classroom seat (dis)comfort: Relationships between **body movements, center of pressure on the seat, and lower limbs’ sensations.** *Applied Ergonomics*, 74, 233–240. <https://doi.org/10.1016/j.apergo.2018.08.021>
- Felver, J. C., Doerner, E., Jones, J., Kaye, N. C., & Merrell, K. W. (2013). Mindfulness in school psychology: Applications for intervention and professional practice. *Psychology in the Schools*, 50(6), 531–547. <https://doi.org/10.1002/pits.21695>
- Fischer, B., & Herbert, C. (2021). Emoji as affective symbols: Affective judgments of emoji, emoticons, and human faces varying in emotional content. *Frontiers in Psychology*, 12, 1–15. <https://doi.org/10.3389/fpsyg.2021.645173>
- Garcia-Garcia, J. M., Penichet, V. M. R., Lonzano, M. D., & Fernando, A. (2021). Using emotion recognition technologies to teach children with autism spectrum disorder how to identify and express emotions.

- Universal Access in the Information Society*, 21, 809–825. <https://doi.org/10.1007/s10209-021-00818-y>
- Guedner, B. A., & Feuerborn, L. L. (2016). Integrating mindfulness-based practices into social and emotional learning: A case application. *Mindfulness*, 7(1), 164–175. <https://doi.org/10.1007/s12671-015-0423-6>
- Guo, D., Zhang, S., Wright, K. L., & McTigue, E. M. (2020). Do you get the picture? A meta-analysis of the effect of graphics on reading comprehension. *AERA*, 6(1), 1–20. <https://doi.org/10.1177/2332858420901696>
- Guyer, A. E., Silk, J. S., & Nelson, E. E. (2016). The neurobiology of the emotional adolescent: From the inside out. *Neuroscience and Biobehavioral Reviews*, 70, 74–85. <https://doi.org/10.1016/j.neubiorev.2016.07.037>
- Herwig, U., Kaffenberger, T., Jäncke, L., & Brühl, A. B. (2010). Self-related awareness and emotion regulation. *NeuroImage*, 50(2), 734–741. <https://doi.org/10.1016/j.neuroimage.2009.12.089>
- Johnson, N. R., Paal, K., Waggoner, E., & Bleier, K. (2021). Scales for assessing news literacy education in the digital era. *Journalism & Mass Communication Educator*, 76(2), 156–175. <https://doi.org/10.1177/1077695820930980>
- Kahne, J., & Bowyer, B. (2017). Educating for democracy in a partisan age: Confronting the challenges of motivated reasoning and misinformation. *American Educational Research Journal*, 54(1), 3–34. <https://doi.org/10.3102/0002831216679817>
- Keng, S. L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical Psychology Review*, 31(6), 1041–1056. <https://doi.org/10.1016/j.cpr.2011.04.006>
- Klemfuss, J. Z., & Musser, E. D. (2020). Talking about emotions: Effects of emotion focused interviewing on **children’s physiological regulation of stress and discussion of the subjective elements of a stressful experience**. *Journal of Experimental Child Psychology*, 198, 104920. <https://doi.org/10.1016/j.jecp.2020.104920>
- Lambie, J. A., Lambie, H. J., & Sadek, S. (2020). “My child will actually say ‘I am upset’...before all they would do was scream”: Teaching parents emotion validation in a social care setting.** *Child: Care, Health and Development*, 46(5), 627–636. <https://doi.org/10.1111/cch.12770>
- Lennarz, H. K., Lichtwarck-Ashoff, A., Timmerman, M. E., & Granic, I. (2016). Emotion differentiation and its relation with emotional well-being in adolescents. *Cognition and Emotion*, 32(3), 651–657. <https://doi.org/10.1080/02699931.2017.1338177>
- Leon-Pineda, J. L. D. (2022). How do you feel today? Nurturing emotional awareness among students in online learning. *Reflecting Practice*, 23(3), 394–408. <https://doi.org/10.1080/14623943.2022.2040010>
- Li, L., & Yang, Y. (2018). Pragmatic functions of emoji in internet-based communication—a corpus-based study. *Asian-Pacific Journal of Second and Foreign Language Education*, 3(16), 1–12. <https://doi.org/10.1186/s40862-018-0057-z>
- Liew, J., Erbeli, F., Nyanamba, J. M., & Li, D. (2020). Pathways to reading competence: Emotional self-regulation, literacy contexts, and embodied learning processes. *Reading Psychology*, 41(7), 633–659. <https://doi.org/10.1080/02702711.2020.1783145>
- Lutz, J., Herig, U., Opialla, S., Hittmeyer, A., Jäncke, J., Rufer, M., Holtforth, M. G., & Brühl, A. B. (2014). Mindfulness and emotion regulation—an fMRI study. *Social Cognitive and Affective Neuroscience*, 9(6), 776–785 <https://doi.org/10.1093/scan/nst043>

- Magnon, V., Dutheil, F., & Vallet, G. T. (2021). Benefits from one session of deep and slow breathing on vagal tone and anxiety in young and older adults. *Scientific Reports, 11*(1), 19267. <https://doi.org/10.1038/s41598-021-98736-9>
- Mar, R. A., Oatley, K., Djikic, M., & Mullin, J. (2011). Emotion and narrative fiction: Interactive influences before, during, and after reading. *Cognition and Emotion, 25*(5), 818–833. <https://doi.org/10.1080/02699931.2010.515151>
- Martel, C., Pennycook, G., & Rand, D. G. (2020). Reliance on emotion promotes belief in fake news. *Cognitive Research: Principles and Implications, 5*(47), 1–20. <https://doi.org/10.1186/s41235-020-00252-3>
- Mason, L., Scrimin, S., Caterina Tornatora, M., & Zaccoletti, S. (2017). Emotional reactivity and comprehension of multiple online texts. *Learning and Individual Differences, 58*, 10–21. <http://dx.doi.org/10.1016/j.lindif.2017.07.002>
- Mason, L., Scrimin, S., Zaccoletti, S., Caterina Tornatora, M., & Goetz, T. (2018). Webpage reading: Psychophysiological correlates of emotional arousal and regulation predict multiple-text comprehension. *Computers in Human Behavior, 87*, 317–326. <https://doi.org/10.1016/j.chb.2018.05.020>
- Menzies, H. M., Lane, K. L., & Lee, J. M. (2009). Self-Monitoring strategies for use in the classroom: A promising practice to support productive behavior for students with emotional or behavioral disorders. *Beyond Behavior, 18*(2), 27–35.
- Nook, E. C. (2021). Emotion differentiation and youth mental health: Current understanding and open questions. *Frontiers in Psychology, 12*, 700298. <https://doi.org/10.3389/fpsyg.2021.700298>
- Otto, C. A., & Everett, S. A. (2013). An instructional strategy to introduce pedagogical content knowledge using Venn diagrams. *Journal of Science Teacher Education, 24*(2), 391–403. <https://doi.org/10.1007/s10972-012-9272-5>
- Papapicco, C., Lamanna, I., & D’Errico, F. (2022). Adolescents’ vulnerability to fake news and to racial hoaxes: A qualitative analysis on Italian sample. *Multimodal Technologies and Interaction, 6*(20), 1–15. <https://doi.org/10.3390/mti6030020>
- Penza-Clyve, S., & Zeman, J. (2002). Initial validation of the emotion expression scale for children (EESC). *Journal of Clinical Child and Adolescent Psychology, 31*(4), 540–547. <https://doi.org/10.1207/153744202320802205>
- Plaisime, M., Robertson-James, C., Mejia, L., Núñez, A., Wolf, J., & Reels, S. (2020). Social media and teens: A needs assessment exploring the potential role of social media in promoting health. *Social Media and Society, 6*(1), 1–11. <https://doi.org/10.1177/2056305119886025>
- Rutledge, S. A., Dennen, V. P., & Bagdy, L. M. (2019). Exploring adolescent social media use in a high school: Tweeting teens in a bell schedule world. *Teachers College, 121*(14), 1–30. <https://doi.org/10.1177/016146811912101407>
- Schussler, D. L., Oh, Y., Mahfouz, J., Levitan, J., Frank, J. L., Broderick, P. C., Mitra, J. L., Berrena, E., Kohler, K., & Greenberg, M. T. (2021). Stress and well-being: **A systematic case study of adolescents’** experiences in a mindfulness-based program. *Journal of Child and Family Studies, 30*(2), 431–446. <https://doi.org/10.1007/s10826-020-01864-5>
- Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology, 62*(3), 373–386. <https://doi.org/10.1002/jclp.20237>

- Sommariva, S., Vamos, C., Mantzarlis, A., Dào, L. U. L., & Tyson, D. M. (2018). Spreading the (fake) news: Exploring health messages on social media and the implications for health professions using a case study. *American Journal of Health Education, 49*(4), 1–10. <http://dx.doi.org/10.1080/19325037.2018.1473178>
- Tarrasch, R., Berman, Z., & Friedmann, N. (2016). Mindful reading: Mindfulness meditation helps keep readers with dyslexia and ADHD on the lexical track. *Frontiers in Psychology, 7*, 578. <https://doi.org/10.3389/fpsyg.2016.00578>
- Taylor, M., Brown, N. C., & Rim, D. (2021). Optimizing thermal comfort and energy use for learning environment. *Energy and Buildings, 248*, 111181. <https://doi.org/10.1016/j.enbuild.2021.111181>
- Thoma, M. V., La Marca, R., Brönnimann, R., Finkel, L., Ehlert, U., & Nater, U. M. (2013). The effect of music on the human stress response. *PLOS One, 8*(8), 70156. <https://doi.org/10.1371/journal.pone.0070156>
- Torre, J. B. & Lieberman, M. D. (2018). Putting feelings into words: Affect labeling as implicit emotion regulation. *Emotion Review, 10*(2), 116–224. <https://doi.org/10.1177/1754073917742706>
- Valiente, C., Swanson, J., & Eisenberg, N. (2012). Linking students' emotions and academic achievement: When and why emotions matter. *Child Development Perspectives 6*(2), 129–135. <https://doi.org/10.1111/j.1750-8606.2011.00192.x>
- Vermeulen, A., Vandebosch, H., & Heirman, W. (2018). #Smiling, #venting, or both? Adolescents' social sharing of emotions on social media. *Computers in Human Behavior, 84*, 211–219. <https://doi.org/10.1016/j.chb.2018.02.022>**
- Villi, M., Aharoni, T., Teneboim-Weinblatt, K., Boczkowski, P. J., Hayashi, K., Mitchelstein, E., Tanaka, A., & Kligler-Vilenchik, N. (2022). Taking a break from news: A five-nation study of news avoidance in the digital era. *Digital Journalism, 10*(1), 148–164. <https://doi.org/10.1080/21670811.2021.1904266>
- Wittebols, J. H. (2020). Critical information/news literacy and the flipped classroom: Student evaluations of information searching and analysis. *Journalism & Mass Communication Educator, 75*(2), 210–225. <https://doi.org/10.1177/1077695819893171>



The *Journal of Educational Research and Practice* is a peer-reviewed journal that provides a forum for studies and dialogue about developments and change in the field of education and learning. The journal includes research and related content that examine current relevant educational issues and processes. The aim is to provide readers with knowledge and with strategies to use that knowledge in educational or learning environments. *JERAP* focuses on education at all levels and in any setting, and includes peer-reviewed research reports, commentaries, book reviews, interviews of prominent individuals, and reports about educational practice. The journal is sponsored by The Richard W. Riley College of Education and Leadership at Walden University, and publication in *JERAP* is always free to authors and readers.