

Student Journals:

Developing Writing and SEL Skills Simultaneously

“The mind is not a vessel to be filled, but a fire to be kindled.”

– Plutarch

With the evolution of technology and the amount of time students are spending learning virtually these days, handwriting, journaling, and note-taking appear to be all but obsolete in classrooms. While typing and digital writing skills might seem more efficient and relevant in these technology-forward times, their use has an impact on student learning. Writing and drawing by hand are proven to be more effective and meaningful strategies for learning compared to digital methods.

Simple movement practices like writing by hand have system-wide effects on socialization, creativity, and

intelligence. We make much more use of the brain with writing rather than typing, just as we do with reading a book versus watching television. Because there is action and movement when we write, our brain's motor cortex is vastly stimulated, whereas typing and texting do not have the same effect. While there is a place for digital devices in learning, it's important to honor the most effective methods for learning. Despite the convenience and seductiveness of devices, it's pencil and paper approaches that stimulate the brain, create long-lasting neural pathways, and build sensory-motor integration (Ose Askvik et al., 2020).

Writing and the Brain

Writing is the foundation of academic communication; it requires fine motor skills, critical thinking skills, and cognitive processes that convey expression and meaning. Recent studies of the brain have shown that while writing by hand and typing both result in written expression, the processes have very different long-term effects on learning and literacy.

When scientists at Indiana University studied the physical act of writing by hand in young children who had not yet learning to read and write, they observed increased brain stimulation in the left fusiform gyrus, the inferior frontal gyrus, and the posterior parietal cortex—the same three areas of the brain adults use when reading and writing. Typing the same letters had a significantly weaker effect on the brain (James & Engelhardt, 2012). Dr. James posited that writing by hand may lead to stronger literacy skills because the inherent variability of hand-writing helps the brain understand the many different ways letters and words can be represented (Konnikova, 2014).

A University of Washington study not only demonstrated that printing, writing in cursive, and typing have individual and distinguishable brain patterns, but also that each method of writing produces different end results. Children with and without learning disabilities who wrote by hand ultimately wrote more words faster

than their peers who typed. They also generated more ideas when writing by hand than when typing. These results held true in older students, as well. Brain imaging for older students showed that those with better handwriting also had higher levels of brain stimulation in areas connected to reading, writing, and working memory (Berninger et al., 2009).

The connection between writing by hand and more effective cognitive activities, like generating ideas and retaining concepts, was also shown in a 2014 study. This research showed that, in both real-world classrooms and in the laboratory, students understood and remembered information better when they took notes by hand rather than typing them (Mueller & Oppenheimer, 2014). The research suggests that students synthesize what they hear in order to hand write the notes, while typing is a fast enough process that they can simply transcribe what they hear without processing it. The speed of typing makes note-taking efficient but less meaningful (Goodwin, 2018). When students write by hand, they are learning, thinking, and remembering what they hear, all at the same time.

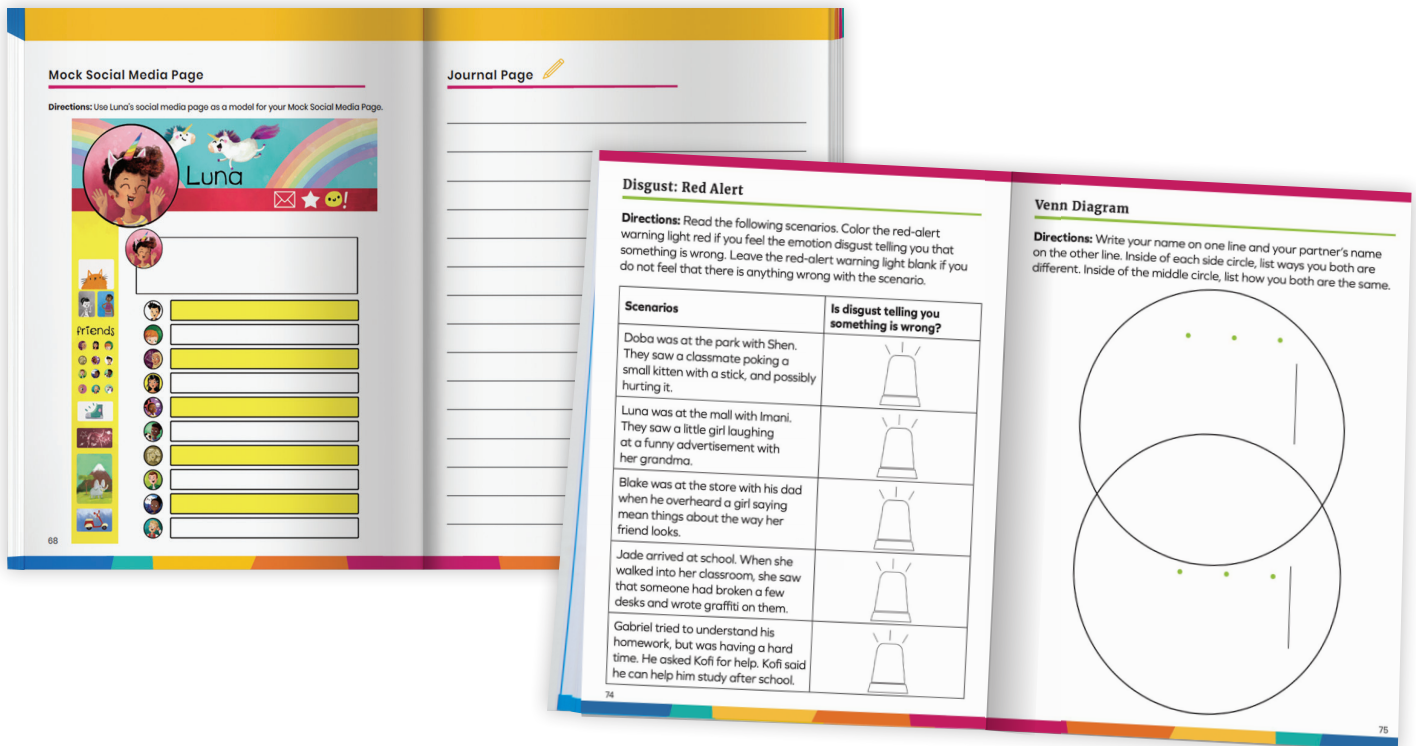
No matter the age of the learner, these studies show that putting pen or pencil to paper helps students understand and remember what they hear, allowing them to fully engage in the learning process.

Writing as a Tool for All Learners

Students at all grade levels are expected to achieve a high level of writing proficiency to express their knowledge and understanding in all subjects. Students with learning disabilities are expected to meet these standards, as well. For some students, this expectation can feel like a limitation, with frustration resulting in negative impacts including low self-esteem and disengagement (McCloskey & Rapp, 2017). However, when effectively scaffolded and supported, writing can be a tool for all learners. Studies show that all students, including students with documented learning disabilities, retain information better when writing by hand rather than typing (Berninger et al., 2009). Strategies for making writing accessible to all learners include employing explicit instructional methods like modeling, using graphic organizers to plan, outlining ideas, and practicing writing skills using frequent, low stakes writing tasks. Using comprehension strategies to help students gather information as they read and giving students time to gather their thoughts before writing are additional strategies that are beneficial for all students. Teaching students how to regulate and monitor their own performance is essential, as self-regulation skills make students stronger learners as well as writers (Reid et al., 2013).

As educators, writing is one of the best tools to use for engaging students in learning, developing critical thinking and problem-solving skills, and gaining insights into a student's learning process. Writing is a core skill that benefits students of all grade levels and ages. Strong writing skills, especially when established early in a student's education, increase a student's chances for a successful academic trajectory (Manfra et al., 2017). Writing encourages students to connect personally with the content taught, raise questions, connect with others, and capture their own thoughts.

Writing is a tool for self-expression and for academic success, and it is also an effective way to develop social-emotional skills. Through writing, students learn to express themselves and build empathy for others (Gordon, 2020).



Teaching Writing and SEL With Fly Five Student Journals

The Fly Five Student Journals are a tactile component of this kindergarten through eighth grade social and emotional learning curriculum. Each student receives a vibrant, colorful book so they can explore the standards-based SEL lessons. The Student Journals are designed to be enticing and to draw even the most reluctant writers into the illustrations, graphics, activities, and reflections embedded within its pages. With comprehensive versions designed for each grade level, the Student Journals provide both visual and manipulative tools including vignettes, scenarios, games, and other learning materials that support student learning.

The Student Journals encourage students to reflect on their own emotions, behavior, and experiences.

Lexile-leveled SEL stories featuring the diverse cast of Fly Five characters connect students to real-life situations and scenarios that allow them to problem-solve, become empowered through self-exploration, and build new levels of confidence for participating in class discussions and sharing their opinions more openly with their peers.

At every grade level, the Student Journals highlight academic writing strategies. Graphic organizers, manipulatives, and frequent opportunities to safely express ideas allow all students to build their core writing skills and proficiency. The Student Journal is an engaging learning tool for all ages, allowing students to learn and practice social-emotional skills and age-appropriate writing skills at the same time.

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