Recommending a Modification to the Common Core State Standards Initiative: By Including more Multi-Literacy

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Abstract

In this paper, I hypothesize that the Common Core State Standards Initiative's lack of creative arts training in the English Language Arts could cripple America's future in the coming world economy. Ironically, the CCSSI claims to prepare learners for college and careers; but, does not consider architects, engineers, military professionals, urban planners, and anyone who thinks visually. Moreover, this limited emphasis placed on the arts is putting the craft into survival mode in many public schools; the only hope for funding (for liberal arts) comes from private resources, a tactic that has helped save art programs in other school districts like in Los Angeles (Public Schools Slash Arts Education and Turn to Private Funding., n.d.). Theoretically, if society only knew how art education is so directly tied to literacy development, perhaps there would be a push to add detailed visual literacy requirements to the CCSSI and potentially save the arts from eminent demise. Correspondingly, in this paper, I want to advocate the view that we are culturally moving towards a modified language that is digital, visual, and written, thereby providing relevance for training globally-ready, multi-literate learners through the vehicle of art education.

Definition of Terms and Theoretical Background

Multi-Literacy: an increasingly popular term in today's world, and it can be described through situational contexts. For instance:

- when you use a new computer-based technology, you are exploring digital literacy;
- when you are driving a car and following the posted arrow signs around a sharp embankment, you are using visual-symbolic literacy;
- when you read a book in the English language (or in any other written language), you are using phonetic literacy.

These multiple definitions of literacy provide deeper learning experiences. Moreover, knowing how to accomplish multiple contemporary tasks using several of these categories is generally referred to as being 'multi-literate'.

Intertextual Connections: When a learner reads a comic book or graphic novel, the narrative (the emerging story) is derived from both visual and phonetic examples. This unique combination of both fields of information provides a dynamic platform of content presentation. These possible diverse associations, which often activate more senses, are more comprehensive than one-sided literary presentations. These multiple associations are derived from dual channels of content; this is known as intertextual connections. This model of instruction is very successful as the military uses dual channel teaching methods (see example in related imagery).

Visual Literacy: Historically, visual communication goes back to early cave paintings some 2,500 years ago, but it was not contemporized as a learning discipline until the late 1960s when there was a renewed interest in visual learning methods (Velders, 2000). Basically, in today's context, visual learning refers to a set of basic competencies related to sensory experiences that enable learners to discriminate and interpret the objects and symbols in the world around them and derive meaning from them (Fransecky&Debes, 1972).

Visualization as Technology: Alberto Ciaro (2013), author of *The Functional Art*, describes visualization as a unique confluence of technologies (both traditional and contemporary) that are used to make visually encoded messages. These messages are known as infographics (Ciaro, 2013). The infographics are very diverse, and they can include data, phonetic text, photography, animation, and many other forms of communication combined into one platform. These multiple sensory information messages are being used in textbooks, online multimedia, and journals to condense complex information.

What is the Common Core Initiative? Introduced by the Obama administration in 2010 (Mathis, 2010), the Common Core is a government program that was developed to produce college-and career-ready graduates. The CCSSIinitiative was written in a yearunder the guidance of the National Governors' Association (NGA) and the Council of Chief State School Officers (CCSSO), by an educational contractor Achieve, Inc. (Mathis, 2010). According to Mathis (2010), states are pushed into using CCSSI because the federal government will withhold Title I aid from any state that does not adopt this initiative (Mathis, 2010). Allie Bidwell (n.d), a correspondent for the US News and World Report, said that the CCSSI grew out of George W. Bush's No Child Left Behind Act because its original aim was to improve those standards set forth by the former presidency, and CCSSI was initially drafted in 2008 - although the Common Core website (n.d.), claims this occurred in 2009. According to the Core Standards website (n.d.), Alaska, Indiana, Nebraska, Oklahoma, Texas, and Virginia are the only states that have not adopted the standards (additionally Minnesota has only adopted the English Language Arts standards). The Common Core is focused on two primary areas: English Language Arts (which also includes Literacy in History/Social Studies and Technical Subjects) and Mathematics.

Theoretical Background of Common Core Initiative: Professor E.D. Hirsh Jr. of the University of Virginia is one of the key theorists behind "Core Knowledge," which is the predecessor idea behind the CCSSI (Core Knowledge ® Foundation, 2011 Exhibit Hall., n.d.). According to his early research, Hirsh (n.d.) indicated that students, regardless of their diverse backgrounds, could read the same content and derive similar concepts from the information if they had a universal "Core Knowledge" background. The primary concept behind "Core Knowledge" includes the sentiment that all students in the US, regardless of economic class or location, have learned a core foundation of standards that are the same, nation-wide, in Math and English Language Arts. This core foundation of knowledge is known by Hirsh as cultural literacy.

Literature Review

The literature reviewed for this paper was an amalgamation of diverse topics. These materials highlighted, on numerous occasions, that learning, when authentic, intrinsically motivates students to continue on their own without rubrics or mandated structure. For instance, when someone starts to play a musical instrument and they authentically enjoy the experience, they continue on their own without being forced to practice. The literature that I reviewed indicated that the one-size-fits-all model in education does not fit with each school, as they all have a unique culture. Each school has its own visual "style" comprised of the posters on the wall, murals, etc., and this visual culture provides the potential for numerous metaphysical discourses (Martins, Miguel, Almeida, &Fernandes, 2012). Moreover, the visual style of each school can promote possible conversations that can cover a wide field of critical-thinking subjects like, 'What does that hallway symbolize beyond a mere space that learners travel through?' These experiences cannot be structured or guided with an external rubric because each setting is varied and diverse, just like each learner. Dissimilarly, in many ways the CCSSI promotes mastery learning which reduces the occurrence of teachable moments because there is little room for external, unplanned learning activities during the school year. In fact, the Core Standards website (n.d.) states, "These standards establish what students need to learn." Clearly, there is not much room in this structure for authentic engagement with self-directed learning.

As stated above, Common Core is regimented. Now that does not make it necessarily a poorly planned education aim; it simply means it must remain very systematic. Theoretically, there is a very large task set forth by the CCSSI planners of preparing our students for math and reading comprehension levels that are above all other countries. To accomplish this task, President Obama has said we must raise our own standards first to ensure that other countries do not outperform us (Mathis, 2010). Nevertheless, some questions still remain: Will the CCSSI pay off?

Will the CCSSI actually improve our national academic ranking and level all learners nationally? Currently there is no long-term research on the gains produced by the CCSSI (because it is so new). For now, these questions must remain at large.

Beyond Mathematics, the Common Core initiative is partially focused on learning and mastery of the English Language. As mentioned in the abstract, the CCSSI does not offer any stronghold for visual literacy. A large part of our human heritage with language communication is undoubtedly making intertextual connections between diverse forms of literary work, which is essentially being able to synthesize ideas from varying external documents (not just phonetic material) and then re-communicate what individual or collective learning transaction occurred, with various methods. Upon reviewing the English Language Arts Standards. (n.d.), the document asks teachers to have their learners "include illustrations" in kindergarten and "draw" their thought; later, in high school, the learners are asked to synthesize information from science literature into "diagrams, models, tables and charts" of content. Yet, these definitions must be inferred as they are not provided in the introduction of the material. Moreover, with these loose descriptions, they say that graphics are only charts, tables, diagrams, models, and graphs - which arguably does not leave much room for creative interpretations. Also, the authors of the document never provide any visual examples to simulate the level of comprehension necessary (like they do with grammar standards and research writing standards). In many sections of the document, the authors simply state "add visual displays when appropriate" which is vague and uses incomplete instructional design (English Language Arts Standards, n.d., p. SL / Grade 3 students: Comprehension and Collaboration / number 2.). Arguably, the document writers should remove standards like this entirely or provide visual examples either in the manual or via an online hyperlink.

Clearly, in the CCSSI ELA document, visual literacy seems to be an afterthought - something administrators can gloss over. Perhaps, the authors believe that they have provided just enough reference to visual graphs to appease some parents. But, research could change their minds. As the author Carey Gillenwater (2014) investigated in, *Reading Images*, if advanced placement (AP) English Language students could use their considerable language ability to transfer the same reading skills to literary works that are primarily visual in nature – and they can. Her findings concluded that graphic novels about superheroes provided AP students with enough of a literary aide to provide comprehension of the storyline along with an appropriate opportunity to discuss and make meaning from the images. Interestingly, the students she observed who had previous art lessons were able to make even deeper analyses of the aesthetic choices used by the comic book artists such as line, form, and color. Conclusively, Gillenwater's (2014) finding discovered that the AP learners with an art background were able to further refine the conversation and with more detail.

Even beyond intertextual connections, learning to read and write visual messages can provide an aid for others. As Alberto Cairo (2013) says, "By giving numbers a proper shape, by visually encoding them, the graphic has saved you time and energy that you would otherwise waste if you had to use a table that was not designed to aid your mind. The first and main goal of any graphic and visualization is to be a tool for your eyes and brain to perceive what lies beyond their natural reach" (Cairo, 2013, p. 9-10). Cairo's (2013) statement debunks, in many ways, the myth that visual communication is less powerful than traditional, phonetic literacy. Moreover, his words connect with the rich history of visual communication which can be a platform to tie multiple structured analysis into a document. Ancient calendars were very visual and they combined numerous categories of information into one document, and this visual platform was also used by ancient architects that joined several perspective drawings along with other aspects of a project, into one document (Fleurke, 2011). Author NikkyFleurke (2011) called this, 'visual design complexity,' and he went on to say that this cultural background in visual communication was the predecessor idea to our modern storyboarding in Hollywood.

Interestingly, intertextual empirical research, also known as image-based research, has not been deeply explored yet. Possibly, this is because visual materials have had a long history of non-acceptance in school reform (Goldfarb, 2002). In fact, Brian Goldfarb (2002) author of, *Visual Pedagogy*, claims that educators fear that the addition of mass media, television, and other audio-visual materials in the curriculum could replace the traditional canon (p. 60). Nevertheless, there has been a noticeable explosion of multimedia use in education because some learners prefer this style of content presentation. Some college students are self-reporting that they would use multimedia content rather than phonetic text-based material, depending on the learning situation. In fact, Richard E. Mayer and Laura J. Massa (2003) have conducted some groundbreaking research to seek further variations in learning preferences with something they call the visualizer-verbalizer hypothesis. With this research, they used a

"multimedia learning preference questionnaire" where learners selected, on a seven point scale, if they are more verbal or more visual.

Interestingly, their findings connected seamlessly with Clark and Mayer's (2011) work in the book, *E-Learning and the Science of Instruction*, which stated that advanced learners need less imagery to learn content and can utilize more phonetic information to grasp information; yet dissimilarity, learners who are being introduced to content for the first time gain more meaningful instruction from a multi-modal (multiplesensorymeans) of instruction. This seems to confirm that, with this new information, pictures and diagrams can be incorporated into learning situations and can prove to be very helpful to some learners!

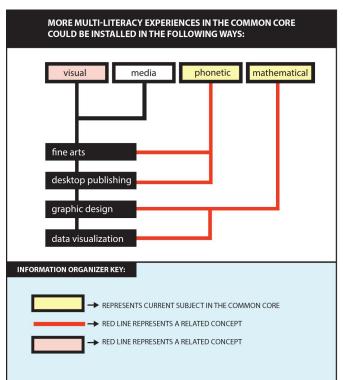
Critics of CCSSI

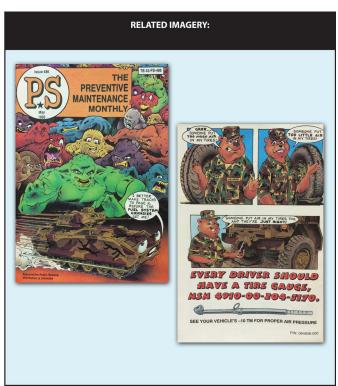
The one-size-fits-all education plan doesn't work for every learner and with the CCSSI there is a loss of rich experiences in schooling due to the standardization of the experience of school (Mathis, 2010). Moreover, visual education methods provide an emotional outlet for learners. Even further, the Christian Bible says, "Train a child in the way appropriate for him, and when he becomes older, he will not turn from it" (International Standard Version, Proverbs 22:6). The CCSSI is directly opposite of this historic biblical wisdom. Accordingly, learned helplessness can set in if a child is unable to master a task that he or she forcibly must learn. The CCSSI has a set of rigid standards that are criterion referenced. Criterion-referenced testing is very unforgiving. Authors Getile andLalley (2003) define criterion-referenced testing as a style of testing that rigidly focuses on mastery, as the concepts assessed and their ability or inability is rated against the test itself, unlike norm-referenced testing which compares the learners against other learners. Conclusively, forcing anyone to do anything, even if it has the intention to do good for people, is rife with problems.

Implications

The current CCSSI ELA document is lacking the most current knowledge that we have about learners and their multiple intelligences. As the data shows some students learn better visually, some learn in an auditory format, some learn via structured hands-on experiences, and some learn traditionally phonetically - but our testing procedures and school experiences do not currently cater to these multiple facets of intelligence. Therefore, to better prepare for the future, I recommend the following suggestions which include:

- Taking the recommendations from the International Visual Literacy Association which offers lists of additional visual skills that tie into the CCSSI ELA document, such as picture reading (Common Core State Standards Related to Visual Literacy., n.d.);
- Include the Torrance Creativity Test to assess creative ability in students in the United States every three years;
- Applying the Armed Services Vocational Aptitude Battery Test as a standardized measurement for career and college readiness (because it contains spatial reasoning questions).





Conclusion

Authors Ronald Getile and James Lalley (2003) introduce an interesting metaphor about the need for teachers to continually reviewimportant areas of content. They said that when teenagers first pass their driver's exams to be licensed drivers, guardians are hesitant about handing over the keys. Clearly, with the car analogy, if learning for the first time had a lasting effect and checking items off of a list were comprehensive enough, we would not worry about giving the keys to young drivers. Similarly, checklists for material mastery is errant and, therefore, crossing off art in kindergarten and then re-introducing art-related competencies later in sixth grade is harmful. If art lessons were imbedded into the CCSSI, learners would continually rehearse the use of symbols which is a corollary task to reading phonetically and making precise analysis of situations—a highly sought after skill.

In conclusion, spatial reasoning skill should be taught in schools as it can be historically associated with great minds. In fact, author Margaret Mackintosh (2011) stated that Albert Einstein was a visual learner who relied heavily on re-translating concepts visually (in drawing format) to comprehend them; similarly, Mackintosh (2011) also said that 40% of today's learners have a similar visual learning style (as cited in Creativity and the Arts in the Primary school: Discussion Document and Proceedings of the Consultative Conference on Education 2009. (n.d.). Conclusively, visual communication methods are an increasingly in-demand skill (used by the United States Government and technology) and should be in the curriculum.

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