

## **The Contextual Role of History in Multi-Disciplinary Education**

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Considering the various reforms in education in America over the last century, the 3Rs are no longer the only focal points. Rigor and relevance, and skills for the 21<sup>st</sup> Century are now considered essential for the success of a child. STEM (Science, Technology, Engineering and Math) education has come to the forefront, and all venues connected to education are consciously and feverishly aligning to STEM. Part of this alignment and prioritization is also occurring because of increased funding opportunities. Those that are left out of this tightly-focused definition of 'subject priority' are advocating integration of other subjects they believe should not be ignored. Creative and interesting revisions to the STEM acronym, such as STREAM (Science, Technology, **Reading**, Engineering, **And** Mathematics) or STEAM (Science, Technology, Engineering, **Arts** and Mathematics) are evolving.

History/Social Studies supporters can stretch and twist the 'subject priority' acronym some more to make their point. Or, we can advocate for a more holistic educational approach where seamless 'multi-disciplinary' instructional methodology helps a child become successful, not just in school, but beyond...where the peripheral or artificially set boundaries of content areas gel into one application called "the real world!!!"

As an ambassador for history education I think history can be the common denominator with the power to contextually integrate multiple disciplines such as Science, Reading, Writing, Math, Engineering, and Technology at every grade level. The impact can be refreshingly positive, and can offer a practical learning opportunity to youth who are empowered to make relevant connections for themselves, and to the world around them.

In a recent article, *Reading through a Disciplinary Lens* (Educational Leadership, March 2010), Connie Juel et al, Stanford University, Stanford, CA elevated the unique power of history as a great contextual connector. "History is distinctive among the disciplines in seeking out many sources of information and wrestling

with their contradictions and problems to tell a compelling narrative about a human event...we can learn how to help students think flexibly about multiple sources of information.” They further support the importance of history to reading by stating, “...learning history can also be an opportunity to practice reading behaviors that can transfer into real-world situations.” Colonial Williamsburg Foundation’s ‘Teaching History through Literacy’ materials and ‘Young American Book Series’ provide exemplary models of how we can use history as the interdisciplinary connector with an obvious partner-subject, Language Arts.

History education can be a vehicle to provide fun, cognitive literacy tools for the early childhood audiences, even before these children get into the K-12 system. Many Children’s Museums and even Montessori programs are offering Visual Learning Strategies (VLS) to preschool groups through artifact/object exploration and related story times. This innovative approach to teach historical facts through the vehicles such as literacy or VLS, can be a great multidisciplinary approach to enhance student learning. There is grave need to offer teachers and parents such experiential and cross-disciplinary opportunities, besides the currently prescribed classroom practices. In an article, *‘What Teachers Can do to Promote Preschoolers’ Vocabulary Development: Strategies from an Effective Language and Literacy Professional Development Coaching Model’* (Reading Teacher, May, 2010), Barbara A. Wasik says, “...recent findings from evaluations of numerous preschool programs, designed to increase child’s language and literacy skills, have shown limited impacts on children’s language outcomes (Jackson et al., 2007 Preschool Curriculum Evaluation Research Consortium, 2008; Ross 2008).

There are exemplary teachers in the K-12 system that team-teach their classes combining Science, Language Arts, Social Studies and Math. Many museums and historical societies use history as the multi-disciplinary connector in their program offerings. As part of the new Teacher Fellow program, The Henry Ford brought together K-12 teachers from Social Studies, Arts, Career Education and Science fields to collaborate and develop tools using The Henry Ford’s assets to enhance classroom teaching. In their evaluative feedback the majority of the Teacher Fellows commented on the

great benefit of the cross-disciplinary collaboration that was instrumental for their professional growth. Cynthia Andrews, an elementary teacher from the Ann Arbor Learning Community commented, “As a life-long learner I feel I have developed an appreciation for subjects outside of my own content area. Any teacher who wishes to grow within their subject area and outside of it should consider participating in this journey. It has been both rewarding and enlightening to work with teachers from across the state and across grade levels and outside my content to see different approaches to the educational opportunities available at THF (The Henry Ford).”

Consider the following examples of multidisciplinary programs from various ‘history’ museums:

**The Western Museum of Mining & Industry** combines Colorado history, mining and industrial technology, geology, and the environment to create an interdisciplinary approach to learning about history and science. Some exemplary exhibits and programs include the current exhibit, *Don’t Get Steamed!* [http://wmmi.org/webapp\\_2894006/Don't Get Steamed, It's History](http://wmmi.org/webapp_2894006/Don't_Get_Steamed,_It's_History)

While this exhibit is open to all visitors, the WMMI has developed specific educational programs for students of all ages in the form of ‘In-Reach’ Educational Programs. Designed to “reinforce interdisciplinary education standards” each program offers unique ways to learn about math, physics, geography, history, and environmental studies.

**The Fairfield Museum and History Center:** Although focused on the local and regional area, The Fairfield Museum and History Center in Fairfield, CT offers a wide variety of educational opportunities.

The program *Old Burying Ground Challenge* upholds their mission. Designed for students grades 1-12, the program “combines history with orienteering, math and teamwork” through a diverse array of activities, including compass and pacing skills that come together to complete an orienteering challenge while learning about life in colonial times. [http://www.fairfieldhistoricalsociety.org/educational\\_programs.php#MuseumTours](http://www.fairfieldhistoricalsociety.org/educational_programs.php#MuseumTours).

**The National Air and Space Museum** presents *Moving Beyond Earth*, a new exhibit on the past, present, and future of space flight that “immerses” participants in an “in-orbit” shuttle experience. The exhibit utilizes historic artifacts to show visitors the past challenges of space flight, enabling them to better understand the present. Then visitors can look to the future while studying a model Aries launch vehicle and pondering the possibility of access to the moon. *Moving Beyond Earth* clearly intertwines history and science, giving visitors a better appreciation for the scientific exploration of space through the exhibition of its past.

**The Henry Ford** is strategically focusing on multidisciplinary connections in all its educational program and product offerings with history as the common hook. We are poised to launch a unique Literacy and History prototype for preschoolers called ‘Henry’s Alphabet Cars’. Preschoolers will discover the traits of an innovator (such as learning from failures and persistence) as they explore digital artifacts and learn historical facts and dates through hands-on puzzles, alphabet scavenger hunts, story-time and word recognition activities. Another set of innovative educational materials around our ‘**Racing in America**’ initiative, focuses on combining history with physics and technology. Using ‘artifactual’ stories from The Henry Ford’s racing collection, a Unit Plan titled *Physics, Technology and Engineering in Automobile Racing* presents creative ways to study physics concepts, including Newton’s three laws of motion, forces in straight lines and circles, motion, distance, displacement, velocity, acceleration and momentum.

Additional research and publications that highlight the benefit of the interdisciplinary approach to education where history can be the catalyst for integrated learning:

A Categorization of the "Whys" and "Hows" of Using History in Mathematics Education by Uffe Thomas Jankvist

<http://www.springerlink.com/content/j31j79273u7q5576/>

***Marshall, Caroline, and Woolf, Keens & Co. Museum as Catalyst for Interdisciplinary Collaboration.*** Cambridge, MA: Museum Loan

Network, Massachusetts Institute of Technology, 2002.

Now is the time to think creatively and advocate for more holistic approaches to education. The federal 'Race to the Top' and other funding initiatives are encouraging educators to think creatively and partner with community organizations. History teachers, museums and historians can leverage this opportunity and advocate for integrated multidisciplinary approaches vs. teaching in single content silos and support it with best practice examples and research.

Noted historian, Howard Zinn, said, "My advice for the future history teacher is, 'Don't obey the rules...Don't be intimidated by what they say you must teach...If you don't take any risks, you're not doing the right thing....You have to give your students reading materials that they would not ordinarily get....think independently, think outside the lines...'" ('One Long Struggle for Justice' by Bill Bigelow in *Rethinking Schools* Spring 2010, Vol 24, Number 3, Page 23)

My article has listed some ideas and I'm sure many of you have additional ideas and examples to advance the case for the multidisciplinary approach to education. The goal is to make history the common, unifying strand. Please feel free to share them by contacting me at [paulag@thehenryford.org](mailto:paulag@thehenryford.org)

Happy Summer!

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