Science in the Classroom (Annotated primary literature; American Association for the Advancement of Science; http://www.scienceintheclassroom.org)

Those who teach science recognize that we live in an ever-changing world where the landscape of our knowledge shifts every day. With every published research article new understanding arises about the universe we live in. For the classroom teacher, keeping up can feel like a daunting task, but even more so for students who lack the background and academic language that make scientific research papers accessible. To combat this threshold the American Association for the Advancement of Science (AAAS) put together an online portal called Science in the Classroom (SitC). There students from all over the country will find a world of interactive, primary literature aimed at increasing knowledge and skills around scientific processes and communication.

The website’s home page opens to rich colorful images whose hyperlinked, catchy titles invite visitors to explore its depths. Visitors can peruse featured papers or browse by categories of topics coming from the Science family of journals. Topics cover everything from pigmentation in humans to mechanical metamaterials, ensuring that every teacher will find relevant narratives in their content area. Students will not encounter watered-down versions of research papers; instead they will get to read the articles as they were published with enhancements allowing for clicking on complex terms to get their definition, finding further descriptions of previous work alluded to in the articles, quickly locating the results and conclusions, and following links in the text that lead to relevant news articles. The process of science will come alive as students engage with the text, turning on the various “learning lenses” that demystify and decode the narrative.

Teachers, too, will find additional resources that they can use to support learning. Switching on the “connect to learning strands” learning lens reveals how the text explicitly addresses teaching standards. These standards include the Next Generation Science Standards and the various Advanced Placement science standards. Teachers who have incorporated SitC have also praised its alignment with Common Core standards, citing its use as a tool to facilitate the reading of informational text. But this is only the beginning of what teachers will find. Every piece of primary literature comes with activities students can perform in class, educator guides, links to additional resources, and many also include video that illustrates the research study. Some of these videos come directly from HHMI BioInteractive, which partners with AAAS. These videos also include interviews of the authors themselves! Students will get to watch and listen to real scientists from diverse backgrounds speak with passion about their work. These informative and motivational clips will surely expose students to careers in STEM.

Classroom teachers find value in Science in the Classroom. They appreciate the site’s contemporary design. Although they find that the annotated articles work well on their own, they see the resources attached to each article as contributing meaningful components to their lessons. Some have even suggested using the work on this site as models students can emulate to annotate their own primary literature text. For additional ways to incorporate primary literature, check out this resource.

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