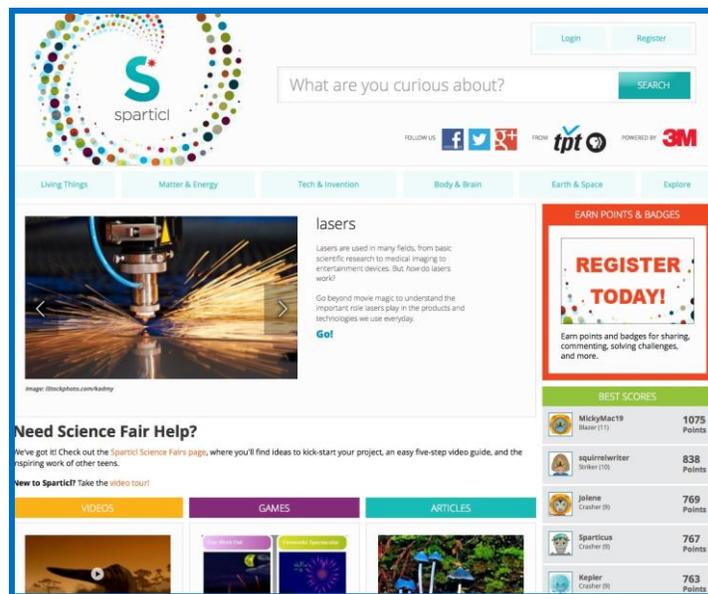




MULTIMEDIA RESEARCH

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Evaluation of *Sparticl* STEM Website for Teens



Executive Summary of Report
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EXECUTIVE SUMMARY

Produced by Twin Cities Public Television, St. Paul, MN, and supported by 3M, *Sparticl* is a free web and mobile service intended for teens but open to all. For *Sparticl*, experts have curated existing web videos, games, articles and activities to provide a digital library representing the very best in science, technology, engineering and math education.

For the evaluation of *Sparticl*, Multimedia Research recruited 64 eighth graders from six states to explore *Sparticl* for a minimum of two hours. Teens experienced a broad expanse of what website has to offer, a wide range of content categories and resource media types.

Teens enjoy exploring *Sparticl* because of the range of information available, the ease of use and the variety of learning formats, particularly the game format. However, they raised concerns about inoperable and/or slow external sites, issues of usability, and the limited range of topics. Four of ten teens described earning points as a motivational reward, and two of ten considered points to be fun or interesting; yet two of ten participants felt that they did not understand the purpose of points.

Teens value *Sparticl*. A majority of teens reported that they will return to the website either for help with a school project or topic or because the site provides interesting information. Most users, particularly the girls, were likely to recommend *Sparticl* to others. Teens valued *Sparticl* because it has pulled together the best STEM websites in one place, but some users also found the keyword search routine and limited resources to be a disadvantage.

Teens share *Sparticl* with others. Two-thirds of teens told friends or teachers about the site; and eight out of ten teens shared memorable *Sparticl* content with family and friends.

***Sparticl* increases teens' awareness of 3M.** Experiencing the website led teens to conclude that 3M cares a lot about helping youth learn about science and science careers, and half of the participants recognized that 3M had made *Sparticl* possible.

***Sparticl* increases interest in and awareness of STEM careers.** One-quarter of our teens increased their interest in STEM jobs or careers. Two-thirds of participants reported learning from *Sparticl* about STEM jobs or careers. Exposure to the website also raised teens' awareness of the wide range of STEM fields and raised awareness of specific jobs within fields.

Teens learn from *Sparticl*. All teens recalled content from at least one of the main *Sparticl* content categories, and half of the teens recalled at least one fact or described at least one cause, relationship or process from their *Sparticl* exploration. Number of resources explored related to higher recall in each category, and the resources of Earth & Space and Body & Brain were the most memorable. Girls were significantly more likely than boys to recall specifics from the categories of Body & Brain and Living Things. Additionally, using *Sparticl* broadened teens' definition of science to include the concept that science is important.

***Sparticl* sparks teens' curiosity.** Exposure to *Sparticl* resources increased the specificity of topics teens were curious about and increased their interest in topics. Half of the teens reported that their curiosities were sparked by something on *Sparticl* and that they would go to the website for answers to their questions.

***Sparticl* changes how teens value science.** After exposure to *Sparticl*, teens significantly increased their valuation of the importance of knowing and studying science and the utility of science in solving everyday problems. When asked for an example of how science, technology or engineering is valuable to society, four out of ten teens specifically referenced a *Sparticl* resource.