Momentum

Julianna Bond  
_Southern Methodist University_

Sara Kendrick  
_Southern Methodist University_

Tyler Anderson  
_Southern Methodist University_

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Momentum:
A student-generated, interdisciplinary science publication

Sara Kendrick  Julianna Bond  Tyler Anderson

Class of 2015  Class of 2015  Class of 2014
Electrical Engineering major  Management major  Management major
Biology major  Political Science major  Economics major
Anthropology minor  Chinese minor  Public Policy major

Problem

According to the National Center for Education statistics, among 15-year old students in 30 nations, those in the US placed 25th in math and 21st in science. In fact, by the end of 8th grade, U.S. students are two years behind in the math being studied by peers in other countries. This statistic is startling when compared with US 4th graders who ranked among the top spots in math and science. What does this decline in scientific and mathematical performance mean for the future of our society?

Science is such a fundamental part of our world today, and technological advancement does not seem to be slowing in the near future. Increasingly, because of the global nature of our culture, having knowledge of science as well as effective communication skills and aptitude in the humanities is also very important. Einstein understood the importance of well roundedness in scientists. But where are the Renaissance people of yesteryear? Da Vinci was both scientist and great artist; scientists are not one-dimensional. A source of inspiration is critical in order to achieve scientific breakthroughs. Currently in the Dallas area we lack approachable interdisciplinary and inspirational resources for middle school and high school students.

Purpose

Momentum will serve several functions in the greater Dallas community. At its most basic level, it will help to inspire a passion and excitement for the study of science. Bridging the gap between disciplines, this publication will focus on ideas about science and technology (like a scientific journal) and will promote intellectual exploration in the approachable manner of a literary magazine. For those who have a passion for both science and the humanities, this synergistic publication will serve as a much-needed outlet for creative expression during this impressionable time and will emphasize the importance of curiosity. It will foster interdisciplinary thought, celebrating the intersection of literature, art, visual media and scientific inquiry. Momentum will allow students to express ideas about new technologies, science in their everyday life and revelations about the sciences; and share them with other students. Also, because a
student will be required to submit at least one scientific resource with an entry, this publication will help introduce and highlight the concept of scientific research, which is essential to a future in science.

The website hosting the contest and publication will also serve as a resource to students, connecting them to news about science, experiences of students in science and much more.

**Proposed Method:**

With the Big Ideas grant, we propose to create an interdisciplinary science publication for middle school and high school students to help spark and fuel an interest in science and encourage Dallas youth to recognize the important intersection and symbiosis between science and the humanities. The publication will be centered on a literary scholarship contest that focuses on student opinions and ideas about science and encourages creative expression through language and the arts. Our proposal calls for both a middle school division and a high school division. We will first create a website that is easily accessible and will allow for both the presentation of information and submission entry. We also plan to use a synergistic and integrated approach to our publicity strategy. Schools throughout the Dallas area (especially those in South and East Dallas) will be alerted and informed about the new scholarship competition. Working with our advisory team of SMU advertising students and faculty, we will then produce and deploy flyers, other visual media and other creative channels such as social media to reach students at our targeted schools. Students will be required to reference at least one scientific resource in their work and can submit their entries online. Once the submission deadline has passed, we will gather a panel of students and professors involved in the arts and the sciences to help judge the submissions. First place, second place, third place, and other outstanding participants from each division will be chosen from the applicant pool. These participants will be notified and invited to an awards ceremony where they will be recognized. Winning students, their school, and their science teacher will receive a physical copy of the publication. The completed magazine will be available to view electronically on the website.

In addition to the publication itself, the contest website will also serve as a hub for additional information about science and the sources of research inspiration. It will draw students’ attentions to helpful resources, news about science, as well as intellectual exploration of SMU students and others involved in science in the Dallas area. The website also will feature blogs from SMU science majors studying abroad, those involved in Richter research as well as information about careers and opportunities in science.

**Anticipated Result**

Creativity is essential to science, and through *Momentum* we hope to reach, inform and impassion youth. This project will not only act as an approachable scientific resource for students, but also help them to gain a broader view of science applications in our society. Science is a broad and limitless field—an experience—that means something different to every individual, and affects every individual differently whether they are even aware of its presence. Through the interdisciplinary and integrated *Momentum* we hope to highlight and celebrate those different perspectives and in doing so encourage scientific dialogue and exploration as well as excitement about science. *Momentum* will
help high school and middle school students appreciate that we live in an interdisciplinary world, that a base knowledge of science is vitally important, and that thoughtful and salient exchange of ideas is tantamount to furthering intellectual thought.

In addition to the Momentum printed publication, eventually we hope that our website will act as a forum to connect students interested in the arts and science to the SMU campus and to the greater Dallas community. On the site, we plan to provide information on opportunities and career paths in the science field, along with updates on current events and new developments and discoveries. We hope to include a blog like portion for SMU students to share their experiences on Richters or abroad as well. Our efforts will help to make scientific resources more easily accessible to Dallas students and foster creativity and intellectual exploration.
Momentum Science Journal
Big Ideas Project Timeline

Post flyers on campuses/localseudent hot s. Any

Print flyers/media
February 13, 2012

Contact Schools and muot with science teachers
February 10, 2012

February 16, 2012

Print hardcopies of Journal and N of Winners
April 13, 2012

Submission Deadline
April 9, 2012

Submission start date
February 23, 2012

Create Website
February 9, 2012

Submit Proposal
January 27, 2012

May 1

Awards Ceremony
April 20, 2012
Budget

$1600  Website creation, web design fees, maintenance fees, & graphic design
We plan to hire a local web developer to create a website that would accept online submission and would allow participants to view an interactive online edition once the competition comes to its fruition.

$2,000  Grand Prize Scholarships
We will offer $500 to the first place submission in the high school and middle school categories. We will likewise offer $300 to the second place winners of each, as well as three $50 awards and supplementary gifts for honorable mentions.

$500  Magazine printing fees
We plan to print copies of the finished publication for the winners and for their schools.

$300  General printing fees
These fees will go toward printing flyers, posters and informational pamphlets to generate interest from participating high schools. Part of this amount will also cover printing submissions for the review panel.

$500  Hosting award ceremony
Upon selecting the winning submissions, we will host an award ceremony to recognize winners. The money will be used for catering, space, rentals, decorations, and miscellaneous items required for the ceremony.

$100  Gas and transportation costs for travel to area schools
We will make visits to schools in the area to promote this competition. We will also provide further information on future careers in the science field.

Total Proposed Budget
$5,000

Person responsible for funds:    Sara Kendrick

Signature of the above: