

Develop a Marketing Campaign to Engage and Inspire Nevada's Next Generation of Potential STEM Workers

Problem

Too few Nevada students and workers-in-transition are currently considering STEM careers that could allow them and the state's diversifying economy to prosper. Part of the problem is that many students and families do not understand either the importance of STEM skills to the state's future prosperity or the exciting STEM career opportunities available to individuals who possess some level of postsecondary training but not necessarily a four-year degree. This challenge is exaggerated among those groups traditionally underrepresented in STEM fields, including individuals from low-income families, people of color, and white women. In this regard, Nevada is like many states that have not effectively conveyed that STEM knowledge will be essential for the workforce of the future; that careers in STEM industries are stable and well-paying; and that STEM jobs are broadly accessible. Without clear signaling aimed at engaging and inspiring Nevadans to explore careers in STEM, Nevada will face great difficulty developing the more diversified, higher-value industries it seeks.

Recommendation

To cultivate enthusiasm and interest in Nevada's STEM industries and STEM education more broadly, the STEM Champion should spearhead a comprehensive, segmented, and multichannel marketing campaign statewide that aims to increase public awareness of the importance of the STEM economy and the education needed to participate in it; inspires excitement about STEM careers; and corrects the misconception that STEM careers are only for a select, highly educated few. While the STEM Champion should set the overarching vision for the marketing campaign, which should be tied to the state's broader STEM agenda, the private sector and the philanthropic community should finance, shape, and carry out the campaign.

Along these lines, a successful campaign will:

 Ensure that families throughout the state understand what STEM is and why it is important to individuals and the state economy

- Demonstrate what Nevada's STEM careers look like
- Coordinate with the private sector to provide STEM career role models, particularly for those from underrepresented populations
- Define differentiated strategies for different target audiences, including especially lowincome students, students of color, female students, and families from underrepresented populations

Implementation Specifics

To start, the STEM Champion should work with the STEM Advisory Council to create a request for responses (RFR) aimed at securing a marketing and communications firm to craft a communications strategy for raising public awareness of exciting STEM career opportunities in Nevada and the importance of STEM education for all Nevadans.

In particular, the RFR should seek an experienced firm that can:

- Create an exciting, recognizable STEM brand for Nevada that students, teachers, and
 families will associate with the state's more diversified economy. A successful campaign
 will inspire excitement among students, parents, teachers, and the general public about
 the various STEM jobs that exist in Nevada while making clear the connection between
 STEM education, STEM jobs, and the state's broader economic aspirations
- Highlight the spectrum of STEM job opportunities in Nevada in order to familiarize students and parents with less traditional STEM careers and the flexibility of a STEM degree
- Develop distinctive marketing strategies for specific target populations, including underrepresented groups such as white women and people of color as well as middle school students, high school students, individuals pursuing non-traditional educational paths, workers-in-transition, and parents
- Support regional and local engagement to ensure that videos, websites, social media strategies, and apps developed for the marketing campaign are adopted by local school districts and actively circulated among students
- Emphasize social media and encourage student interaction with the campaign. Many STEM awareness campaigns amount to little more than a few online videos. By contrast, Nevada's marketing campaign should employ Facebook, Instagram, Tumblr, Twitter, Vine, and other social media platforms used by students to foster active, ongoing engagement
- Empower schools and community organizations to follow up with relevant information. Once the marketing campaign has piqued students' interest in STEM,

schools and community programs should be mobilized to provide further information on STEM career pathways

• **Field-test the campaign's impact** by conducting focus groups with students, teachers, parents, and private-sector partners throughout the state

The private sector and philanthropies should support the marketing campaign effort by providing **substantial financial investment and advocacy**. Most successful states have leveraged private-sector and philanthropic resources and expertise to develop and deploy their STEM marketing strategies. Private-sector firms and philanthropic groups can be invaluable partners in marketing efforts, particularly given their firsthand familiarity with marketing and public outreach. Moreover, companies and philanthropies may be more inclined to associate with the STEM marketing campaign given the positive media attention that is likely to ensue. Affiliation with the marketing campaign (whether through funding, co-branding, or other avenues) could inspire continued private- and philanthropic-sector engagement on STEM education and outreach activities, ranging from internships to afterschool programming to inkind equipment donations. As such, the STEM Champion and the STEM Advisory Council should seek commitments from philanthropies and private-sector partners that extend beyond the initial marketing campaign.

For its part, state government should provide **strong support and advocacy from the governor's office**, which has proven crucial to the success of similar campaigns in Iowa, Massachusetts, Utah, and elsewhere.

Budget Implications

The budget implications for the campaign will vary depending upon the size and scope of the campaign. The RFR to marketing and communications firms would require a minimum outlay of \$50,000. Once a firm has been selected, development and implementation of the strategy—including print and video ad development and ad buys, production and placement of videos and other web-based content, active social media engagement, and development, publication, and distribution of collateral materials for schools, community centers, and other relevant organizations—will require an initial investment of between \$500,000 and \$2 million. For reference, Utah's STEM marketing campaign—"STEM Utah: Curiosity Unleashed"—mobilized over \$2 million in private-sector funding.

References

Massachusetts STEM Pipeline Fund. 2013. "Public Awareness Campaign Request for Responses for Marketing and Advertising Services." Available at www.mass.edu/forinstitutions/prek16/documents/2013-02-06RFR-STEMPublicAwarenessCampaign.pdf

President's Council of Advisors on Science and Technology. 2010. "Prepare and Inspire: K-12 Science, Technology, Engineering, and Math (STEM) Education for America's Future. Available at www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-stemed-report.pdf.

Jonathan Rothwell. 2013. "The Hidden STEM Economy." Washington: Brookings Institution. Available at

 $\underline{www.brookings.edu/^{\sim}/media/research/files/reports/2013/06/10\%20stem\%20economy\%20rot}\\ \underline{hwell/thehiddenstemeconomy610.pdf.}$

Utah Governor's Office of Economic Development. "Curiosity Unleashed: STEM Utah." Available at http://business.utah.gov/news/stem.

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