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Martin Pflanz, Bentley Systems
Mr. Ed Wright, Bentley Systems

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Substance Creation is the New Industry Sponsorship

Martin Pflanz, P.E. & Edward Wright @ Bentley Systems, Inc.

The landscape of primary and secondary education has been trimmed and pruned by economic influences. Ultimately these modifications may have unintentional and, worse yet, unavoidable impacts on college preparation and overall readiness leading to the work force. This also carries a risk of a diminished workforce for Industry on the horizon. Fortunately, the alarm bells have sounded, pending impacts on areas such as the STEM (Science Technology Engineering & Math) Profession’s have been recognized. Strategies have been and continued to be launched in STEM related education pathways. For example, the February 2012 Report by President’s Council of Advisors on Science and Technology (PCAST) highlighted the critical need for STEM preparation in the first 2 years of college. Now more than ever, corporations must contribute through substance creation, sharing advanced technology and skills with education institutions; they are interlinked.

This abstract will focus on Industry’s critical role as necessary substance contributors at strategic points throughout a student’s learning pathway. The following points outline Bentley System, Inc’s inclusive support of Engineering Education:

- Creation of the BeMentors Community, a central hub for STEM mentors to encourage, learn, prepare and share best practices for mentoring students
- Career readiness for exiting college graduates through the BeCareers Network
- “Educators Collaborative” program facilitating collegiate uptake of industry technology
- Support of student competitions both at National and Regional levels through contributions of direct manpower and operating funds
- Launched “Cloud Mentoring”, a corporate-corporate initiative to make impact
- Corporate leadership-embraced support of colleague involvement in youth mentoring and volunteerism (eg. Big Brothers Big Sisters, Future City Competition, MATHCOUNTS)
- The Student Learning Server, training on real-world industry application software
- International partnerships created for global impact:

  Example: Bentley partnered with the Ethiopian Institute for Water in conjunction with a team of researchers from the University of Connecticut and several Ethiopian Universities through a USAID/Higher Education for Development (HED) planning grant to support the sustainable development and management of water and overcoming water distribution challenges in their drought-ravaged country.

In summation, the key to a viable future engineering workforce is reliant on an integral relationship between private corporations and education through learning pathways, further increasing the bandwidth of systems in place, and raising the bar of capability and readiness.