OVAE CONNECTION

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Report on Successful K-12 STEM Education (Continued From the Oct. 13 *OVAE Connection*)

The committee that prepared the report Successful K–12 STEM Education for the National Research Council explored three types of criteria for identifying successful STEM schools: (1) those related to outcomes, (2) those related to school types, and (3) those related to instruction and school-level practices. In its review of the evidence on each of these types of criteria, the committee found that the "strongest research comes from criteria related to practices, where the evidence allowed [it] to characterize effective STEM instruction, identify key elements that contribute to effective instruction, and identify school characteristics that support learning."

In reviewing criteria related to the three types of STEM-focused schools (selective, inclusive, and CTE), the committee found that they have "different goals, strategies, and school populations—all with the potential to improve STEM learning." Because of the challenges of conducting cause-and-effect research on these schools, the committee found little research that demonstrates the effectiveness of STEM-focused schools in comparison with other schools or that "contrasts the relative effectiveness of their different approaches on a variety of student outcomes." Therefore the committee was not able to identify a distinct set of criteria related to STEM-focused schools. On the other hand, the committee found that "these schools do offer a range of compelling models for the ways that the various effective STEM practices can be combined into a working whole." As such, they provide good resources for implementing their effective practices elsewhere—for individual learners and for schools throughout districts and states.

A variety of outcomes can be used to identify successful schools, even as those outcomes alone "do not provide insight" into the practices that enable this success. The committee noted, however, that "[p]owerful new research is being conducted using longitudinal data on student achievement; among other things, such research will provide a systematic inclusive way to define schools that have positive student outcomes." The committee called for a broadening of this research to take account of a variety of outcomes and concluded that "[i]n many respects, effective STEM practices are closely related to effective practices for education in general." Nevertheless, "research suggests that some strategies are unique to STEM learning and some challenges particularly affect success in STEM."

The committee contended that it "documented" some important shortcomings that could hinder our nation's success in achieving its objectives with regard to STEM. The committee's recommendations will be highlighted in the final issue of this series on STEM.

Federal Interagency Reentry Council's *Myth-Buster* Fact Sheets Assist Federal, State, and Local Providers

Each year, more than 700,000 individuals are released from state and federal prisons, with another 9 million cycling through local jails. When reentry fails for these individuals, the social and economic costs are high. The *Second Chance Act* was designed to improve outcomes for people returning to communities from prisons and jails. The act authorizes federal grants to government agencies and nonprofit organizations for a variety of services to reduce recidivism.

Attorney General Eric Holder convened the inaugural meeting of the Federal Interagency Reentry Council, in January 2011. The meeting brought 18 federal departments and agencies together to coordinate their efforts for making communities safer and prison and jail returnees productive citizens. Both Secretary of Education Arne Duncan and OVAE Assistant Secretary Brenda Dann-Messier attended. A second meeting was held last month, where it was announced that Congress appropriated $83 million in fiscal year 2011 for the *Second Chance Act* and other reentry programs.

A series of Reentry Myth-Busters fact sheets has been designed to clarify federal policies that affect formerly incarcerated individuals, their families, and the employers, providers, and others who work with them. The sheets summarize federal regulations; provide guidance on how to navigate the reentry process; and clarify federal policies in areas such as prison, jail, probation, community corrections, and parole; reentry service providers; and employers and workforce development.

One fact sheet debunks the myth that a person with a criminal record is not eligible to receive federal student financial aid, countering with the fact that individuals currently incarcerated in a federal, state, or local correctional institution do have some limited eligibility. Further, restrictions on eligibility are generally removed for formerly incarcerated individuals, including those on probation, parole, or residing in a halfway house. To learn more, please access: the council, the National Reentry Resource Center, the library of reentry resources, and the council's September newsletter as well as individual or the entire series of Myth-Busters fact sheets.

Real World Design Challenge Announced for 2011–12

Real World Design Challenge, an annual high school competition run by a public-private partnership with the goal of sustainably increasing the STEM workforce, announced its 2011–12 competition recently. Teams of three to seven secondary school students are challenged to design an efficient, low-carbon emission and environmentally friendly personal light sport aircraft accommodating two team members and flying 200 miles in less than two hours at a cruise altitude of 1000 feet above ground level minimum. Each team is supported by professional mentors. The theme of this year's challenge is "green aviation," especially fuel efficiency. To partner or for additional information contact Ralph Coppola, at rcoppola@ptc.com or go to www.realworlddesignchallenge.org. Registration is open on the RWDC website.