

STEM Task Force

Government Sector

Sector Group Ideas

Dec. 19, 2006

- Opportunity for KY niche in “sustainable energy” – potential new technologies and new jobs
- Improve math and science teaching at all levels
- Improve teacher education programs
- KEES reform – create incentives for students to take more rigorous courses
- Grants for STEM majors
- Match incentives to desired outcomes
- Universities must change first – math teachers should be math majors
- High schools must change since we currently teach to what is being tested
- Students must see benefits of pursuing STEM fields
- National STEM curriculum
- Differentiated pay (\$38,000 to \$45,000 starting salary)
- Raise per capita income in KY
- Hire mathematicians to teach mathematics
- Create Governor’s Scholars-type program for STEM
- Money and grants for future STEM graduates
- Embedded and improved PD (professional development) for teachers
- Close achievement gaps in STEM disciplines
- Communicate urgency of STEM crisis to the search committees for the CPE, KDE and Economic Development leadership positions
- Require mentoring for teachers who are lacking proper skills and/or certification
- Create focus groups with talented high school students
- Invest in interactive instructional technologies (Computer video games as upcoming tech platform for K-12 learning)
- Consider “pay for performance” for teachers in STEM
- Include Kentucky Education Association in discussion of STEM
- Need to raise awareness among members of the general public
- Create a large prize for creation of innovative energy solutions (Like X Prize)