



MARSHALL'S STRATEGIC VISION - Our Bold Constellation for the Future

Status Update for: Plan, pilot and launch the Marshall/West Virginia Science Technology Engineering Math (STEM) Academy

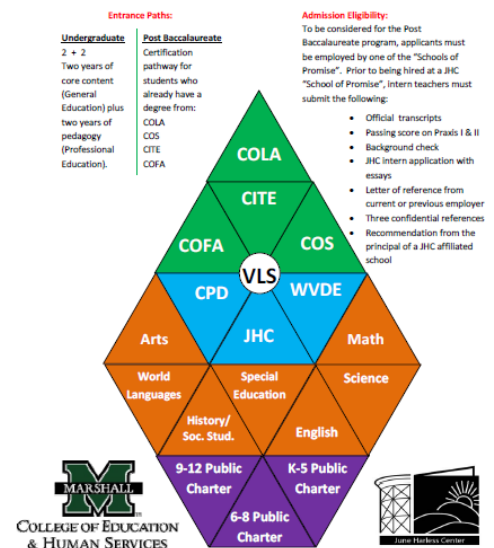


Overview of S.T.E.M. Academy - The academy is *envisioned* as a model high school academy featuring leading-edge math and science instruction that yield high-level student achievement as evidenced by research-based outcomes. Student experiences will be enriched through learning opportunities, which amplify conceptual foundations, as well as applications involving problem- and project-based learning approaches that integrate the STEM (science, technology, engineering and mathematics) disciplines. Opportunities for developing fine arts and other areas of enrichment are also conceived as part of this endeavor.

This high school academy will operate on Marshall University's Huntington campus and will enlist experimental laboratory and other resources of the campus to advance inquiry- and problem-based student learning. In addition, a virtual programming aspect of the academy will be developed for use by public school districts across West Virginia. Virtual Learning Studios will provide:

1. Early college enrollment opportunities for junior/senior high school students in the state, providing multiple opportunities for college credit in STEM-related academic programs
2. Enrichment activities to supplement curricular opportunities in rural schools:
 - Science
 - History
 - World Language
 - Math
 - LEGO/Engineering
 - Virtual Field Trips
 - Fine Arts
 - 21st Century Content
 - Global Studies
 - Financial, Economic, Business and Entrepreneurial Literacy
 - Civic Literacy
 - Health and Wellness Awareness
 - Research opportunities in areas of interest for educators and students

A New Kind of Educator



To learn more visit this Strategic Initiative at: <http://www.marshall.edu/president/strategic/STEM.asp>

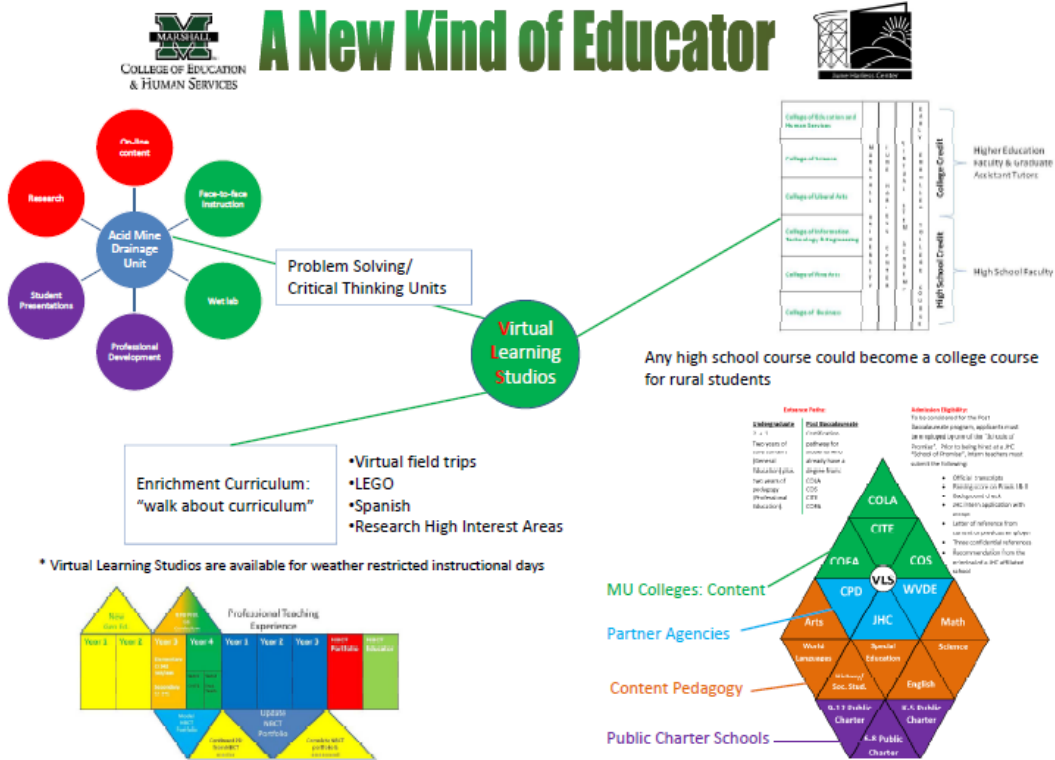
Virtual Learning Studios will be a valuable resource for weather-restricted instructional time.

SPECIFIC FOCUS AREAS:

- Integration with 21st Century Skills
- Professional development
- Content knowledge and clinical experiences
- Academic enrichment
- Research clearinghouse
- Liaison with external organizations
- Grant-writing
- Public outreach

CONCEPTUAL REPRESENTATIONS

- Model Academy
- Illustrative Diagram – High School
- Middle School Concept
- Tri-State Consortium Initiative
- K-8 Gold Medal Schools
- WV Statewide Initiative



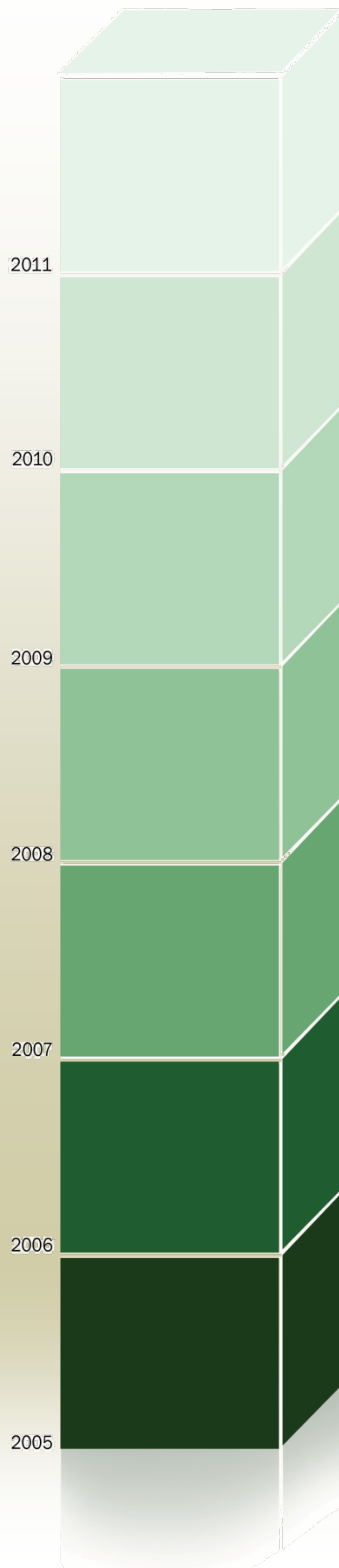
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Status Update for:



- **February 2010** - Dr. Tina Cartwright speaks on [Promoting Scientific Literacy](#) in Faces of Appalachia Symposium
- **August 2009** - ["Second Life in a S.T.E.M. Academy"](#) presented at the WVDE Technology Conference, Charleston. [Video](#)
- **November 2009** - [eMission Space](#) camp
- **June 2009** - [Ninth Annual Engineering Academy](#)
- **Fall 2008** - Building a Bridge to Marshall University: [STEM Academy on MU Campus](#)
- **April 2008** - [June Harless Center for Rural Education: Grand Opening](#) of the [21st Century Model School](#): Kellogg Elementary, Wayne County - A West Virginia School of Excellence
- **July 2008** - State funding increased to \$150,000 annually
- **2007- 2008** - \$2 million NSF grant to Marshall for multi-state Appalachian Math and Science Partnership ([AMSP](#))
- **2007** - [Online College in High School](#) opens website and receives the first \$300,000 annual allocation from the West Virginia Higher Education Policy Commission
- **2006** - WVEPSCoR grant from the National Science Foundation (NSF) [renewed](#) - \$9 million shared largely between Marshall and WVU

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