



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

Status Update for: **Focus Resources on Advancing Centers of Excellence**



Overview

1. Disability Studies and Research Center

- a. Initial discussions with current units housing programs and/or services were made.
 - i. On-going

2. Transportation & Intelligent Transportation Systems Research, Training and Development

- a. This is primarily a RTI issue, but there is involvement with CITE/Engineering. See Below.
- b. [CITE's engineering program](#) is supporting the [Rahall Transportation Institute's](#) efforts to create a Center of Excellence in Intelligent Transportation by providing the expertise of its faculty to the research and development efforts of RTI. New faculty have been recently hired who are recognized experts in the areas of infrastructure and transportation engineering. The expertise that these faculty members possess includes not only ITS, but advanced testing and monitoring techniques for various transportation structures, as well as the application of modern materials and techniques used in the construction of transportation systems. In addition to teaching courses related to transportation engineering in the MU undergraduate BSE and graduate MSE programs, these faculty are acting as mentors and advisors for existing RTI research personnel who are pursuing engineering doctoral degrees at WVU. The research efforts and educational programs of these RTI personnel will create a more robust and extensive pool of talent for the ITS Center, as well as the undergraduate and graduate engineering programs offered at the University.

RTI supports [STEM outreach](#) efforts coordinated through CITE such as the summer engineering academy, Project Lead The Way, and the [West Point Bridge Competition](#). These outreach and educational initiatives are helping to develop an interest among high school students in engineering fields, including transportation engineering. These outreach efforts will help insure that the talent needed to sustain and expand the ITS Center will be available well into the future.

3. Marshall Freshwater Institute

- a. Dr. Charles Somerville has submitted a pre-proposal for the [Ohio River Observatory](#) to [EPSCoR](#) for the new round of RII awards, working with Dr. John Maher (infrastructure grants)
- b. The new awards are for 5 years (rather than 3) and each year 5 million is available. WVU has submitted a single proposal to expand their nanotechnology. Marshall has submitted 2 pre-proposals (the water institute and cyberinfrastructure , i.e., supercomputing).

4. Center for Environmental Research, Assessment, and Policy

- a. Presently, faculty members have formed a voluntary, ad hoc committee to oversee the initial stages of developing a comprehensive, integrated “Center for Environmental Research, Assessment and Policy.” The initial step will be the development of a pool of shared research equipment and materials. This collaboration is in place to coordinate the use of the two MU research boats this summer.

IST and Biology have cooperated to create and manage a graduate degree program in “Watershed Resource Science” as an area of emphasis in the Biology Department. Both IST and Biology faculty and administration are committed to working with the faculty of the [Environmental Science Graduate Program](#) in CITE to produce a companion degree program “Watershed Resource Management,” in CITE. The intent is to create an “Intellectual Common Market” of courses and resource opportunities that will enable students to choose courses across disciplines and colleges that are in their best interest. Discussions are in progress about ultimately merging all environmental degree programs under one “Center.”

[IST](#) is presently cooperating with the College of Education and the [June Harless Center for Rural Educational Research and Development](#) to develop a “place-based” curriculum for K-12 education in Appalachia that focuses on science experiments testing sustainable solutions to local problems. This work is being done in cooperation with the Rahall Transportation Institute and is active in seven counties in West Virginia. Collaboration has been established with the Environmental Center at Eastern Kentucky University. This collaboration is attempting to grow heath plants such as laurel and blueberry on abandoned and reclaimed mine lands. Our cooperators at Eastern Kentucky will be attempting to maintain honey bees on Marshall’s blueberries.

5. Center for Innovative Education, Research, Policy and Pedagogy

- a. The Center for Innovative Education, Research, Policy and Pedagogy housed at the Graduate School of Education and Professional Development has focused on several initiatives during the past year. Dr. Barbara Nicholson has been leading the initiative and actively pursuing educational research projects for the center. First the Center has entered into an agreement with [Edvantia](#) (formerly Appalachian Educational Laboratory) to collaborate on educational evaluation and research projects. Several proposals have been submitted in cooperation with [Edvantia](#). Second, under Dr. Nicholson’s guidance the Center has collaborated with Globaloria, an organization which uses virtual and scalable edu-social networks-comprised of programmable

websites and related Wikis and Blogs—to teach young people from underserved communities how to take control of their new-media world. Marshall's role in this collaboration is to provide a cadre of doctoral-level student researchers who conduct field based research on the impact of Globaloria's initiatives in our region. Seven doctoral students have participated in the initiative to date. Dr. Idit Caperton (founder of Globalria) visited the GSEPD on April 17th 2008 to discuss the research activities carried out by the students and to plan future activities.

The Center has recently entered into an agreement with Kanawha County Schools to conduct research into the county's student dropout problem. This research will begin in the spring of 2008 and continue through the 2009 school year. Another focus of the Center is to serve as a vehicle for faculty development. Since January 2007 GSEPD faculty have attended in excess of 47 faculty development activities on the state, national and international level. The Center was also charged with developing linkages with graduate programs and students. During the past four semesters, the GSEPD though the Center has provided funding for 24 graduate students for research or professional conference presentations.

6. The June Harless Center for Rural Educational Research and Development.

- a. The mission of June Harless Center is to provide leadership in education initiatives for West Virginia educators and students, providing educators and families of rural West Virginia with a support system that addresses educational problems, sustains school improvement, and provides positive growth in all educational factors.

7. The Shewey Learning and Research Center

- a. This center, which is under development will be dedicated to assisting with rural educational research and development. Specifically, the goal of the Center is to increase the mathematics and science achievement in middle school students through improved mathematics and science instruction in the middle schools in southern West Virginia, with a preference to Mingo County.

8. Higher Education for Learning Problems - The Higher Education for Learning Problems Program was organized in 1981. The Program has grown steadily from 3 dyslexic students at its conception, to over 200 Learning Disabled college students today. H.E.L.P. has also provided support to over 1,000 medical /law students and professionals, helping them to be more successful in their courses or to pass standardized examinations such as the USMLE, LSAT, and the Bar examination. The Program has worked with over 400 K-12 students, and has provided diagnostic evaluations for Marshall students and families in the community.



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Status Update for:



2009

2008

2007

2006

2005

April 2008 - West Point Bridge Competition supporting Intelligent Transportation

February 2008 - Pre-proposal for the Ohio River Observatory to EPSCoR

Fall 2007 - Voluntary, ad hoc committee to oversee the initial stages of developing a comprehensive, integrated "Center for Environmental Research, Assessment and Policy.

Fall 2006 - Entered into an agreement with Edvantia (formerly Appalachian Educational Laboratory) to collaborate on educational evaluation and research projects.

For More Information on the Initiative – Focusing Resources on Advancing Centers of Excellence visit:

<http://www.marshall.edu/president/strategic/CentersofExcellence.asp>