

Category	Grow Your Own: Build Regional Entrepreneurial Community and Create Small Business Buzz					
Name	STEM Education Initiative			#	3-2	
Goal(s)	Design and conduct a Southeastern North Carolina STEM (Science Technology Engineering Math) Education Awareness Summit and Annual Science and Inventor Fair to help fill the STEM talent pipeline by focusing on middle and high school students. .					
Champion	Greater Wilmington Chamber Foundation, UNCW School of Education, Department of Computer Science (Sridhar Narayan) UNCW Center for Community and Economic Development, CFCC, WID, GE, etc.			Importance	4.0 (3.5)	
Do-ability	3.5 (2.6)			ROI	3.5	
(Importance, Do-ability, ROI rated on a 4 to 1 scale; 4=High; 1=Low. Steering Committee average rating also shown).						
Action Type	X	Build New	X	Expanding Existing		Attract From Elsewhere
Focused Impact Areas	X	Talent		Technology	X	Tolerance
		Territory Assets		Overall		
Description	<p>Staying competitive in the modern global economy increasingly requires a greater supply of skilled labor. Innovation companies choose regions with a reliable and flexible supply of local talent.</p> <p>STEM education program emphasizes the importance of recruiting students to science and engineering disciplines, mentoring and supporting students through high school and beyond.</p> <p>UNCW has a number of STEM-related initiatives already under way as do other post secondary and K-12 institutions in the region. This Catalytix recommendation is focused on helping build more awareness for these efforts and to connect practioners and regional employers.</p> <p>Employers are recruited to facilitate student placement in the STEM workforce. Participating institutions are expected to support the goals of the general goals of STEM programs including:</p> <ul style="list-style-type: none"> • Improved educational opportunities for students; • Increased retention of students in STEM programs; • Improved student support programs at institutions of higher education; • Increased numbers of well educated and skilled employees in technical areas of regional need <p>Program would be extended to college freshman and sophomores to help keep them in the STEM majors</p>					

Timing	Q-1 2009 or Q-1 2010
Resource(s)	\$ for Annual Summit \$ for Annual Regional Science Fair
Performance Measures	<p>STEM educational progress in K-12 should raise the STEM elements of standardized test scores and AP participation. SAT and ACT scores are a key indicator of a school system's ability to prepare students for college entrance. State data should be benchmarked against national data.</p> <ul style="list-style-type: none"> - Average standardized test scores on STEM elements in public high school - Average standardized test scores for students with FIRST participation - Average standardized test scores for students with HiEST participation - AP participation in math and science <p>Measures/ Sources: AP Testing, The College Board, www.collegeboard.com</p> <p>K-12 Standardized Test Scores, National Center for Education Statistics, www.nces.ed.gov/nationsreportcard</p> <p>Average Standardized Test Scores, Measuring Up, The National Center for Public Policy and Higher Education, www.highereducation.org</p>
Success Factors	<p>Buy-in from UNCW and School Districts</p> <p>Major focus on marketing versus only on program content</p>
Tactics and Action Plan	<p>Identify and recruit Summit and Science Fair champions.</p> <p>Review and refine goal and success factors.</p> <p>Benchmark 2007 Pittsburgh STEM Summit and Carnegie Science Center Science Fair</p> <p>Obtain seed funding from National Science Foundation or State</p> <p>Develop lists of key sponsors: civic, economic development, business and academic.</p>
Justification / Rationale	<p>Percent of Cape Fear workers in knowledge economy (26.9%) compared to national (29.7%) and benchmark (30.3%) averages.</p> <p>Regional workforce needs in engineering and healthcare</p>

Model or Case Study Reference	<p>See www.pghtech.org/networks/education/stemsummit.asp</p> <p>See www.scitechfestival.com/mainsf.asp</p>
Supporting Documentation	<p>2007 Pittsburgh STEM Summit</p> <p>Delaware Valley STEM Outcomes Research Initiative</p> <p>National STEM Summit (October 2008 Pittsburgh)</p> <p>Pittsburgh Regional Science and Engineering Fair (PRSEF) will celebrate its 69th year of open competition of research projects in the fields of science, mathematics and engineering on April 4 (competition day) and April 5 (awards ceremony) at Heinz Field. This competition is open to all students in grades 6-12 from 23 counties in Western Pennsylvania and three counties in West Virginia.</p> <p>As the only local International Science and Engineering Fair (ISEF) affiliated fair, PRSEF will nominate Senior Division students to attend ISEF in 2008. Additionally, PRSEF will nominate middle school students to attend the SSP Middle School Program (formerly DCYSC), held annually in October in Washington, DC.</p> <p>Download 2008 PRSEF Guidebook</p>
Risk Factors	Low
Marketability or Buy-In Potential	High
Synergy with Other Strategies	Links with 1.2 Youth Entrepreneurship, 1.7 New Hanover School Board, 3.4 UNCW Engineering School, 6.5 Regional Image Enhancement
Alternatives	
Notes	