



Executive Summary

There is one thing stronger than all the world, and that is an idea whose time has come.

— French Novelist Victor Hugo

Summary: The alarming confluence of a widening skills gap, disturbingly low college graduation rates and an ill-prepared workforce has sparked a spate of studies, articles and debates on how to address this crisis. While not a panacea, an ongoing and expanding effort in Mississippi is providing an opportunity for communities to correct course for its students and employers. Pathways2Possibilities: P2P is an interactive, hands-on career expo designed for all 8th graders in public and private schools, as well as at-risk youth, ages 16-24. Each student experiences 19 Pathways, all aligned with the career Pathways set forth by the United States and Mississippi Departments of Education.¹ Each Pathway is led by a Pathfinder who has coordinated fellow Pathway professionals to design and facilitate hands-on activities intended to inspire the students to further explore that career Pathway. Software helps the students corral their thoughts before and after the event and encourages a direction for their high school schedule of classes. University of Mississippi researchers have begun a study on the short- and long-term outcomes of P2P, including a control group. Preliminary data points to results that could positively impact tomorrow's workforce and improve the quality of life across communities.



¹ RCU Mississippi State. (2012). MDE. Retrieved from <http://www.rcu.msstate.edu/MDE/PathwaystoSuccess.aspx>

Overview: P2P Gulf Coast 2015 by the Numbers



P2P hosted its inaugural Magnolia State event in Biloxi for 6,000 8th graders from the six lower counties in November 2013. The inaugural Imagine the Possibilities event, a P2P affiliate, debuted in Tupelo for 3,300 8th graders across seven Northeast Mississippi counties in October 2015. Almost 160 employers at the third annual Gulf Coast event and 80 employers at the Northeast Mississippi event engaged in creating the Pathways for P2P. After all of the 8th grade students have departed on the first day, targeted at-risk youth, ages 16-24, experience the Pathway activities. The Pathways include Aerospace; Agriculture, Food & Natural Resources; Architecture & Construction; Arts, A-V Technology & Communications; Business Management & Administration; Education & Training; Energy; Engineering & Polymer Science; Finance; Government & Public Administration; Health Science; Hospitality & Tourism; Human Services; Information Technology; Law, Public Safety, Corrections & Security; Manufacturing;

Marine Science (Gulf Coast venue only); Marketing; Transportation, Distribution & Logistics. The inaugural P2P Delta event is set for April 6-7, 2016 in Greenville for 13 Northwest Mississippi counties.

Jean Massey, Associate Superintendent for Career and Technical Education for the Mississippi Department of Education, urges school districts and communities to focus on Pathways that connect directly with local employers.² For example, high schools in DeSoto County, Mississippi, near Memphis where Fed Ex Headquarters is located, are emphasizing the Transportation, Distribution & Logistics Pathway. Similarly, P2P divided the STEM Pathway into separate Pathways for Aerospace because of NASA's presence in Hancock County, Energy because of the power companies and Chevron's refinery in Jackson County, Engineering & Polymer Science because of the renowned Polymer Science program at the University of Southern Mississippi, and Marine Science because of the proximity to the Gulf of Mexico and the Institute of Marine Mammal Studies in Harrison County.

Documentation of Need: Skills Gap, Graduation Rates and Changing Workforce

Skills Gap - Much of our country's workforce is not ready for its tasks of today or tomorrow. Employers expect young people to arrive in the workplace with a set of basic and applied skills, and the Workforce Readiness Report Card makes clear that reality is not matching expectations.³ While the employer respondents report that some new workforce entrants have "excellent" basic knowledge and applied



skills, significant "deficiencies" exist among entrants at every educational level, especially those coming directly from high school. Florida State Senator Don Gaetz and Florida Speaker of the House Will Weatherford explained the need for the Sunshine State's Career and Professional Education Act, saying, "While more than half of last year's U.S. college graduates are unemployed or underemployed, the ironic truth is that there are thousands of jobs in Florida unfilled because employers can't find workers whose skills meet industry specifications."⁴

The gap between the readiness of the workforce and the needs of the employers is not unique to one state; it is a national concern. The State of Mississippi is painfully experiencing it as well in its energy companies, oil refinery and shipyards, for example. Former Ingalls Shipbuilding President Irwin Edenzon and former Chevron Refinery General Manager Tom Kovar said both of their companies are still looking

² Massey, J. (2012, September 6). Personal interview.

³ Casner-Lotto, J. & Barrington, L. (2006). Are They Really Ready to Work? The Conference Board, Inc., the Partnership for 21st Century Skills, Corporate Voices for Working Families, and the Society for Human Resource Management. Retrieved June 15, 2013 from <http://www.eric.ed.gov/PDFS/ED519465.pdf>

⁴ Gaetz, D. & Weatherford, W. (2013, June 11). Gaetz, Weatherford column: Act makes education a path to jobs. *Tampa Bay Times*. Retrieved from <http://www.tampabay.com/opinion/columns/gaetz-weatherford-column-act-makes-education-a-path-to-jobs/2126014>.

for skilled workers. "When we get out of bed in the morning, it's something we're worried about. The industry across the Gulf Coast is struggling to find the skilled labor force we need," Edenzon said⁵.

Graduation Rates - Students need to understand relevance between staying in school and becoming productive adults. Mississippi's graduation rate was 75 percent for School Year 2011-12, which is 7th from the bottom⁶. The national average is 80 percent. More than 14,000 students leave the K-12 system each year in Mississippi, costing the state economy \$458 million in net annual costs, according to educators at the Mississippi Gulf Coast Community College⁷. Only about one-third of those dropouts has a job or seeks work, and those who do earn 27 percent less than high school graduates over their lifetime. They are also 30 percent more likely to use state Medicaid and are 3.5 times more likely to be incarcerated than those who graduate.



Graduation rates for the public high schools along the Gulf Coast and in Northeast Mississippi P2P areas fall between the state and national averages of 75 and 80 percent, respectively⁸. The average graduation rate for the 21 high schools in the P2P Gulf Coast region is 79.2 percent; Imagine the Possibilities is 76.6 percent for 30 high schools. The average graduation rate for the 32 public high schools in the P2P Delta footprint, though, is below the state average at 68.8 percent.

College graduation rates are even more dismal. The average rate of students graduating from any of the eight public universities in Mississippi in four years is only 22.85 percent; in six years, it is 44.24 percent.⁹ The national graduation rate at public universities is 57 percent after six years.¹⁰ The college completion

⁵ Havens, A. (2013, May 16). Mississippi Press business roundtable: Developers note improving market, manufacturers still seek skilled workers. *The Mississippi Press*. Retrieved from http://blog.gulflive.com/mississippi-press-news/2013/05/mississippi_press_business_rou_1.html

⁶ National Center for Education Statistics. (2014, April). *Public high school four-year on-time graduation rates and event dropout rates: School years 2010-11 and 2011-12* (NCES Publication No. 2014-391). Washington, DC: U.S. Department of Education. Retrieved from <http://nces.ed.gov/pubs2014/2014391.pdf>

⁷ Havens, A. (2014, July 9). MGCCC courts high school dropouts with free Transitions Academy. *The Mississippi Press*. Retrieved from http://blog.gulflive.com/mississippi-press-news/2014/07/mgccc_courts_high_school_dropo.html

⁸ Mississippi Department of Education. (2012). Reports. Accountability 2013-14. District and School-Level Results File. Retrieved from <http://reports.mde.k12.ms.us/report/report2014.aspx>

⁹ The Chronicle of Higher Education. (n.d.) College Completion. Retrieved from http://collegecompletion.chronicle.com/state/#state=MS§or=public_four

¹⁰ National Center for Education Statistics. (n.d.) Fast Facts. Retrieved from <http://nces.ed.gov/fastfacts/display.asp?id=40>

rate per 100 students at the Mississippi universities is only 18.46. “Awards per 100 full-time undergraduate students” includes all undergraduate-level completions reported by the institution to the National Center for Education Statistics: bachelor’s degrees, associate degrees and certificate programs of fewer than four years in length.

	Graduate in 4 Years	Graduate in 6 Years	Completions/100*
Alcorn State Univ.	20.6	37.2	16.6
Delta State Univ.	19.9	46.5	20.6
Jackson State Univ.	20.1	40.3	14.6
MS State Univ.	28.4	58.0	19.7
MS Univ. for Women	23.8	39.4	21.7
MS Valley State Univ.	13.7	27.2	13.4
Univ. of MS	33.9	58.7	19.2
Univ. of Southern MS	22.4	46.6	21.9

*NOTE: “Awards per 100 full-time undergraduate students” includes all undergraduate-level completions reported by the institution to the NCES: bachelor’s degrees, associate degrees, and certificate programs of less than four years in length. Full-time-equivalent undergraduates are estimated from the number of credit hours taken at the institution in an academic year. To account for changes in enrollment, the resulting metric is a three-year average of data from 2008, 2009, and 2010.

Changing Workforce - Anthony Carnevale, director of the Center on Education and the Workforce at Georgetown University, said nearly a third of people ages 22 through 26 with a Bachelor of Arts degree either do not have a job or are working at one that doesn’t require a university degree¹¹. The high school Class of 2018 will be starting the 8th grade in the fall of 2013. By 2020, most of these students will be about 20 years old. The U.S. Department of Labor’s Bureau of Labor Statistics estimates that by then Americans ages 16 – 24 will experience the greatest drop in representation among the country’s workforce.¹² From 2010 - 2020, that youngest age group will have lost representation by about 2.6 million workers. The Baby Boomers, ages 55 and older, on the other hand, will have gained about 11.4

¹¹ Hagerty, J.R. (2015, January 7). The life of a \$140,000-a-year welder. *The Wall Street Journal*. Retrieved from <http://www.wsj.com/articles/the-140-000-a-year-welding-job-1420659586>

¹² Bureau of Labor Statistics. (2012, February 1). Economic News Release. Retrieved June 15, 2013 from <http://www.bls.gov/news.release/ecopro.nr0.htm> and <http://www.bls.gov/news.release/ecopro.t01.htm>.

million workers. There will be fewer jobs available for the newcomers, which will lead to more competition among potential employees. The bureau also claims occupations that typically need some type of postsecondary education for entry are projected to grow the fastest during the 2010-20 decade. Occupations classified as needing a master's degree are projected to grow by 21.7 percent. However, two-thirds of the 30 occupations projected to have the largest number of new jobs typically require less than a postsecondary education, no related work experience, and short- or moderate-term on-the-job training. The importance of middle school and high school students exploring vocational opportunities and formulating a plan to achieve employment as young adults is ever-growing.

Impact

Observations by the P2P team suggest desirable outcomes directly related to the event. First, students

What I liked about the P2P field trip was that I got to experience things that I didn't even know about.

~Jasmine Terry-Hawkins
George Co. Middle School 8th Grader

seem to increase their knowledge of what jobs and careers await them post-graduation. Many students report either discovering a vocation with which they feel a connection or validating an interest they had felt in the past. Secondly, the professionals facilitating the activities experience a renewed sense of pride in their work as they

interact with the students, while the students, whose career exploration to-date has been mostly restricted to a computer screen, appreciate the face-to-face time. Volunteer coordinator, Kenneth Jones, said, "I heard amazing feedback from the students that felt engaged by the experience, as well as the volunteers who were so impressed by the event that they were already talking about returning to volunteer next year." Thirdly, the P2P effort serves as a unifying force during the planning and execution phases as professionals from across public, private and nonprofit sectors and across county and state lines work together for the sake of the students. In 2015, researchers from the Dr. Maxine Harper Center for Educational Research and Evaluation (CERE) at the University of Mississippi began a study of short- and long-term outcomes and the impact of P2P on students, families, educators, employers and communities. As of February 11, 2016, the only study results completed were from the community volunteer survey, showing that almost 93 percent of the volunteers anticipate volunteering with P2P in the future, and 99 percent would recommend the experience to a friend¹³. According to Dr. Marie Barnard of CERE, early student survey results point to a highly satisfying and eye-opening experience for the students¹⁴.

You opened my eyes to try new things and explore a little.

~Amber Steinkamp
Hancock Co. Middle School 8th Grader

¹³ Dr. Maxine Harper Center for Educational Research & Evaluation. (2015). Pathways 2 Possibilities (P2P) career expo volunteer survey report. Oxford, MS: University of Mississippi.

¹⁴ Barnard, M. (2016, February 11). Personal interview.

Costs

The costs associated with Pathways2Possibilities: P2P include the facility, floor set-up, feeding the volunteers, educational materials, such as booklets, bags, and hard hats, and promotional materials. While local sponsors for each P2P event offer varying in-kind donations, \$250,000 is the budgeted amount for direct costs and payment for two independent contractors who coordinate the event. After March 2017, the CERE study will cost \$25,000 per year to track the 2015 cohort over another eight years.

Sustainability

The event's growth on the Gulf Coast over three years is notable. The number of employers participating in the Pathways has increased 61 percent. Consequently, the number of professionals

	2013	2014	2015
Employers	98	132	158
Professionals	500	600	800
Financial Donors	49	57	60

in each Pathway also increased 60 percent. The number of sponsors increased 22 percent.

However, growth in participants, either professionals or students, is not the definition of success. Employers and professional participants will grow as needed within each Pathway so that activities represent far-reaching job opportunities relevant to the local area while preserving a depth of quality in the students' experience. On the Coast, for example, all public and private schools with more than 20 students in the 8th grade, except St. Stanislaus, already send their students to P2P. Therefore, sustaining the quality of engagement, education, and empowerment that the event offers its young people is success.

Clearly, the biggest threat to sustainability for P2P is funding, which is often dictated by priorities in the public and private sectors.

Conclusion: P2P successfully reaches across public, private and nonprofit sectors to create a potential solution to a communal challenge affecting multiple quality-of-life indicators. Education and workforce development professionals must work in tandem in order to ensure a promising future for all. The issue is not unique to South Mississippi, or even to the Magnolia State. Students everywhere need to know what jobs are available, what the necessary training and education requirements are, and what the pay scales could be. Workforce development should start at least in the eighth grade and should involve an entire community.