NEW RESEARCH

LESS THAN 80% OF ECONOMICALLY DISADVANTAGED STUDENTS IN MAINE GRADUATE HIGH SCHOOL.¹

AND JUST 20% HAVE A COLLEGE DEGREE WITHIN SIX YEARS OF GRADUATION.²

OF MAINE STUDENTS WITH DISABILITIES DROP OUT OF HIGH SCHOOL.³

AND JUST 10% HAVE A COLLEGE DEGREE SIX YEARS LATER.⁴

LESS THAN 3% OF MAINE YOUTH IN THE FOSTER CARE SYSTEM GRADUATE COLLEGE.⁵

Since 1993, JMG has been dedicated to serving these and other Maine students with barriers to success. During the past year four research evaluations have been performed on the JMG program. This research, conducted by independent evaluators, provide new insights into the JMG model. The findings are both affirming and a call to action. They show definitively that the JMG model is working, but that more must be done to help disadvantaged students succeed in college and careers.

Today, JMG is reaffirming its commitment to Maine’s youth, particularly those who are economically disadvantaged, have a disability, or are in foster care. JMG is using this new research to refine its curriculum, programming, and organizational structure to better support the needs of these youth, and in doing so not only help them, but also address challenges to Maine’s workforce and economy. This memo provides a summary of the recent research and JMG’s organizational response.

¹ Compared to 95% of non-economically disadvantaged students; source: Maine Department of Education Data Warehouse; four-year graduation rate for the 2017 cohort
² Compared to 46% of non-economically disadvantaged students; source: National Student Clearinghouse Student Tracker for High Schools Demographic Report, 2017
³ Compared to 10% of non-disabled students; source: American Institutes for Research, May 2018
⁴ Compared to 43% of non-disabled students; source: National Student Clearinghouse Student Tracker for High Schools Demographic Report, 2017
Stepwise Data Research, an economic research firm located in Yarmouth, Maine, in partnership with the Maine Department of Labor (MDOL), analyzed wage records for 1,500 JMG students who graduated high school in 1998, 2009, or 2010. This research is an update to an earlier study of the class of 1998 and is the first longitudinal analysis for the classes of 2009 and 2010. The study matched JMG high school graduates with employer wage reports submitted to the MDOL between 2000 and 2017. These wage records were aggregated to create an average wage for each JMG class for each quarter from one year after high school graduation through the fourth quarter of 2017.

What did the research find?

JMG students in this study began with an average of six documented barriers to success. The most common barrier was related to the workforce, with three-quarters of students identified as lacking marketable occupational skills and/or having inadequate work experience. Despite these barriers, the research showed that JMG graduates experienced significant, consistent, and sustained wage increases after high school. Average wages for JMG students who graduated high school in 2010 doubled in the six years after their graduation (+107%). Average wages for 2009 graduates increased by 137% over six years. For both classes, this represented average annual wage increases of over 18% or $2,300 dollars per year, more than 10 times the rate of inflation. For the 1998 JMG graduates, their wages continued to rise steadily over this period of time to more than 2.75 times their starting place.

How is JMG responding to this research?

These results illustrate a rising path through the labor market that we would wish for every young adult, and they affirm a primary goal of the JMG program – that students have the career skills necessary not just to get a job, but to find careers with the opportunity for growth. However, the labor market continues to change rapidly; certainly, a student graduating in 2019 faces a much different occupational landscape than a 1998 graduate. In response, JMG is introducing a new “Employment Pathway Map” component to its educational strategies to help students explore and evaluate a variety of career choices. Through data, analytical tools, and relationships with business leaders, students will be able to identify in-demand careers and plan educational pathways to position them for success in today’s labor market.
American Institute for Research (AIR), a global research firm located in Washington D.C., evaluated the effect of JMG programming on high school graduation rates for Maine students with disabilities. The study was commissioned by the Maine Department of Labor (MDOL) as part of a federal grant it received for its vocational rehabilitation services. AIR used a dataset of more than 27,000 students prepared by the Maine Department of Education that identified students with disabilities who first enrolled in high school between 2005 and 2013 and followed them during their four years of high school.

**What did the research find?**

AIR used a sophisticated statistical method called the Local Average Treatment Effect to match JMG students with non-JMG students on a multitude of socio-economic and demographic variables. The matched dataset allowed researchers to compare graduation rates between JMG and non-JMG students with similar income levels, race, geographic location, and school characteristics. The results showed that students with a disability who enroll in JMG are 17 percentage points more likely to graduate high school than their peers with disabilities not enrolled in JMG. These results were statistically significant at the 99% level.

![Students with Disabilities](image.png)

**How is JMG responding to this research?**

During the past several years, JMG has enhanced its capacity to support students with disabilities. As part of the federal grant, JMG expanded its partnership with the Vocational Rehabilitation staff within the MDOL. In addition, every JMG Specialist has been trained through the Association of Community Rehabilitation Educators (ACRE). ACRE training is a nationally recognized training curriculum for working with disabled students with a special focus on employment for people with disabilities.
Stepwise Data Research analyzed data from three cohorts of students who enrolled in one of ten JMG College Success programs between 2015-2017. These students were former JMG high school students, youth who had been in the foster care system, or students who had recently received their GED or HiSET diploma.

The research focused on four student outcomes:

- Retention at the college campus where they started
- Persistence in college, although not necessarily at their initial college
- Graduation from college (for students in one- or two-year degree programs)
- Full-time work for those students who withdrew from college

**What did the research find?**

Two-thirds of students in the JMG College Success program who enrolled in college between 2015-17 are still in college today, and 85% are still in college or working full-time. Sixty-five students (11%) graduated. For the most recent cohort of students who began college in the fall of 2017, 68% percent were still enrolled at the same campus where they started (defined as “retained”) or had graduated one-year later. 75% were still enrolled in college, although not necessarily at the campus where they started (defined as “persisted”), or had graduated. And 90% experienced a positive outcome, defined as either enrolled in college, graduated from college, or working full-time.

<table>
<thead>
<tr>
<th>Year</th>
<th>Roster</th>
<th>1st Year Retention / Graduation</th>
<th>Retention / Graduation, Fall 2018</th>
<th>Persistence / Graduation, Fall 2018</th>
<th>Positive Outcomes, Fall 2018</th>
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</thead>
<tbody>
<tr>
<td>2015-16</td>
<td>180</td>
<td>71%</td>
<td>53%</td>
<td>64%</td>
<td>88%</td>
</tr>
<tr>
<td>2016-17</td>
<td>182</td>
<td>60%</td>
<td>49%</td>
<td>59%</td>
<td>76%</td>
</tr>
<tr>
<td>2017-18</td>
<td>229</td>
<td>68%</td>
<td>68%</td>
<td>75%</td>
<td>90%</td>
</tr>
<tr>
<td>Total</td>
<td>591</td>
<td>66%</td>
<td>58%</td>
<td>67%</td>
<td>85%</td>
</tr>
</tbody>
</table>
How is JMG responding to this research?

Several years ago, in 2010-2012, internal research indicated that JMG students were not going to or graduating from college in sufficient numbers. That research provided the impetus to change the JMG program to one more focused on post-secondary aspirations and attainment, and was the primary motivation behind starting the JMG College Success program. The research today shows that those programmatic changes are working, but that there is still much more work to be done to help students complete the post-secondary option that is right for them (which may not be a traditional 2- or 4-year degree). In addition to Employment Pathway Maps, JMG is taking three significant steps to enhance its support of students’ post-secondary goals.

1. JMG recently hired four “roving” College Success Specialists, called Pathway Navigators. These Navigators are not connected to a particular campus; instead they support and reengage students who withdraw from a JMG campus-based program and help reconnect students to post-secondary options, including credentialing programs.

2. JMG is investing significant resources towards college “bridging.” College persistence won’t be successful if it starts when a student first sets foot on campus. JMG is developing and implementing a “continuum of care” model for college success that starts in high school (or earlier) and continues through college success.

3. JMG also commissioned a final research project, “Predictors of College Success for JMG Students”, to better understand the predictors of student success in order to continually improve its college success model.

In addition, JMG has significantly expanded its commitment to economically disadvantaged youth and youth in foster care. Nearly 70% of JMG students are economically disadvantaged. JMG and Maine’s Department of Health and Human Services (DHHS) have formed a close collaboration to ensure foster care youth have an opportunity to enroll in JMG programs statewide. DHHS caseworkers and JMG Specialists work together to proactively engage and invite youth in care to participate in JMG. Currently, JMG is serving more than 100 foster care youth in its continuum of support – including middle school, high school, and the JMG College Success program. And all JMG Specialists have received Adverse Childhood Experiences (ACES) professional development.

For almost 15 years, JMG has partnered with the DHHS to provide financial literacy and capacity building for youth in care. Through the matched savings program, Opportunity Passport™, youth can receive up to $1000 in matched funds annually to support critical expenses related to transitioning into adulthood and post-secondary education. More than 600 youth in care have participated in Opportunity Passport™, and total funds saved and match is nearly $1.5 million.
This research study was not a program evaluation, per sé, but instead was designed to give JMG insights about their students with which to improve their college success programming. Stepwise Data Research analyzed the college-going and college-completing rates for students from three JMG graduating classes: 1998, 2009, and 2010. These college success rates were analyzed with data from the National Student Clearinghouse (NSC), which contains semester-by-semester enrollment and graduation records for 97% of U.S. Title IV, degree-granting institutions. The NSC outcome data was then matched with student-level socio-economic data from JMG, and several logistical regression statistical models were formed to identify the most important student characteristics predicting both college-going and college-completing.

**What did the research find?**

The most important characteristics that predict a JMG student will earn a college degree are academic performance in high school, the presence of a special-education disability, and the education level of his/her parents. A JMG student is two times more likely to earn a college degree if his/her mother attended college – even if the mother did not graduate – and 1.5 times more likely to earn a degree if their father attended college. A JMG student with adequate or better academic performance in high school is four times more likely to graduate college compared to a student with low academic performance. And a JMG student without a special-education certification is almost three times as likely to graduate compared to a student with a certification.

However, socioeconomic factors affected going to college differently than completing college. Some examples: gender predicts college-going, with young women 1.6 times more likely to go to college than young men, but once enrolled JMG women and men have no difference in completion rates. Excessive absences in high school do not predict college-going but do predict college completion; once enrolled in college, a student with a history of absences in high school is 1.5 times less likely to get a degree. And a student convicted of a crime in high school is 3.4 times less likely to go to college, but once enrolled, no less likely to earn a degree.

**How is JMG responding to this research?**

Like the research done in 2010-2012 that motivated the creation of the JMG College Success program, this research will have significant effects on the JMG model and program. It affirms the critical need for coordination between JMG high schools and college programs. It also provides new data with which to flag students early for extra or different wrap-around support services. As one example, students with excessive absences in high school who are statistically less likely to complete college can be quickly identified on campus to provide additional supports to get them through.

In Summary, these research findings are both affirming and a call to action for new strategies to support disadvantaged Maine students. Data evaluation and research have been and will continue to be central to JMG’s mission and program. These four research projects give JMG new, evidence-based insights to change and improve its programming, curriculum, and organizational structure to help the next generation of JMG students find success after high school.