

# PATHWAYS 2 POSSIBILITIES CAREER EXPO, ANNUAL EVALUATION REPORT: MISSISSIPPI



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Annual Evaluation Report

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# EXECUTIVE SUMMARY

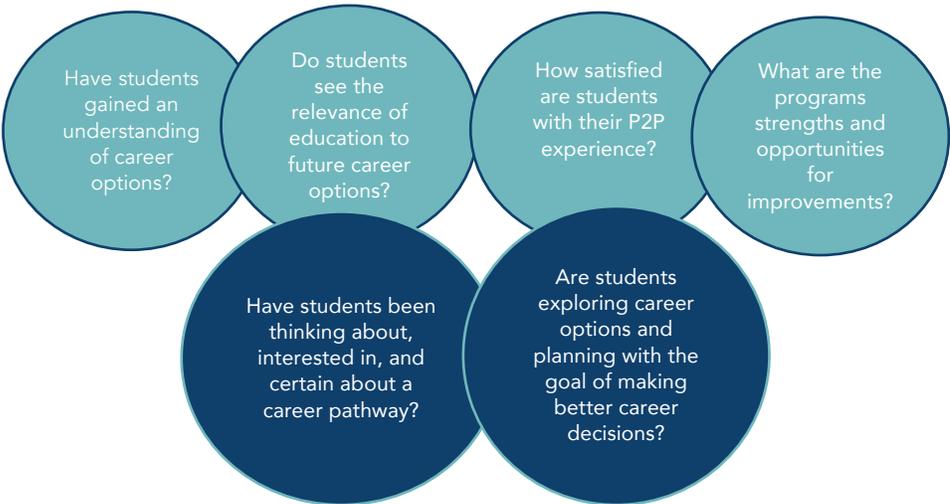
This document provides an overview of findings from the Pathways 2 Possibilities (P2P) Career Expos that were held on the Mississippi Coast (November 2018) and in the Delta (February 2019). It also provides an overview of findings from longitudinal surveys of 9<sup>th</sup> grade and graduating senior cohorts who attended previous Expos. These surveys were designed to track the longer-term effects of Career Expo attendance.

Data described in this report were collected and analyzed by the Center for Evaluation Research (CERE) at the University of Mississippi.

## BACKGROUND

The P2P program is a two-day event that seeks to engage 8<sup>th</sup>-grade students in thinking about the future, while exposing them to a wide variety of career pathways and allowing them to explore these opportunities through interactive exhibits with career professionals. The program informs students about the educational requirements for varying careers in each pathway, along with expected earnings and work conditions. The overarching goal is to encourage Career Expo attendees to look to the future and start career planning early, armed with knowledge about the academic choices that will support their career goals.

The P2P program has requested that **four questions** be explored as part of the Career Expo evaluation, along with **two additional questions** focused on 9<sup>th</sup> graders who attended the Career Expo last year, and a group of graduating seniors who attended the Career Expo when they were in 8<sup>th</sup> grade:



With these questions in mind, CERE selected a series of validated scales during the first year of this evaluation. These surveys capture data on the following dimensions:

1. Overall student outlook on future career pathways,
2. Perceived education needs,
3. Post-high school plans, and
4. A set of validated scales that capture underlying beliefs about career planning. These scales focus on factors that prior research shows are influential in shaping young people’s career planning practices. These include:
  - a. Career decision making factors (i.e. beliefs about the importance of career information and the need for self-knowledge),
  - b. Career outcome expectations (i.e. education performance expectations, and career decision expectations), and
  - c. Planning intentions (i.e. planning behaviors and intentions).

CERE also developed a short set of satisfaction items designed to capture information about students’ experiences at the P2P Career Expo. In particular, students were asked to gauge how influential attending the Career Expo was in helping them finalize post-high school graduation plans for education and career pathways.

## FINDINGS

### *Eighth Graders*

Overall, findings provide early evidence the Mississippi P2P Career Expo helped prompt 8<sup>th</sup> graders consider future career pathways, while also supporting understanding about post-high school training requirements. With that said, a number of effects observed on the Coast were not seen in the Delta this year, suggesting it may be valuable to delve more deeply into students’ experiences in the Delta (see Table 1).

*Table 1. High-level summary of findings*  
**Differences in outcomes at post-Expo when comparing attendees to non-attendees.**

Outcome domain	Coast	Delta
1. Thinking about Career Pathways	✓	■
2. Perceived education needs	✓	✓
3. Underlying beliefs about career planning	■	■
4. Career outcome expectations	■	■



Statistically significant difference between Expo attendees and those who did not attend.



No difference observed at this time.

## Outlook on Future Career Pathways

Overall, the 2018-2019 Mississippi P2P Career Expos appeared to influence some 8th graders' thinking about potential career pathways.

- **Coast:** At the post-test, students who attended the Coast Career Expo were significantly more likely ( $p < 0.01$ ) to have thought about a future career path (76%) than those who did not attend (65%). A higher proportion of attendees were also sure they knew what they wanted to do for a career (70%) when compared to those who did not attend (60%,  $p = 0.01$ ).
- **Delta:** Among students who attended the Delta Career Expo, there were no statistically significant differences between students who attended the Career Expo (84%) and those who did not attend (80%) in terms of the number who had thought about a career path ( $p = 0.01$ ). Having said that the proportion of students who had thought about a career path was high across both groups. Additionally, there was also no statistically significant difference in students' level of certainty about career choices when comparing Delta students who attended the Career Expo (78%) and those who did not (85%,  $p = 0.02$ ).

## Relevance of Education to Future Career Options

Students who attended the Mississippi P2P Career Expos also reported differences in their future education plans, when compared to those who did not attend.

- **Coast:** A greater proportion of students who attended the Coast Career Expo said they were likely to obtain a college degree after graduating (58%) when compared to those who did not attend the event (54%;  $p < 0.001$ ). Fewer attendees also said they were undecided about plans after graduation (22%) when compared to those who did not attend, although this difference was not statistically significant (23%;  $p = 0.30$ ).
- **Delta:** Similarly, a greater proportion of students who attended the Delta Career Expo said they were likely to obtain a college degree after graduating (55%) when compared to those who did not attend the event (45%;  $p < 0.01$ ). Again, fewer attendees said they were undecided about plans after graduation (14%) when compared to those who did not attend (22%), however here to these differences were not statistically significant ( $p = 0.13$ ).
- Across both the Coast and Delta Expos, there appeared to be small shifts in student understanding about the need for specific college degrees after attending the P2P Career Expo.

For example, more students realized they needed a college degree, and more realized they needed a graduate degree after attending the Coast and Delta Career Expos.

### Beliefs about Career Planning

- **Coast:** When comparing those who did and did not attend the Coast Expo, there did not appear to be significant differences in students' underlying beliefs about (1) the need for career information, (2) the need for self-knowledge, (3) career decision-making outcome expectancies, (4) planning intentions, and (5) the connection between educational performance and career outcomes based on Expo attendance.
- **Delta:** Similarly, there were no significant differences in Delta students' underlying beliefs about (1) the need for career information, (2) the need for self-knowledge, (3) career decision-making outcome expectancies, (4) planning intentions, and (5) the connection between educational performance and career outcomes.
- These two findings are not particularly surprising given that it is challenging to change underlying beliefs. It is also understandable given that students can only spend a short amount of time at each event and only attend one time in the 8<sup>th</sup> grade. It may be that longer-term, repeated exposure, and more sustained interventions implemented in partnership with participating schools are required if P2P seeks to shape and influence these underlying beliefs.

### Student Satisfaction with the Mississippi Coast and Delta P2P Career Expo Experiences

Although satisfaction with the Career Expos was generally high, students who attended the Coast Expo reported higher levels of satisfaction than students who attended the Delta Career Expo.

- Overall, 85% of Coast Career Expo attendees said they enjoyed the event, 84% agreed they enjoyed interacting with exhibitors, 68% agreed they found a pathway of interest, and 58% found a pathway they wanted to pursue. Among the 13% who were ambivalent (neutral) or did not enjoy the event, approximately 61% were male and 54% were White.
- Overall, 70% said they enjoyed the event, 70% agreed they enjoyed interacting with exhibitors, 58% agreed they found a pathway of interest, and 54% found a pathway they wanted to pursue. Among the 30% who were ambivalent (neutral) or did not enjoy the event, approximately 58% were male and 49% were Black/Multiracial.
- Interestingly, there were also similar differences in the proportions of students who were able to engage in a hands-on experience. There were 86% of Coast Career Expo attendees who tried a hands-on experience with at least one pathway compared to 71% of Delta Career Expo attendees.

- Trying at least one hands-on activity was significantly associated with satisfaction at both the Coast ( $p < 0.0001$ ; 75%) and Delta ( $p < 0.0001$ ; 56%) Career Expos with students having at least one hands-on experience reporting greater satisfaction.

### *Ninth Graders*

- Overall, there were few significant differences between 9<sup>th</sup> grader responses to the online survey, and their responses in the previous year. However, this may simply be due to the small number of students who completed both the 8<sup>th</sup> grade and the 9<sup>th</sup> grade survey ( $n=25$ ). For this reason, these 9<sup>th</sup> grade results should be interpreted with caution.
- Of particular note, however, is the finding that career planning intentions (e.g. students' intentions to talk to counselors about their career options, or to spend time learning about career options) were lower among students in 9<sup>th</sup> grade (mean=3.81) than they were immediately following the 8<sup>th</sup> grade Career Expo (mean=4.02). Although these differences were not statistically significant, the data nonetheless suggest a dip in career planning intentions from 8<sup>th</sup> to 9<sup>th</sup> grade among this group of students.
- Similarly, there was a slight decrease in participating students' interest in thinking about a future career pathway in the 9<sup>th</sup> grade (80%) compared to the year before (84%).
- Interestingly, there was also a notable decrease in students' beliefs about the importance of understanding *what are my personal values?* from 8<sup>th</sup> grade (mean=4.5) to 9<sup>th</sup> grade (mean=4).
- Students' beliefs about the importance of education—and the likelihood that working hard at school would lead to positive outcomes—were also lower in the 9<sup>th</sup> grade (mean=3.84) when compared to immediately after the Career Expo (mean=4.21).
- Moreover, students' beliefs about the relationship between career planning and positive career outcomes also decreased from the 8<sup>th</sup> grade, immediately after the Career Expo (mean=4.3) to 9<sup>th</sup> grade (mean=4.0).
- Taken together, the 9<sup>th</sup> grade survey data provide tentative evidence to suggest that students experience a 'dip' in career planning intentions and beliefs when progressing from the 8<sup>th</sup> grade to the 9<sup>th</sup> grade.
- Interestingly, 9<sup>th</sup> grade career decision outcome expectancies—a student's belief that engaging in career planning activities would lead to positive career outcomes—predicted 9<sup>th</sup> grade student career planning intentions over and above other factors explored in this survey. This suggests that activities designed to influence students' beliefs about career decision outcome expectancies may be required if programs are to shift student career planning in the longer-term (see Figure below).



### *Graduating Seniors*

- Seniors who attended a P2P Career Expo in the 8<sup>th</sup> grade were more likely to have plans to attend college after high school graduation (80%) than seniors who did not attend/were unsure (72%).
- However, seniors who attended the Career Expo were also less sure (78%) about their future career choice than students who did not attend or did not remember attending (94%).
- Seventy percent said the Career Expo event was influential on their post-high school graduation plans with 86% agreeing that they enjoyed the event.
- One particularly interesting finding from the senior survey was that 41% of graduating seniors said they had not received any type of career planning support from their school.
- With that said, there were no statistically significant associations between receiving career planning support at school and seniors who knew what they wanted to do when older.

### *Strengths and Opportunities for Improvement*

The P2P Career Expo appears to be a positive experience for the majority of those who attend. Students who attended the Mississippi Coast and Delta P2P Career Expos felt the events helped to shape their awareness of, and thinking about, career opportunities, pathways, and required education to achieve future career goals. Students from both events also agreed in their enjoyment of hands-on activities, opportunities to speak with career professionals, and interaction with student peers.

Comparative data also show that Coast students who attend are more likely to have begun thinking about career pathways and used the P2P Career Expo to refine their understanding about the educational requirements for their intended careers. In this way, the P2P Career Expos in Mississippi appear to represent a positive starting point for students' thinking about career opportunities. This is consistent with earlier findings about P2P Career Expos held elsewhere in addition to those findings from the 2019 South Carolina Career Expo.

## RECOMMENDATIONS

- Acknowledging that the P2P Career Expo at the Coast and Delta locations did not appear to shift some students' underlying beliefs about career planning, it may be that there is a need for a partnership with schools and school counselors to provide more career planning support to graduating seniors throughout high school; however, this is likely out of the current scope of the P2P goals and objectives.
- While the vast majority of students enjoyed their time at the P2P Career Expo, the survey data suggest that a small group of students (est. 15% from the Coast event and 30% from the Delta event) did not rate the event highly. With this in mind, it may be useful for P2P to engage further with these groups to better understand their experience(s) and the factors that might further engage Delta students.
- Potential suggestions for adaptation emerging from the survey data include broadening the pathways present to include careers in trucking, art, and more law and healthcare options.
- Additionally, an interesting finding from this study is that there are a small number of career pathways for which there was little to no interest among participating students (e.g. Finance, Energy, and Government/Public Administration from the Coast and Aerospace, Agriculture Food/Natural Resources, Energy, and Transportation/Distribution/Logistics from the Delta). It may be valuable to map student interests to anticipated job growth in Career Expo locations so that P2P can assess whether some pathways—specifically those with higher expected jobs growth over the coming years—might benefit from additional support when developing exhibits to ensure they attract an appropriate number of students.
- It is recommended that future rounds of data collection include mechanisms to identify individual students so that individual-level change from pre to post Career Expo can be captured in more detail.

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# BACKGROUND & METHODS

## Summary

- The Pathways2Possibilities (P2P) program seeks to engage 8th-grade students with the goal of exposing them to a wide variety of career pathways.
- The Career Expo allows students to explore pathways through interactive exhibits with professionals in the fields guiding this exploration and sharing their knowledge with the students at a 'mock' career expo.
- Data are collected via online surveys among 8<sup>th</sup> graders pre and post the Coast and Delta Career Expos to evaluate the following questions:
  1. Have students gained an understanding of career options?
  2. Do students see the relevance of education to future career options?
  3. How satisfied are students with their P2P experience?
  4. What are the programs strengths and opportunities for improvements?
- Data were also collected via online surveys from 9<sup>th</sup> graders who attended a Career Expo in the 8<sup>th</sup> grade to evaluate the following questions:
  1. Have students been thinking about, interested in, and certain about a career pathway?
  2. Do students see the relevance of education to future career options?
  3. Are students exploring career options and planning with the goal of making better career decisions?
- Data are collected via online surveys among graduating seniors to evaluate the following questions:
  1. Have students been thinking about future career plans?
  2. Do students see the relevance of education to future career options?
  3. Are students exploring career options and planning with the goal of making better career decisions?
- Post-test data were also collected from students who did not attend the event, allowing the evaluation team to compare post-event outcomes among those who did and did not attend the Career Expo.
- Data from 9<sup>th</sup> grade students are included to assess the longer-term effects of attending the event during their 8<sup>th</sup> grade school year. Comparisons are made using matched data collected during both school years (i.e., after the 8<sup>th</sup> grade event and during their 9<sup>th</sup> grade school year).
- Data are also included from graduating seniors who completed an online survey at the end of their senior year. These students included seniors who attended a P2P Career Expo in the 8<sup>th</sup> grade as well as a small number of seniors who did not attend an event or

could not remember attending. Those who did not attend/could not remember were used as a comparison group.

The P2P Career Expo is an interactive experience designed for all 8th-grade students in public and private schools. The event exposes students to a wide variety of careers aligned with the career pathways set forth by the Mississippi Department of Education. These were selected by the P2P administrative staff and are applied across all sites for consistency, regardless of location. The Career Expo seeks to engage the entire community in stimulating career consideration and planning in 8th graders. This workforce development initiative engages public, private, and non-profit partners to facilitate student-focused career exploration at an opportune point in a student's academic career, as 8th grade students are on the cusp of making decisions regarding high school academics. Exploration and exposure to career opportunities is an important part of students' development as they move toward productive and enjoyable careers.

The Career Expo provides an environment for students to have one-on-one and hands-on experience with multiple career pathways through individuals in the local Mississippi community that are connected to these pathways (see Table 1).

*Table 1. Career Pathways*  
**Career pathways identified by students pre and post-Career Expo attendance.**

Career Pathways	
Aerospace	Government and Public Administration
Agriculture, Food and Natural Resources	Health Science
Architecture and Construction	Hospitality and Tourism
Arts, AV Technology and Communications	Human Services
Business Management and Administration	Information Technology
Education and Training	Law, Public Safety, Corrections and Security
Energy	Manufacturing
Engineering and Polymer Science	Marketing
Finance	Transportation, Distribution and Logistics
Marine Science <sup>a</sup>	

<sup>a</sup> The Marine Science career pathway was included for those students who participated in the P2P Career Event on the Mississippi Coast.

**METHODS**

This evaluation utilized a mixed-methods, multi-component design. On the quantitative side, the evaluation team used pre- and post-surveys to capture change in student beliefs and behaviors over time. Post-surveys were also distributed to students who both did and did not

attend the Career Expo, allowing us to examine differences between these two groups at the end of the event. Note that individual students could not be matched from pre-test to post-test, so a key limitation to this study is the fact that we cannot determine whether pre and post responses represent the same, or slightly different populations of students.

Two additional cohorts were included in this report to measure change over time and serve as quasi-longitudinal analyses. A cohort of 9<sup>th</sup> grade students who attended a Career Expo in the 8<sup>th</sup> grade in addition to graduating seniors were incorporated in quantitative analyses to measure change in behaviors and thinking about future career pathways, relevance of education, and planning efforts with the outcome of interest being better career decisions. Data collected among the 9<sup>th</sup> grade cohort were also matched to their 8<sup>th</sup> grade post-event data to better capture individual change.

### Survey Instruments

Online surveys were designed to capture data on the following dimensions:

1. Overall student outlook on future **career pathways**,
2. Perceived **education needs**,
3. Post-high school **plans**, and
4. A set of validated scales that capture underlying **beliefs** about career planning.

These scales focus on factors that prior research shows are influential in shaping young people's career planning practices. These include:

- a. Career decision making factors (i.e. beliefs about the importance of career information and the need for self-knowledge),
- b. Career outcome expectations (i.e. education performance expectations, and career decision expectations), and
- c. Career planning behaviors (see Figure below).



Career decision factors were measured with the Career Factors Inventory (Chartrand, Robbins, Morrill, & Boggs, 1990). Outcome expectations related to career choices were measured utilizing scales developed by Betz and Vuyten (1997). Intentions related to career planning

behaviors were measured with a scale which was modeled on one developed originally by Lent et al. (1994).

Given that **satisfaction** with an activity is also likely to have an impact on the effectiveness of educational activity, items related to satisfaction with the P2P expo were also created. CERE developed a short set of satisfaction items designed to capture information about students' experiences at the P2P Career Expo. Finally, two free response items were included on the post-expo survey to collect student feedback on what they liked best about the Career Expo and what they thought could be improved.

Student survey and data collection protocols were developed and approved by the University of Mississippi Institutional Review Board (IRB), and included the pre and post-expo survey. A link to an electronic survey created in Qualtrics was distributed with a cover letter to each school contact that was provided by P2P personnel to CERE researchers. Pre and post-expo surveys were completed online through the Qualtrics platform and all data collection, maintenance, and analyses were conducted by CERE staff. As part of the post-expo survey students were also asked to indicate if they were interested in participating in a follow-up longitudinal tracking survey. A detailed explanation of survey instruments and measurement characteristics are in Appendix A.

## MISSISSIPPI CAREER EXPO COHORTS

In this report, CERE analyzed data collected from two 2018-2019 Career Expo events in Mississippi that included 3,717 students from the Coast and 852 students from the Delta according to pre-event surveys. Two hundred and ninety students from the Coast and 27 students from the Delta did not complete the pre-event survey and so were removed during cleaning. Two thousand three hundred and twenty-five (2,325) Coast students began post-event surveys but 200 of these did not complete and so also were not included in the analyses. Two hundred fifty-two (252) Delta students began post-event surveys and twenty-five did not complete and were subsequently not included in the final cohort. Final analyses were run on final Coast cohorts of 3,422 pre-surveys and 2,125 post-surveys and final Delta cohorts of 825 pre-surveys and 227 post-surveys (see Table 2). Among students who completed the post-tests, 94% attended the Coast event, while 6% did not and 80% attended the Delta event, while 20% did not attend. A more detailed description of the Coast and Delta cohorts are provided in Appendix B.

Table 2. Student Survey Maintenance and the Mississippi P2P Career Expo Attendance  
**Coast pre-expo cohort: n=3,422 students; final post-expo cohort: n=2,125 students.**  
**Delta pre-expo cohort: n=825 students; final post-expo cohort: n=227 students.**

Action Taken	Pre-expo	Post-expo
	Mississippi Coast Cohort	
Attempted surveys	3,717	2,325
Observations removed	295	200
Final analysis sample	3,422	2,125
Mississippi Delta Cohort		
Attempted surveys	852	252
Observations removed	27	25
Final analysis sample	825	227

**MISSISSIPPI 9<sup>th</sup> GRADE FOLLOW-UP COHORT**

Mississippi 9<sup>th</sup> graders who participated in a Career Expo during the 8<sup>th</sup> grade were asked to complete a follow-up survey, and findings were included in this reporting cycle. Fifty-eight students attempted the survey in the 9<sup>th</sup> grade with n=25 completing the survey while also being matched back to their 8<sup>th</sup> grade data that they completed after attending a Career Expo (see Table 3).

Table 3. Student Survey Maintenance and the Mississippi 9<sup>th</sup> Grade Follow-up  
**Mississippi 9<sup>th</sup> grade final cohort: n=25 students.**

Action Taken	Mississippi 9 <sup>th</sup> Grade Cohort
Attempted surveys	58
Observations removed	27
Final analysis sample, matched to 8 <sup>th</sup> grade data	25

**MISSISSIPPI SENIOR SURVEY COHORT**

Mississippi seniors, including students who participated in a Career Expo in the 8<sup>th</sup> grade and those who did not/could not remember attending, had the opportunity to complete a follow-up survey during this report cycle. Students who did not attend/could not remember attending were included in analyses and served as a comparison group for graduating seniors who remembered participating in a Career Expo during the 8<sup>th</sup> grade. One hundred seventy students attempted the survey with n=68 completions and comprising the final cohort included in this report for analyses (see Table 4).

Table 4. Student Survey Maintenance and the Mississippi Senior Survey  
**Mississippi senior survey final cohort: n=68 students.**

Action Taken	Mississippi Senior Survey Cohort
Attempted surveys	170
Observations removed	102
Final analysis sample	68

# FINDINGS

## HAVE STUDENTS GAINED AN UNDERSTANDING OF CAREER OPTIONS?

**Summary**

- Overall, findings provide early evidence the P2P Career Expo shaped participants thinking about future career pathways.

**Coast**

- Students who attended the Coast Career Expo were more likely to have thought about a future career pathway (76%) compared to students who did not attend (65%).
- Students who attended the Coast Expo were also more certain about their career choice(s) (70%) compared to students who did not attend (60%).

**Delta**

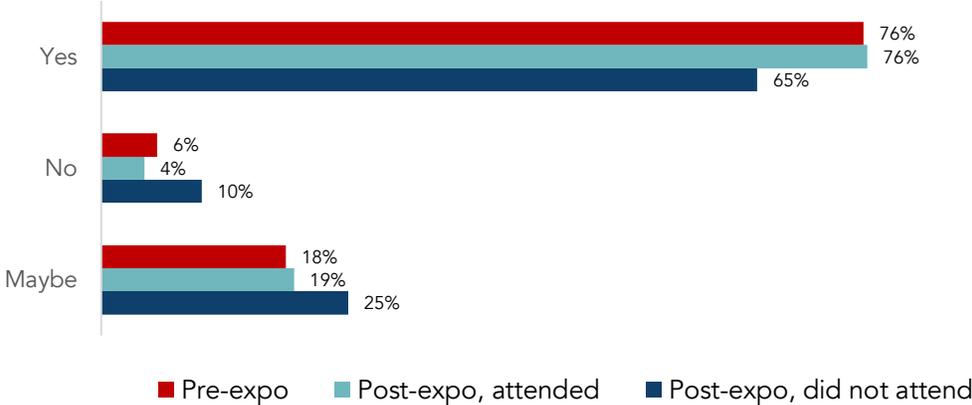
- There were small differences among Delta students who did/did not attend the Career Expo with respect to thinking about future career pathways, although these differences were not statistically significant. Eighty-four (84%) of attendees said they had thought about a future career path, as compared to 80% of those who did not attend.
- Interestingly, students who did not attend the Expo were more certain about their career choices (85%) when compared to students who did attend (78%).

### *Students' Overall Outlook on Future Career Pathways*

**Have you thought about a career pathway for yourself?** Overall, findings provide early evidence the P2P Career Expos on the Coast in the Delta influenced participants thinking about future career pathways. As part of the survey completed by students before and after the Career Expo, Mississippi students were asked whether they had thought about a career pathway for the future.

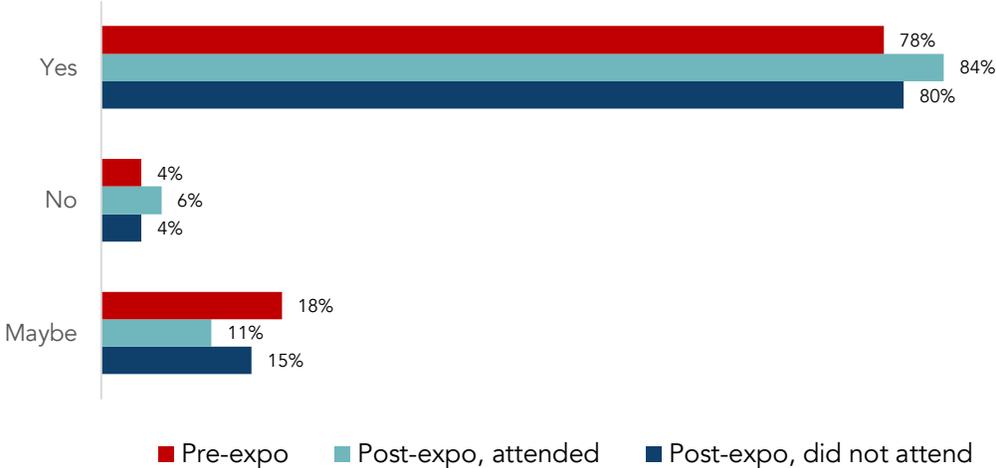
Among Coast students, prior to attending the Career Expo, 76% of students said they had thought about a career pathway. After the event, 76% of those who attended the Career Expo said they had thought about a career pathway, whereas only 65% of those who did not attend reported thinking about a career pathway ( $p < 0.01$ ; see Figure 1).

*Figure 1. Mississippi Coast: Have You Thought About a Career Pathway for Yourself?*  
 At the post-test, students who attended the Career Expo were statistically significant more likely to have thought about a future career pathway (76%) than students who did not attend (65%;  $p < 0.01$ ).



Among Delta students, prior to attending the Career Expo, 78% of students said they had thought about a career pathway. After the event, 84% of those who attended the Career Expo said they had thought about a career pathway, whereas only 80% of those who did not attend reported thinking about a career pathway ( $p < 0.1$ ; see Figure 2).

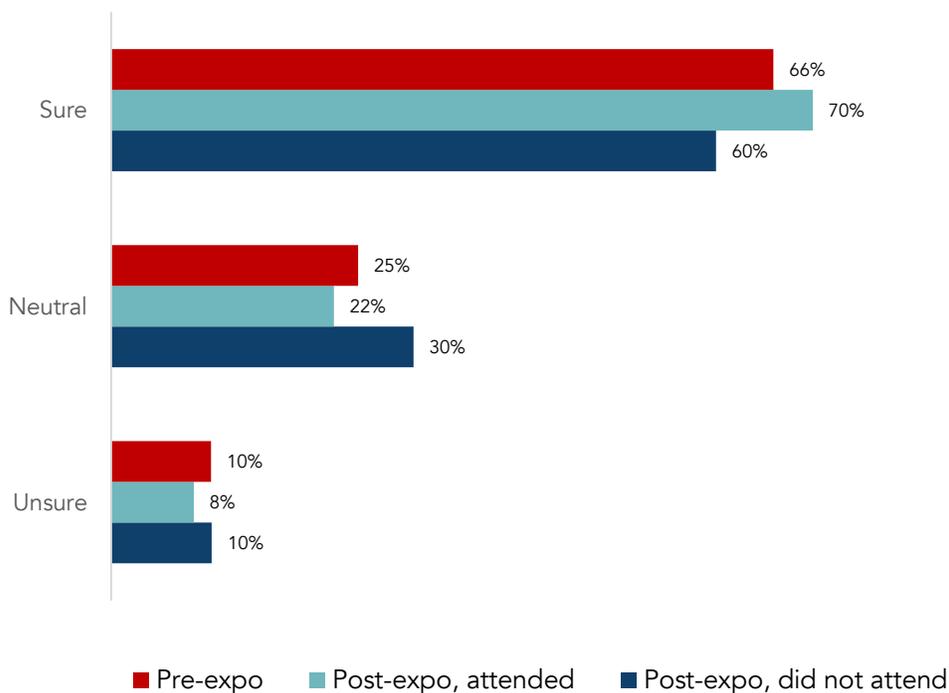
*Figure 2. Mississippi Delta: Have You Thought About a Career Pathway for Yourself?*  
 At the post-test, more students who attended the Career Expo had thought about a future career pathway (84%) than students who did not attend (80%), however these differences were not statistically significant ( $p = 0.1$ ).



**How sure are you that you know what you want to do for a career?** When Coast students were asked *how sure are you that you know what you want to do for a career* before and after the Career Expo, 66% of students were sure of a future career path before attending compared to 70% after the Career Expo who attended the event. By comparison, only 60% of Coast students who did not attend were sure of what they wanted to do for a career ( $p=0.01$ ; see Figure 3).

Figure 3. Mississippi Coast: How Sure Are You That You Know What You Want to do for a Career?

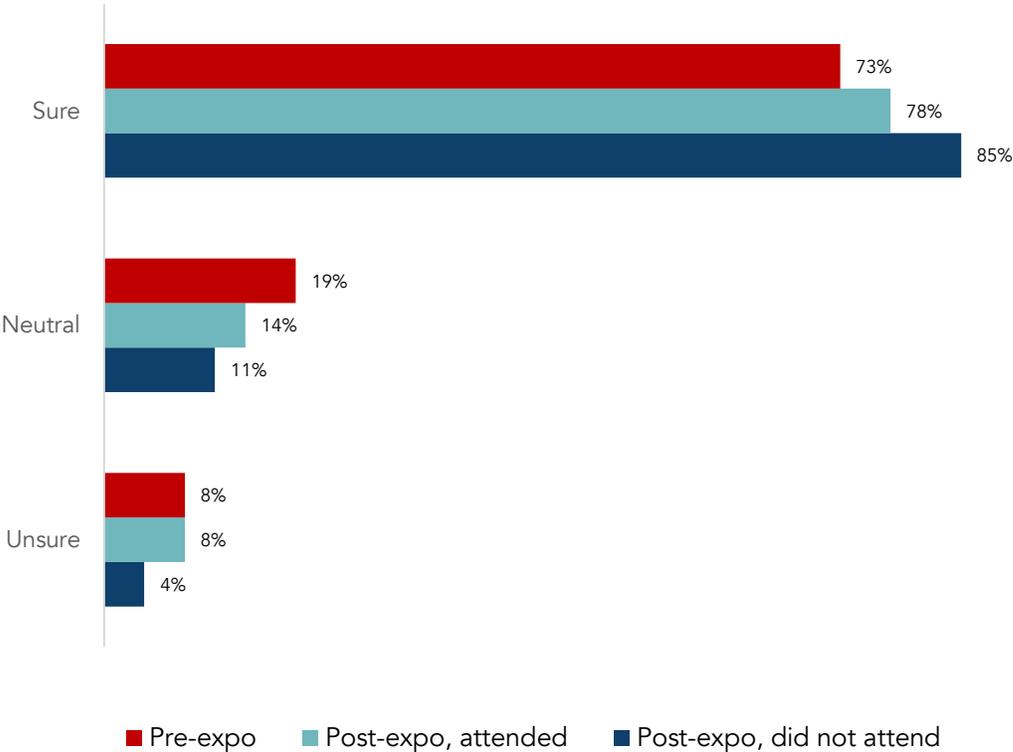
After the Career Expo, students who attended were sure (70%) of their future career choice compared students who did not attend (60%;  $p=0.01$ ).



When Delta students were asked *how sure are you that you know what you want to do for a career* before and after the Career Expo, 73% of students said they were sure about their future career path before attending the Career Expo compared to 78% of attendees after they attended the Career Expo. By comparison, the proportion of students who did not attend the Delta event and were sure about their future career paths was higher at the post-test (85%), although these differences too were not statistically significant. ( $p=0.2$ ; see Figure 4).

Figure 4. Mississippi Delta: How Sure Are You That You Know What You Want to do for a Career?

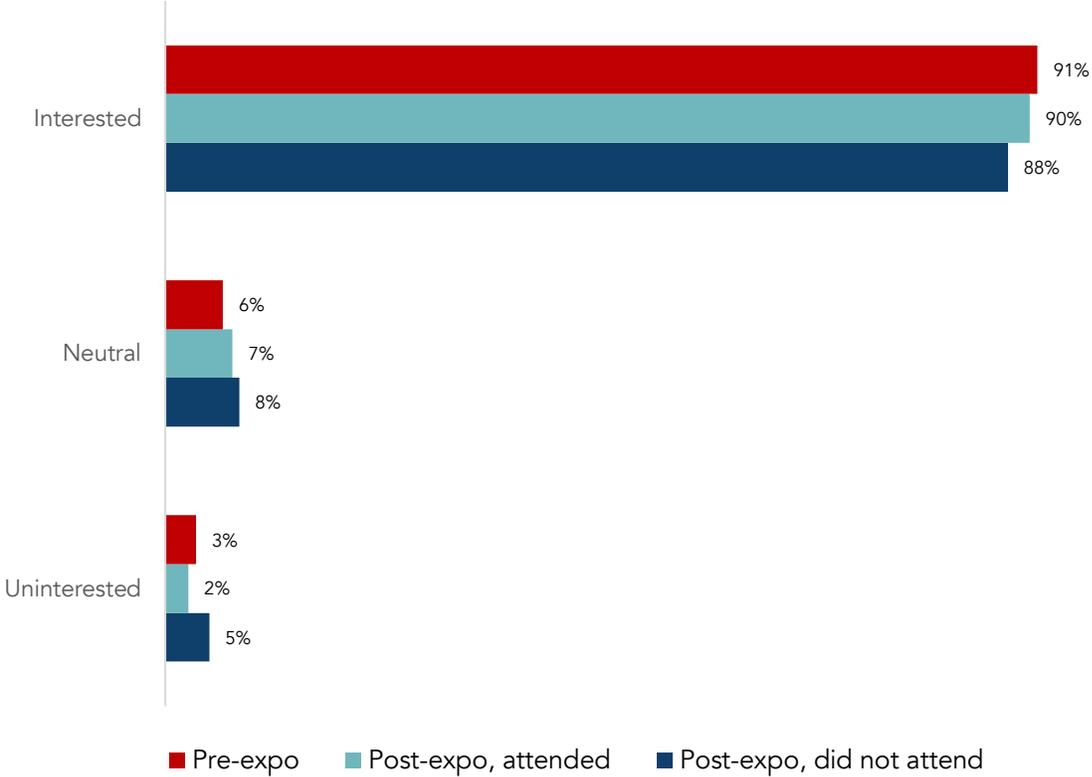
After the Career Expo, students who attended were less sure (78%) of their future career choice compared to students who did not attend (85%). There were no statistically significant differences ( $p=0.2$ ) between those who did and did not attend the Career Expo suggesting there may be other reasons for these pre/post differences.



**How interested are you in thinking about a career pathway for yourself?** When asked *how interested are you in thinking about a career pathway for yourself*, there was little variability across the different groups among Coast students. Most students said they were interested in thinking about a career path both before (91%) and after the survey (90% among attendees, and 88% among non-attendees). Likewise, when comparing those who did and did not attend the Coast Career Expo there were very small differences in the proportions of students who said they were *neutral* in their thinking about career pathways: a (slightly) higher proportion of students who did not attend said they were neutral in their interest in thinking about a career pathway (8%) compared to students who attended (7%; see Figure 5).

Figure 5. Mississippi Coast: How Interested Are You in Thinking About a Career Pathway for Yourself?

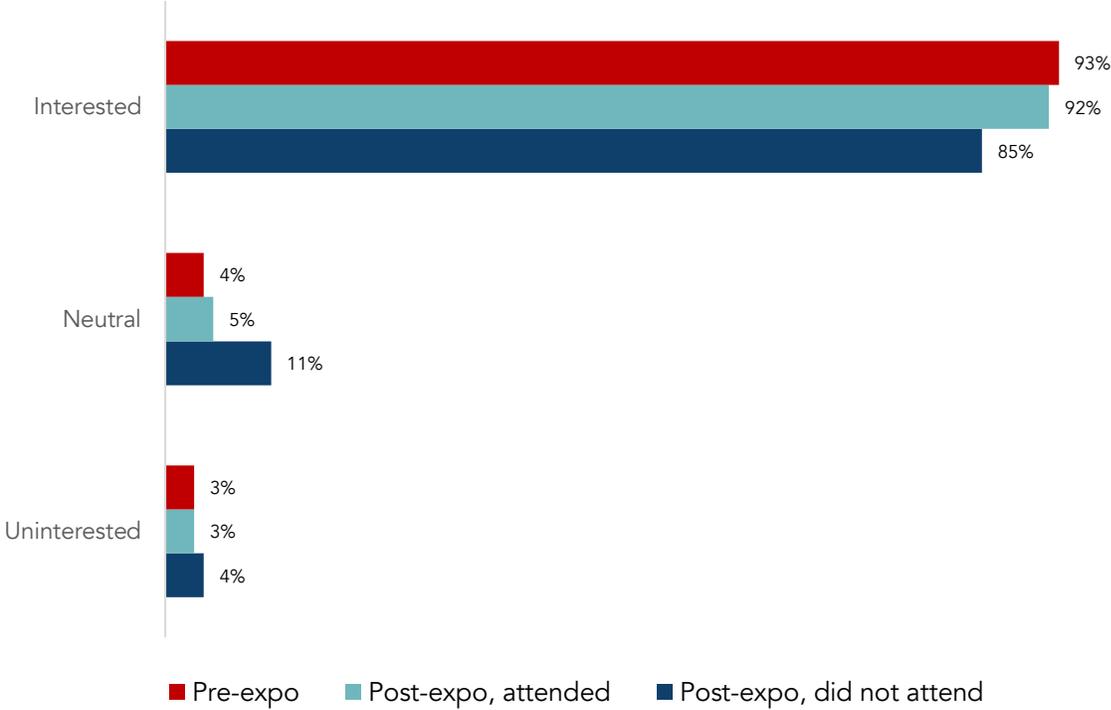
Students' interest in thinking about career pathways did not appear to change a great deal as a result of the P2P Career Expo.



When asked *how interested are you in thinking about a career pathway for yourself*, there was more variability in Delta student responses. While most students said they were interested in thinking about a career path both before and after the event, a more pronounced difference was apparent when comparing students who attended and did not attend the Delta event. Among students who attended the Delta Career Expo, 92% said they were interested in thinking about a career pathway whereas only 85% of students who did not attend responded similarly. Among students who did not attend, almost twice the proportion said they were *neutral* in their thinking about career pathways (11%) compared to those who attended (5%; see Figure 6).

Figure 6. Mississippi Delta: How Interested Are You in Thinking About a Career Pathway for Yourself?

Students' interest in thinking about career pathways was greater among Delta Career attendees (92%) compared to those who did not attend the event (85%).



DO STUDENTS SEE THE RELEVANCE OF EDUCATION TO CAREER OPTIONS?

**Summary**

**Coast**

- The Career Expo did influence Coast students' underlying beliefs about the need for career information on the Coast (p<0.001), but it did not appear to influence their beliefs regarding (1) the need for self-knowledge and (2) the connection between educational performance and career outcomes.
- There were shifts in students' understanding about specific education requirements for career pathways of interest.
- Higher proportions of students who attended the Coast Expo realized they needed a college degree or a graduate degree to work in the fields they hoped to pursue.

**Delta**

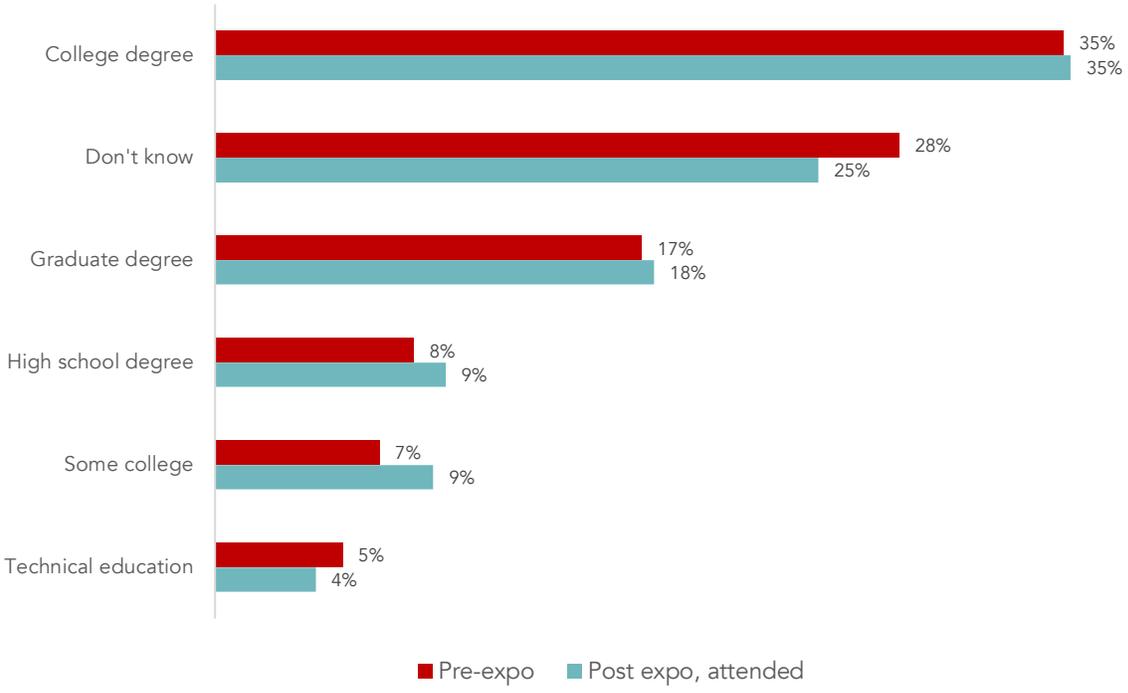
- The Career Expo did not appear to influence students in the Delta and their perceived beliefs about (1) the need for career information, (2) the need for self-knowledge, and (3) the connection between educational performance and career outcomes
- There were slight shifts showing that Delta students somewhat recognized specific education requirements for specified career pathways.

### Perceived Education Needs

One of the key goals of the P2P Career Expo is to build students’ understanding of the educational requirements for potential careers. In this domain, among Coast students there were minimal differences when comparing pre- and post-surveys among students who attended the event; however, there were greater differences when comparing those who did and did not attend the Coast Career Expo. For example, 28% per cent of students were unsure of the education needed for their chosen pathway before attending the workshop, whereas this dropped by 3% among post-event attendees to 25% ( $p < 0.01$ ; see Figure 7).

Figure 7. Mississippi Coast: Perceived Education Needed for Career Pathway by Pre and Post-Expo Attendance

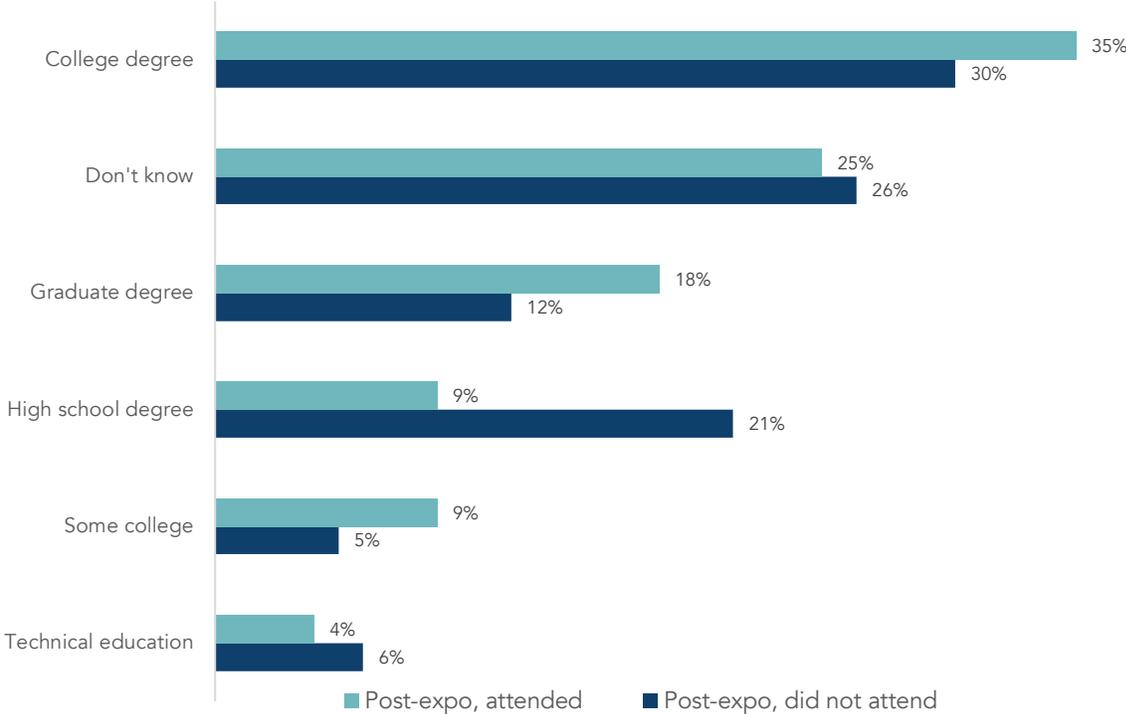
Before attending the Career Expo, 28% of students said they didn’t know how much education they needed to succeed in their chosen career compared to 25% of students after they attended the Career Expo ( $p < 0.01$ ).



Greater differences were observed when comparing those who did and did not attend the Coast Career Expo, with a statistically significant higher proportion of those who attended the event believing they needed a college/graduate degree to pursue their chosen pathway. After the event, 53% of attendees said they needed a college or graduate degree for their chosen pathway, as compared to 42% of students who did not attend the event ( $p < 0.001$ ). Interestingly, 9% of students who attended the Career Expo believed they needed a high school diploma for their career pathway compared to only 21% of students who did not attend (see Figure 8).

*Figure 8. Mississippi Coast: Perceived Education Needed for Career Pathway After the Career Expo by Attended vs Not Attended*

After attending the Career Expo, 18% of students significantly identified a need for a graduate degree necessary for their future career pathway compared to only 12% who did not attend ( $p < 0.001$ ).

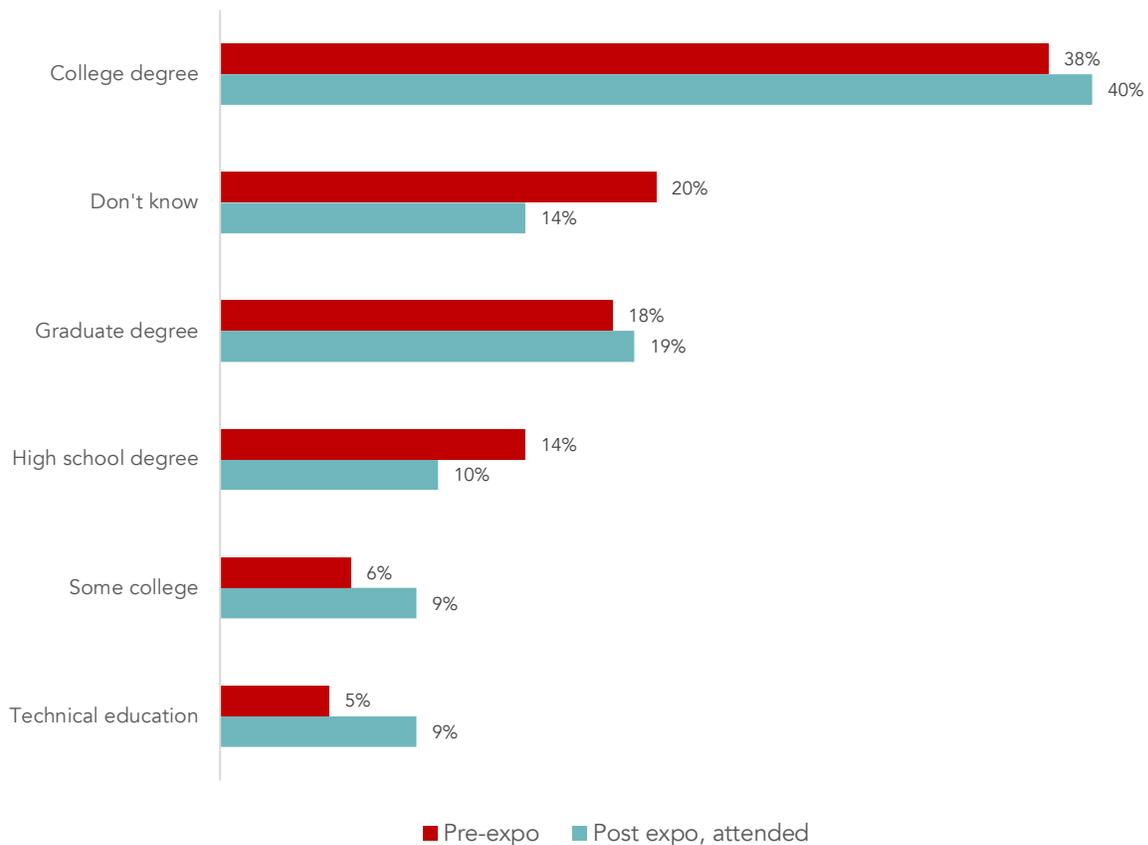


There were larger differences between pre- and post- surveys among Delta students, and their perception of educational requirements for potential careers. Most notably, there was an increase among students before the event compared to students after who attended and also reported they needed some college for a future career path (3% increase) or technical education

(4% increase). Twenty percent of students were unsure of the education needed for their chosen pathway before attending the Delta Career Expo which dropped by 6% among post-event attendees to 14% (p=0.06; see Figure 9).

*Figure 9. Mississippi Delta: Perceived Education Needed for Career Pathway by Pre and Post-Expo Attendance*

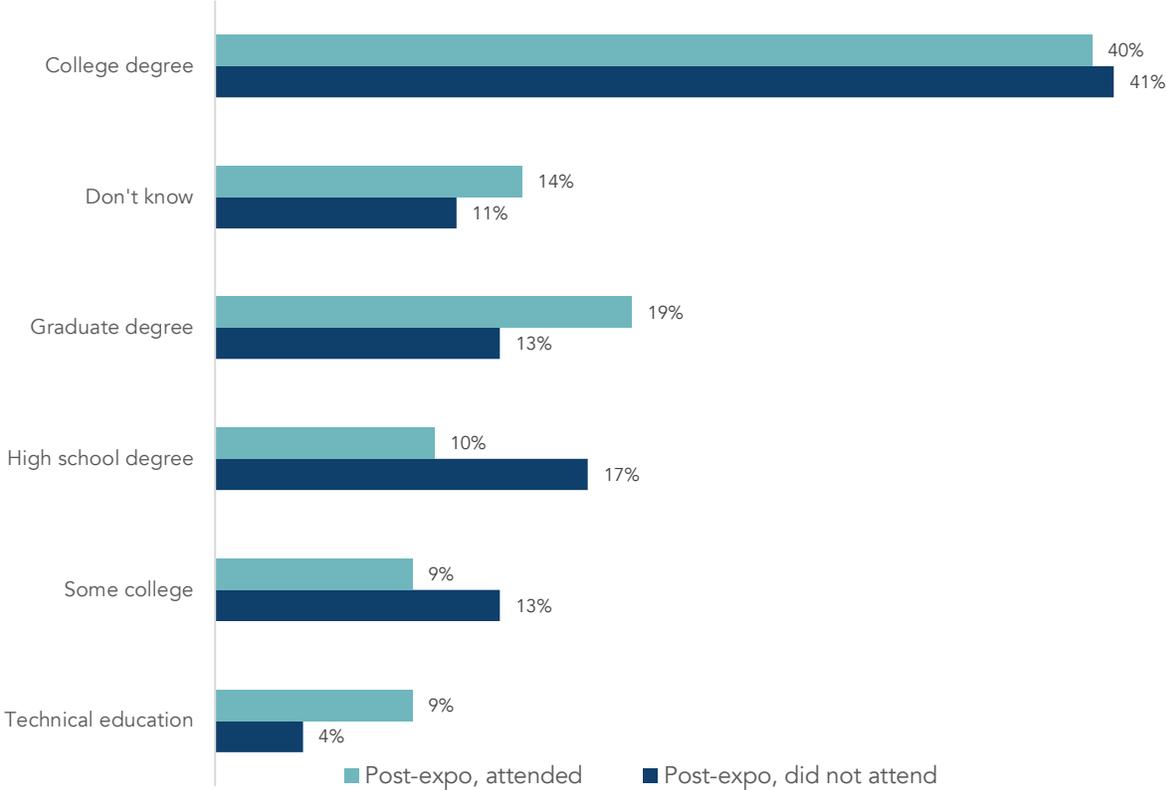
Before attending the Career Expo, 20% of students said they didn't know how much education they needed to succeed in their chosen career compared to 14% of students after they attended the Career Expo (p=0.06).



When comparing students who did and did not attend the Delta Career Expo, differences were still noted, however, they were not statistically significant. After attending the event, 59% of attendees said they needed a college or graduate degree for their chosen pathway, as compared to 54% of students who did not attend the event. Similar to the trend found among Coast students, 17% of students who did not attend the Delta Career Expo believed they only needed a high school diploma for their career pathway compared to only 10% who attended (see Figure 10).

Figure 10. Mississippi Delta: Perceived Education Needed for Career Pathway After the Career Expo by Attended vs Not Attended

After attending the Career Expo, 10% of students identified a high school diploma as necessary for their future career pathway compared to only 17% who did not attend ( $p < 0.47$ ).



*Plans After High School Graduation*

Students who attended the P2P Career Expo on the Coast also appeared to be somewhat more certain about their future plans after attending the event. Prior to attending the P2P Career Expo, 24% of students were unsure about their plans after high school; however only 22% of students were unsure after they attended the event (see Figure 11). This same trend was also noted when comparing those who did and did not attend the Coast Career Expo. That is, students who attended the P2P Coast Career Expo were less likely to be unsure about their plans than those who did not attend, albeit not at the statistically significant threshold ( $p = 0.30$ ; see Figure 12).

Figure 11. Mississippi Coast: Plans After High School Graduation by Pre and Post-Expo Attendance

Students who attended the Coast Career Expo were somewhat less likely to say they were uncertain about their future plans after high school graduation (22%) compared to students before the event (24%).

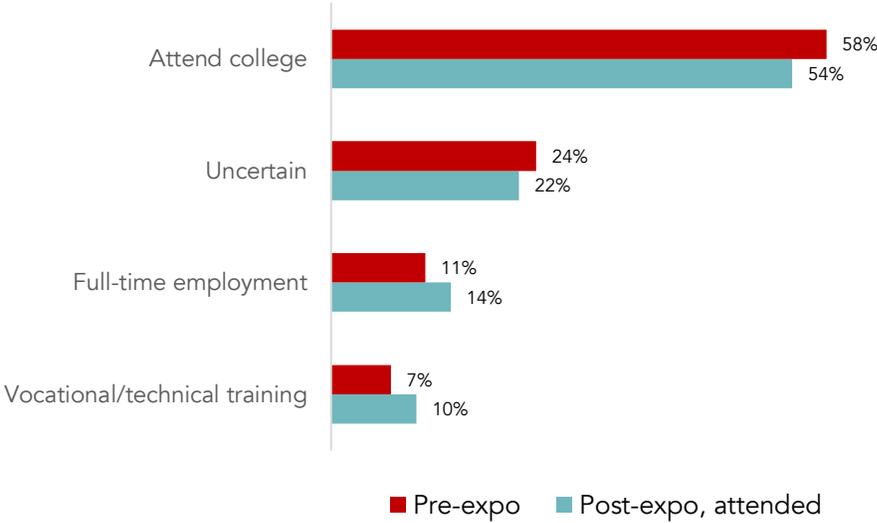
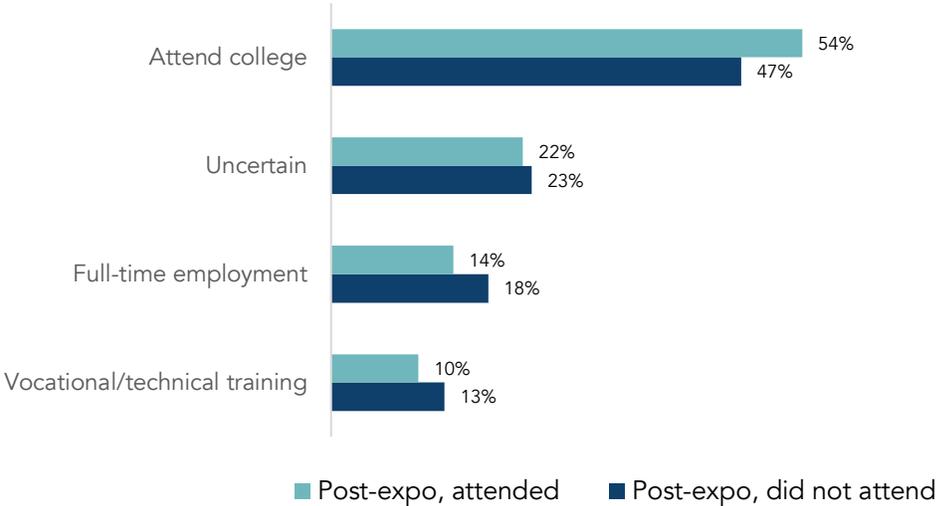


Figure 12. Mississippi Coast: Plans After High School Graduation After the Career Expo by Attended vs Not Attended

There were no significant differences in future plans when comparing those who did and did not attend.



Students who attended the P2P Career Expo in the Mississippi Delta also appeared to be statistically significant more certain about their future plans after attending the event. Prior to attending the P2P Career Expo, 17% of students were unsure about their plans after high school; this decreased to 14% of students after they attended the event (see Figure 13). Also, students who attended the P2P Coast Expo were less likely to be unsure about their plans (14%) than those who did not attend (22%), although this too was not statistically significant ( $p=0.13$ ; see Figure 14).

Figure 13. Mississippi Delta: Plans After High School Graduation by Pre and Post-Expo Attendance

Fewer students were uncertain about their plans after high school graduation after attending the event.

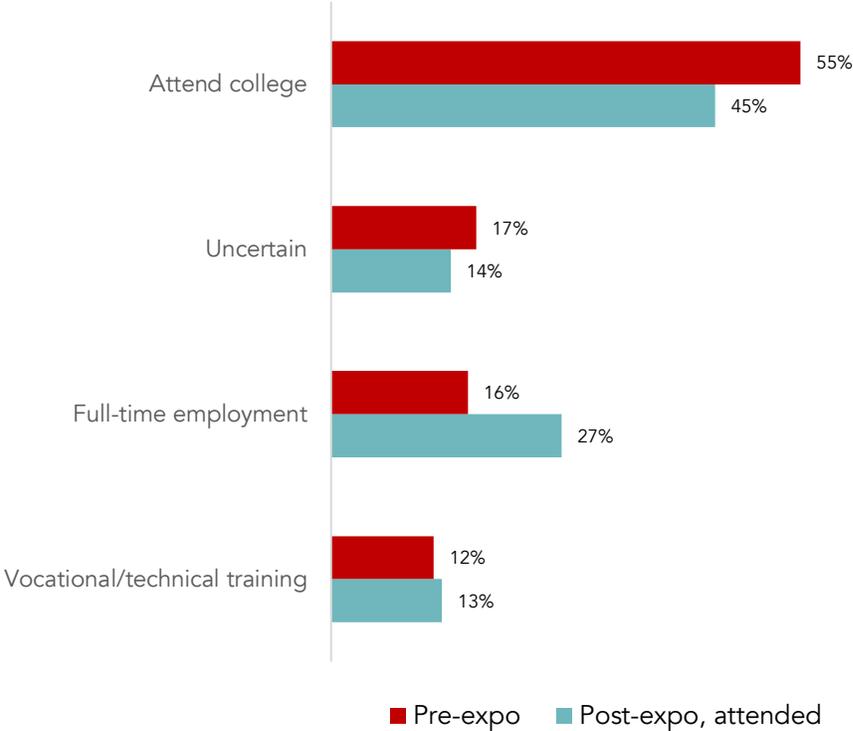
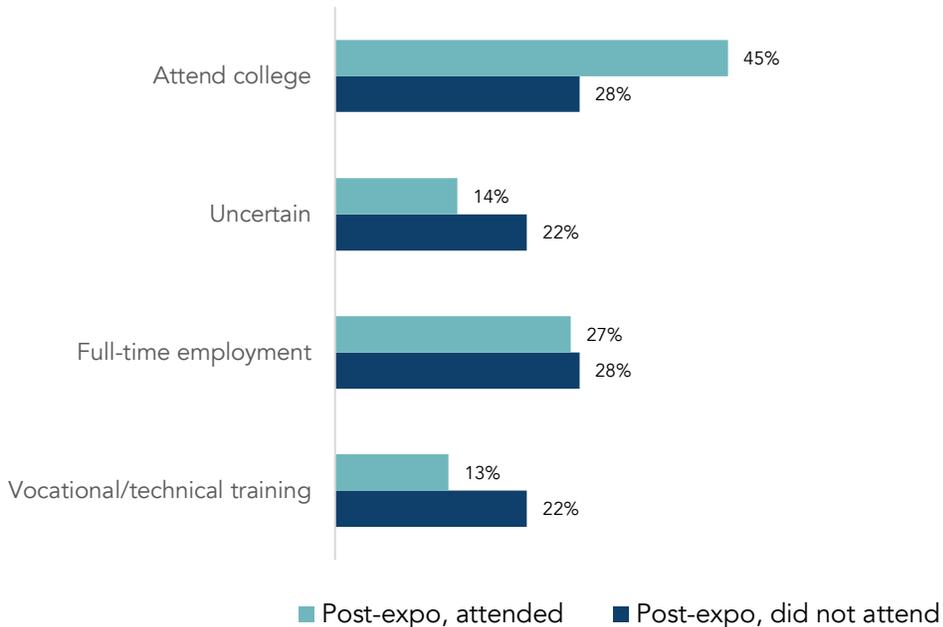


Figure 14. Mississippi Delta: Plans After High School Graduation After the Career Expo by Attended vs Not Attended

A higher proportion of non-attendees were uncertain about their future plans, although this difference was not statistically significant.



### Beliefs about Career Planning

The evaluation team assessed three factors related to students’ beliefs about career planning before and after both P2P Mississippi Career Expos. These were measured by six scales, which included career decision-making factors (two scales), career outcome expectations (two scales), and career planning behaviors (one scale). Findings in this section are reported by making comparisons across three groups: (1) pre-expo, (1) post-expo for those who attended the event, and (3) post-expo did not attend the event (see Appendix C for scale details).



### Career Decision Making Factors Inventory

**Need for Career Information Scale.** The Need for Career Information Scale measures the degree to which students respect the importance of seeking information about career options before choosing a specific pathway. Higher scores on this scale reflect more indecision and less certainty for this type of information.

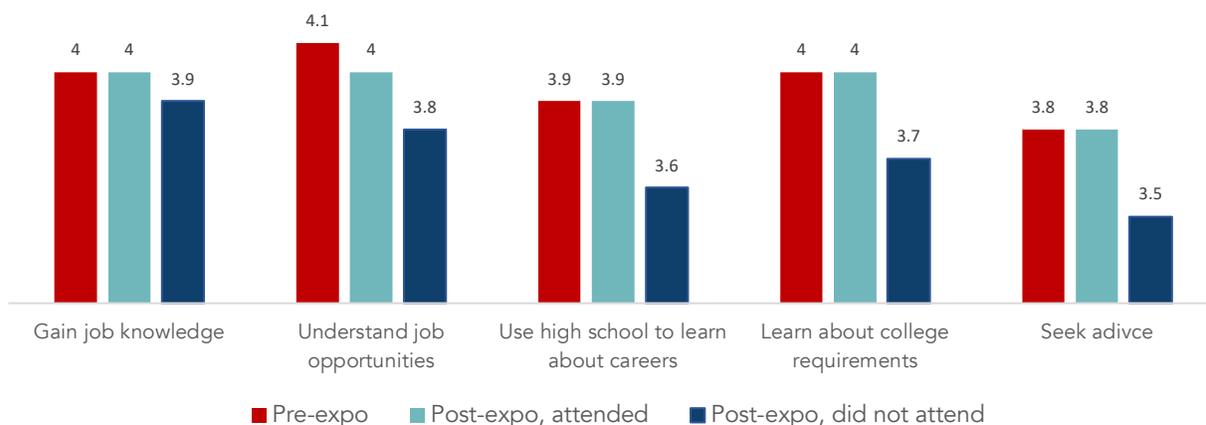
Overall mean scores on the Need for Information Scale were slightly lower at the post-test (19.7 at post-test for those who attended the Career Expo vs. 19.8 at pre-test), although they were lower again among those who did not attend (18.6), with a statistically significant difference noted between students who did and did not attend the Coast event,  $p < 0.001$  (see Figures 15 and 16).

Figure 15. Mississippi Coast: Composite Score for Need for Career Information Scale <sup>a, b, c, d, e</sup> Students who attended the Coast Career Expo reported a significantly higher score on the need for career information scale compared to students who did not attend ( $p < 0.001$ ).



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5, summed across 5 elements for range from 1 (more career certainty) to 25 (less career certainty).  
<sup>b</sup> Students pre-expo: n=3,327.  
<sup>c</sup> Students post-expo, attended: n=1,926.  
<sup>d</sup> Students post-expo, did not attend: n=128.  
<sup>e</sup> There is a statistically significant difference between post-expo attended (sum score=19.7) versus did not attend (sum score=18.6) students,  $p < 0.001$ .

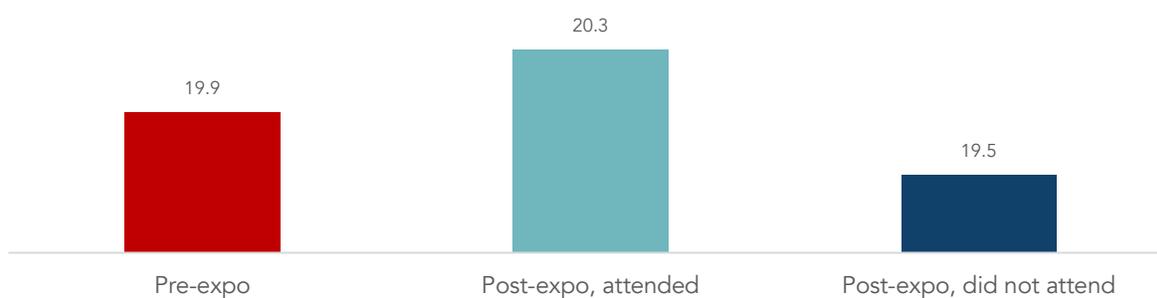
Figure 16. Mississippi Coast: Need for Career Information Scale Elements <sup>a</sup>  
 There was little variability across the surveys, regardless of attendance at the Career Expo.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5

Mean scores on the Need for Information Scale were greater at the post-test (20.3 at post-test for those who attended the Career Expo vs. 19.9 at pre-test), and they were lower again among those who did not attend (19.5). These differences were small and likely not meaningful as supported by the non-statistically significant differences between students who did and did not attend the Coast event,  $p < 0.24$  (see Figures 17 and 18).

Figure 17. Mississippi Delta: Composite Score for Need for Career Information Scale <sup>a, b, c, d, e</sup>  
 The Career Expo did not appear to influence students' beliefs in the need for career information.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5, summed across 5 elements for range from 1 (more career certainty) to 25 (less career certainty).

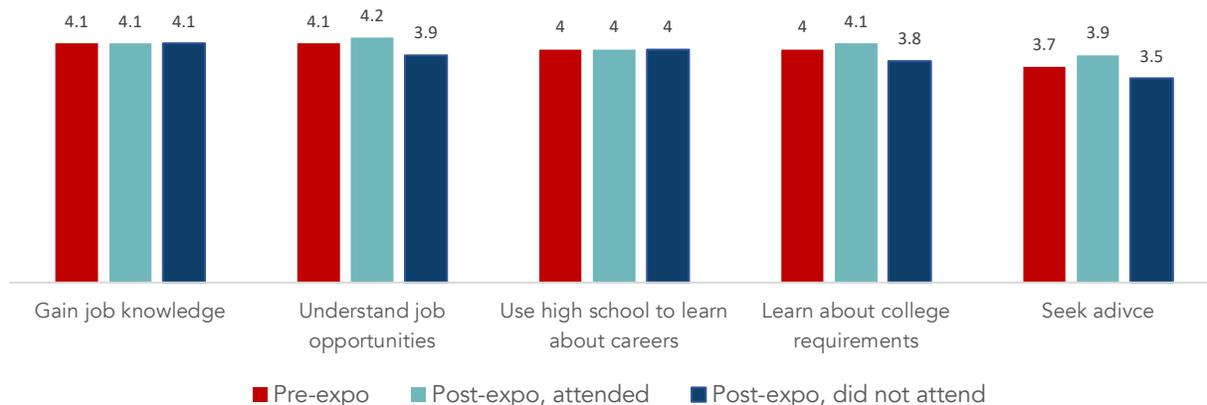
<sup>b</sup> Students pre-expo:  $n = 776$ .

<sup>c</sup> Students post-expo, attended:  $n = 172$ .

<sup>d</sup> Students post-expo, did not attend:  $n = 42$ .

<sup>e</sup> There is not a statistically significant difference between post-expo attended (sum score=20.3) versus did not attend (sum score=19.5) students,  $p = 0.24$ .

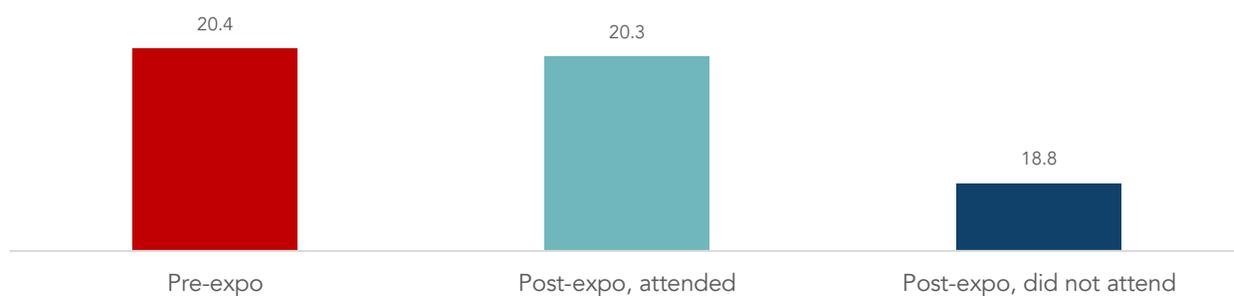
Figure 18. Mississippi Delta: Need for Career Information Scale Elements <sup>a</sup>  
 There was little variability across the surveys, regardless of attendance at the Career Expo.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5.

**Self-Knowledge Scale.** There were similar findings with respect to Coast student beliefs about the importance of self-knowledge when choosing a career pathway. While students generally agreed that understanding who they are, their personal values, and what type of person they want to be were important when determining future career pathways, there was no difference when comparing students who did and did not attend, or when comparing pre and post results (see Figure 19 and Figure 20).

Figure 19. Mississippi Coast: Composite Score for Need for Self-Knowledge Scale <sup>a, b, c, d</sup>  
 The Career Expo did not appear to influence students' beliefs about the need for self-knowledge when selecting a career pathway.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5; summed across 5 elements for a range of 1 (more career certainty) to 25 (less career certainty).

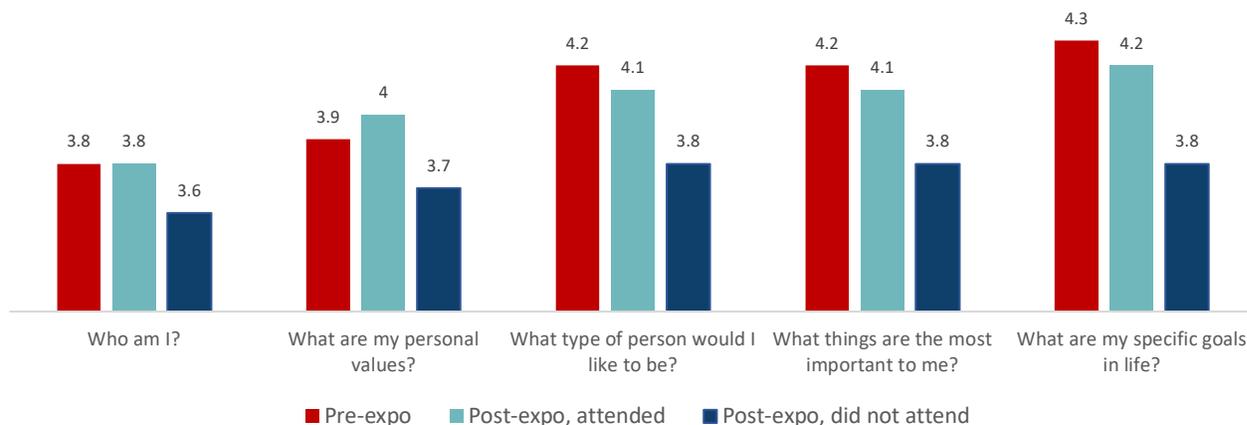
<sup>b</sup> Students pre-expo: n=3,267.

<sup>c</sup> Students post-expo, attended: n=1,904.

<sup>d</sup> Students post-expo, did not attend: n=126.

Figure 20. Mississippi Coast: Self-Knowledge Scale Elements <sup>a</sup>

There were few differences in beliefs about self-knowledge across the three groups.

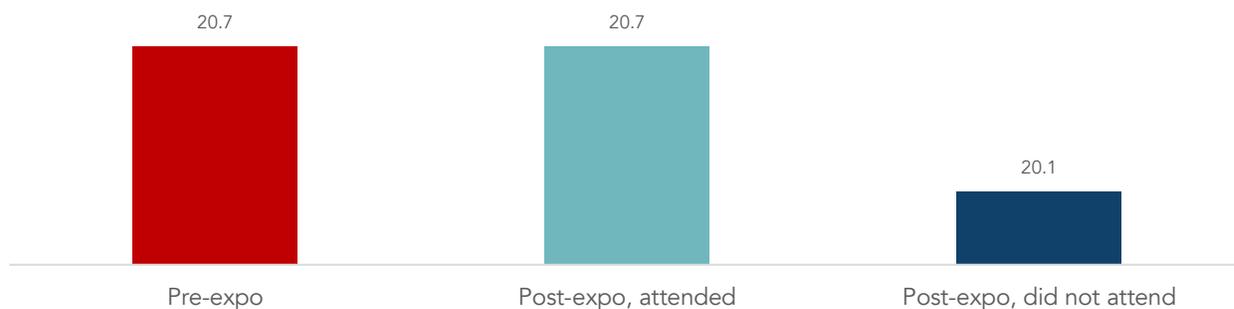


<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5.

Following the same trend in the Delta, students’ beliefs about the importance of self-knowledge when choosing a career pathway also did not change after attending the Career Expo. Again, students generally agreed that understanding who they are, their personal values, and what type of person they want to be were important when determining future career pathways; however, there was no difference when comparing students who did and did not attend, or when comparing pre and post results (see Figure 21 and Figure 22).

Figure 21. Mississippi Delta: Composite Score for Need for Self-Knowledge Scale <sup>a, b, c, d</sup>

The Career Expo did not appear to influence students’ beliefs about the need for self-knowledge when selecting a career pathway.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5; summed across 5 elements for a range of 1 (more career certainty) to 25 (less career certainty).

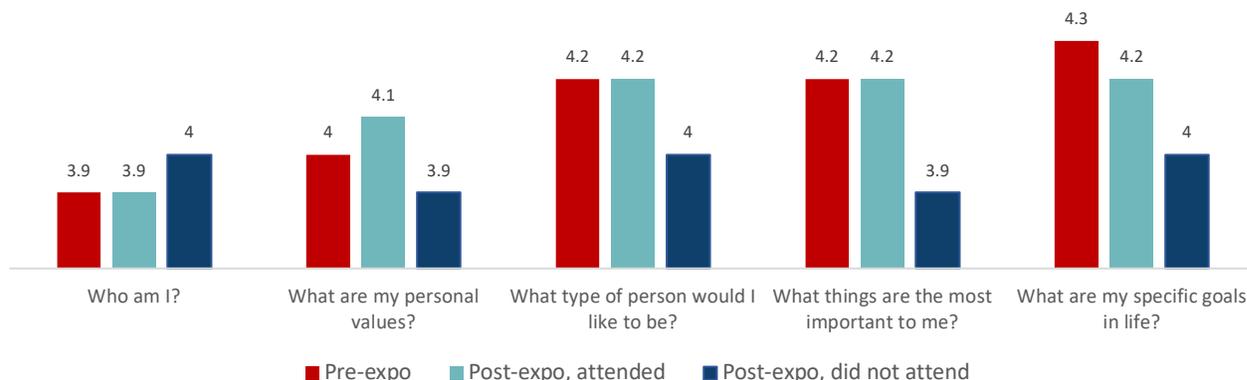
<sup>b</sup> Students pre-expo: n=755.

<sup>c</sup> Students post-expo, attended: n=171.

<sup>d</sup> Students post-expo, did not attend: n=39.

Figure 22. Mississippi Delta: Self-Knowledge Scale Elements <sup>a</sup>

There were few differences in beliefs about self-knowledge across the three groups.



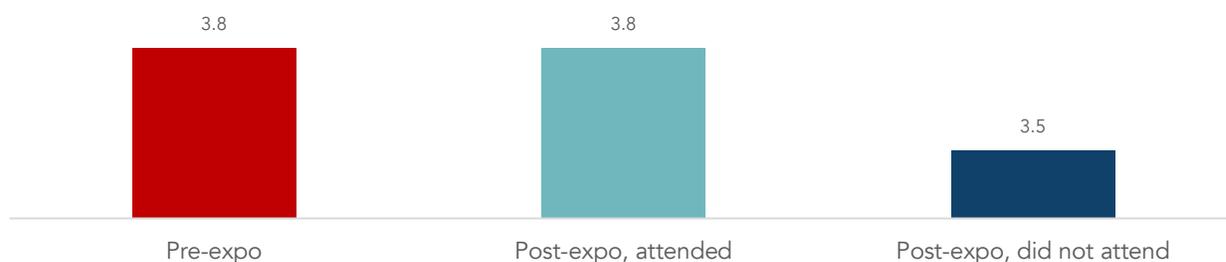
<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5.

### Career Outcome Expectations

**Education Performance Assessment Scale.** Attendance at the Coast Career Expo did not appear to significantly impact student beliefs about the importance of education performance and the role it plays in shaping career outcomes. Students tended to place a relatively high value on education both before and after the Coast Career Expo, regardless of attendance. No differences from pre to post were observed except when comparing post-expo students by attendance (see Figures 23 and 24).

Figure 23. Mississippi Coast: Mean Composite Score for Education Performance Assessment Scale <sup>a, b, c, d</sup>

The Career Expo did not appear to influence students' beliefs about the importance of education in relation to their career goals.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5; summed and taken the mean across 5 elements for range 1 (student does not value the need for career information to be successful) to 5 (student values the need for education performance to be successful).

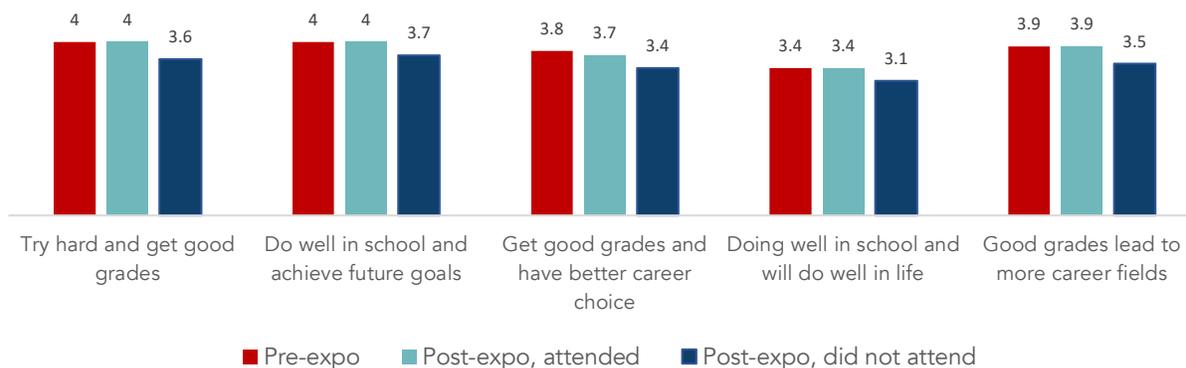
<sup>b</sup> Students pre-expo: n=3,309.

<sup>c</sup> Students post-expo, attended: n=1,909.

<sup>d</sup>Students post-expo, did not attend: n=126.

Figure 24. Mississippi Coast: Education Performance Agreement Scale Elements <sup>a</sup>

Survey responses were slightly lower at the post-test, although these differences were small and likely not meaningful.

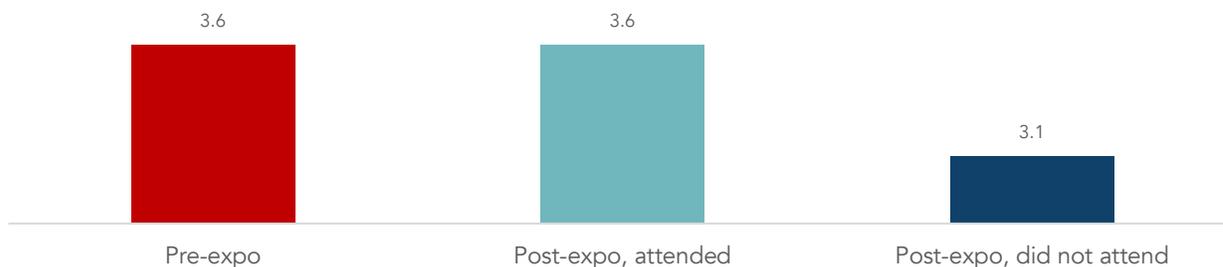


<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5.

Attendance at the Delta Career Expo also did not appear to influence student beliefs about the importance of education performance and the role it plays in shaping career outcomes. Students from the Delta placed high value on education both before and after the Coast Career Expo, regardless of attendance. Again, no differences from pre to post were observed except when comparing post-expo students by attendance (see Figures 25 and 26).

Figure 25. Mississippi Delta: Mean Composite Score for Education Performance Assessment Scale <sup>a, b, c, d</sup>

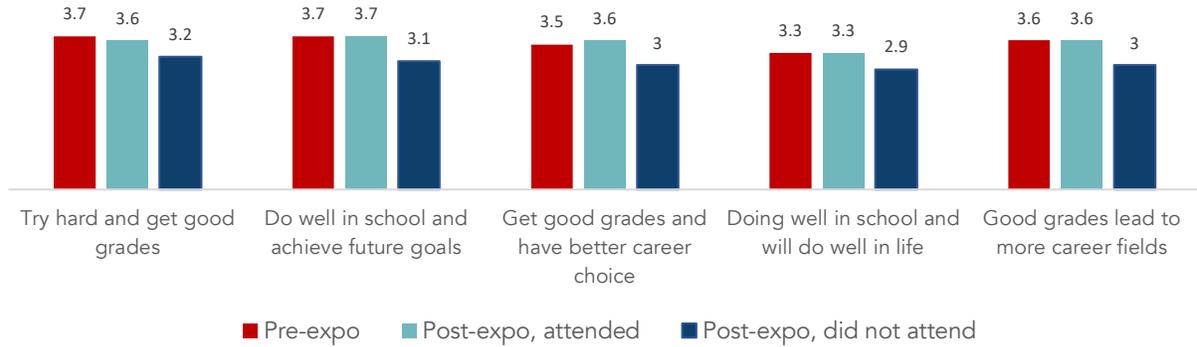
The Career Expo did not appear to positively influence students' beliefs about the importance of education in relation to their career goals.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5; summed and taken the mean across 5 elements for range 1 (student does not value the need for career information to be successful) to 5 (student values the need for education performance to be successful).

- <sup>b</sup> Students pre-expo: n=791.
- <sup>c</sup> Students post-expo, attended: n=169.
- <sup>d</sup> Students post-expo, did not attend: n=41.

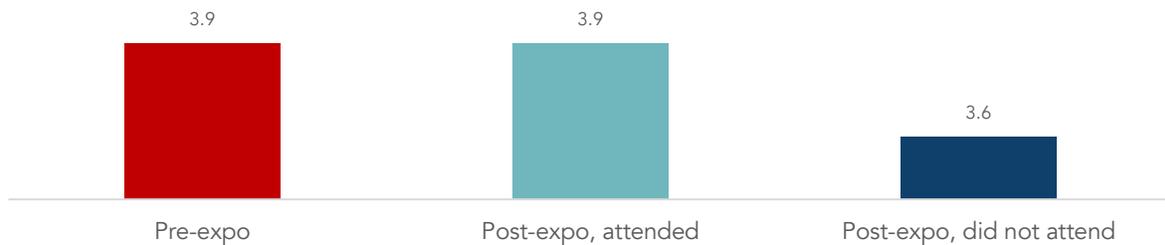
*Figure 26. Mississippi Delta: Education Performance Agreement Scale Elements <sup>a</sup>*  
 Survey responses were slightly lower at the post-test, although these differences were small and likely not meaningful.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5.

**Career Decision Outcome Expectancies Scale.** Survey data suggest that students’ have moderate beliefs about factors that influence good career decisions, although those who attended the Career Expo on the Coast tended to think that learning more about careers, personal interests, learning educational requirements, and spending time to gather career information would impact future career decisions slightly more than those who did not attend. Overall, students who attended the Coast Career Expo had a mean=3.9 compared to mean=3.6 among students who did not attend on the Career Decisions scale, indicating that students who attended value these features slightly more than those who did not attend (see Figures 27 and 28).

*Figure 27. Mississippi Coast: Mean Composite Score for Career Decisions Scale <sup>a, b, c, d</sup>*  
 Students who attended the Coast Career Expo placed slightly higher value on factors that influence career decisions than those who did not attend.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5; summed and taken the mean across 4 elements for range 1 (student does not value the need for learning about a career to be successful) to 5 (student values the need for learning about all aspects of a career needed to be successful).

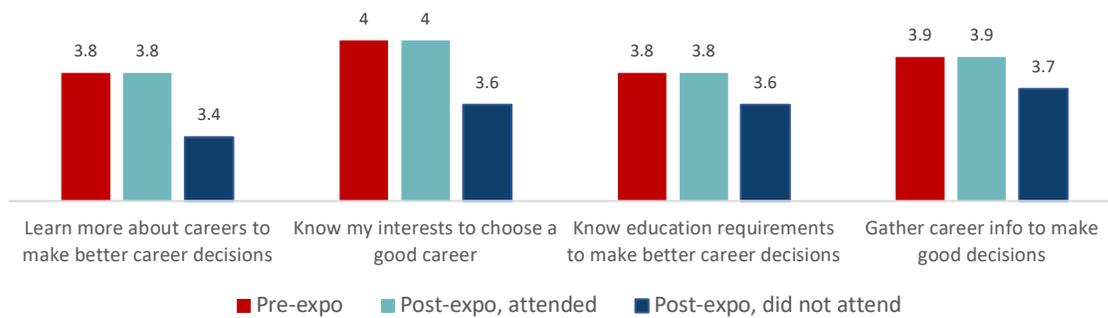
<sup>b</sup> Students pre-expo: n=3,250.

<sup>c</sup> Students post-expo, attended: n=1,899.

<sup>d</sup> Students post-expo, did not attend: n=119.

*Figure 28. Mississippi Coast: Career Decision Outcome Expectancies Scale Elements <sup>a</sup>*

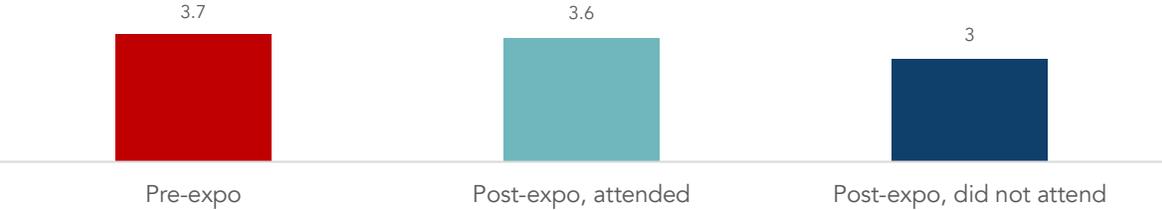
**Students who attended the Coast Career Expo agreed that learning more about careers leads to making better career decisions and knowing personal interests helps in choosing a career.**



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5.

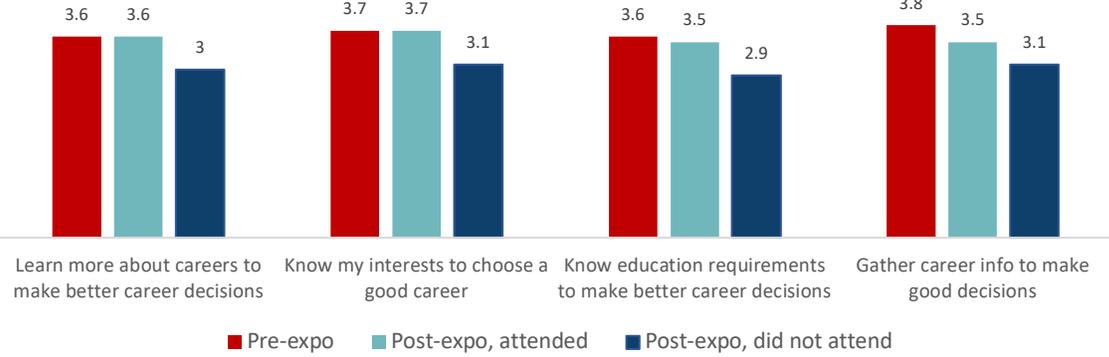
Survey data among students who attended the Delta Career Expo also suggests similar findings with respect to students' views about factors that influence good career decisions. Following the same trend as Coast students, among those who attended the Delta Career Expo, students tended to think that learning more about careers, personal interests, learning educational requirements, and spending time to gather career information would impact future career decisions slightly more than those who did not attend. Overall, students who attended the Delta Career Expo had a mean=3.6 compared to mean=3.0 among students who did not attend on the Career Decisions scale, indicating that students who attended placed a greater value on these features more than those who did not attend (see Figures 29 and 30).

Figure 29. Mississippi Delta: Mean Composite Score for Career Decisions Scale <sup>a, b, c, d</sup>  
 Students who attended the Delta Career Expo placed higher value on factors that influence career decisions than those who did not attend.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5; summed and taken the mean across 4 elements for range 1 (student does not value the need for learning about a career to be successful) to 5 (student values the need for learning about all aspects of a career needed to be successful).  
<sup>b</sup> Students pre-expo: n=781.  
<sup>c</sup> Students post-expo, attended: n=168.  
<sup>d</sup> Students post-expo, did not attend: n=43.

Figure 30. Mississippi Delta: Career Decision Outcome Expectancies Scale Elements <sup>a</sup>  
 Students who attended the Delta Career Expo were more likely to agree that learning more about careers leads to making better career decisions, and knowing personal interests help in choosing a good career and gathering career information helps to make good decisions compared to students who did not attend.



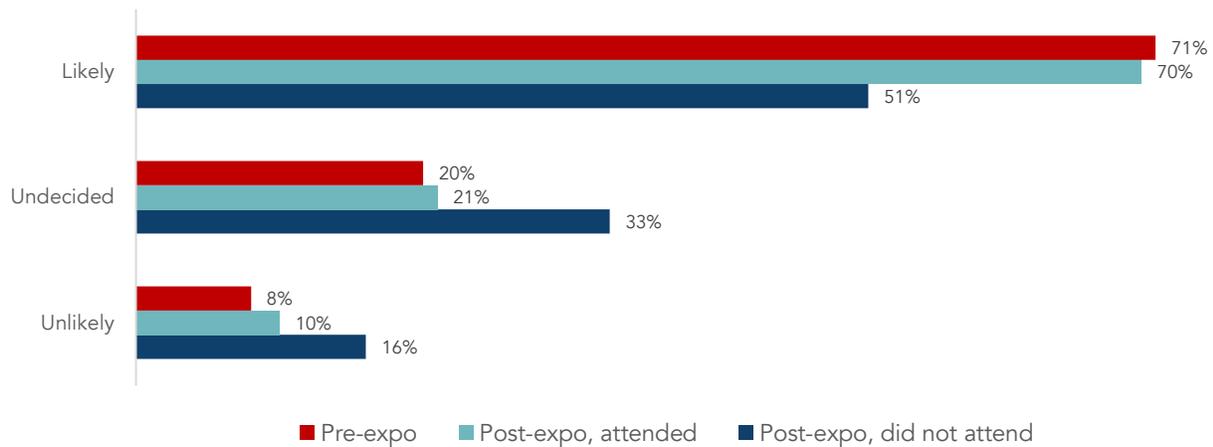
<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5.

*Career Planning Behaviors*

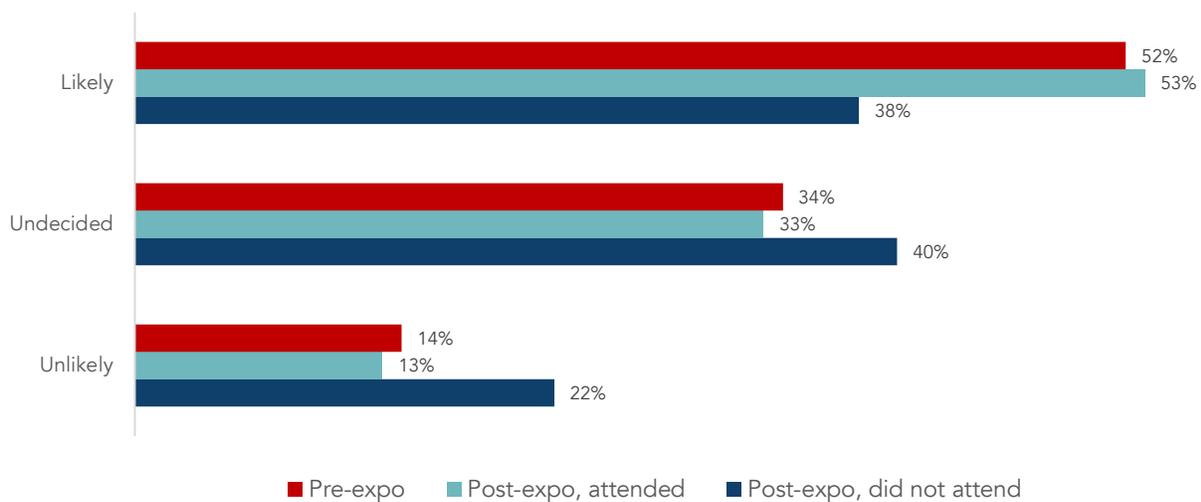
**Educational Intentions Scale.** At the post-test, a higher proportion of students who attended the Coast Career Expo said they were ‘likely’ to obtain a college degree (70%) when compared to students who did not attend the Career Expo (51%, p<0.001). There were also differences in students’ certainty about their plans to obtain college degrees, with fewer attendees (21%) saying they were undecided about whether they would attend college when compared to those who did not attend (33%; see Figure 31). Also, students who participated in the Coast Career Expo reported

a statistically significant higher likelihood ( $p < 0.01$ ) of seeking a graduate degree (53%) compared to those who did not attend (38%). Similarly, a smaller proportion of students who attended the Coast Career Expo were unsure of attending graduate school (33%) compared to undecided students who did not attend the Career Expo (40%; see Figure 32).

*Figure 31. Mississippi Coast: Education Intentions and Plans to Obtain a College Degree*  
 A statistically significant higher proportion of students ( $p < 0.001$ ) who attended the Coast Career Expo plan to obtain a college degree (70%) compared to those who did not attend (51%).



*Figure 32. Mississippi Coast: Education Intentions and Plans to Obtain a Graduate Degree*  
 A statistically significant higher proportion ( $p < 0.01$ ) of students who attended the Coast Career Expo plan to obtain a graduate degree (53%) compared to those who did not attend (38%).



Similarly, a higher proportion of students who attended the Delta Career Expo said they were 'likely' to obtain a college degree (71%) when compared to students who did not attend the Career Expo (45%,  $p < 0.01$ ) in comparing post-event tests. Differences were also present among students' certainty about their plans to obtain college degrees, with fewer students who attended the Delta event (16%) saying they were undecided about whether they would attend college when compared to those who did not attend (23%; see Figure 33). Also, students who participated in the Delta Career Expo reported a marginally statistically significant higher likelihood ( $p < 0.068$ ) of seeking a graduate degree (60%) compared to those who did not attend (41%). Similarly, a smaller proportion of students who attended the Coast Career Expo were unsure of attending graduate school (22%) compared to undecided students who did not attend the Career Expo (30%; see Figure 34).

*Figure 33. Mississippi Delta: Education Intentions and Plans to Obtain a College Degree*  
**A statistically significant higher proportion of students ( $p < 0.01$ ) who attended the Delta Career Expo plan to obtain a college degree (71%) compared to those who did not attend (45%).**

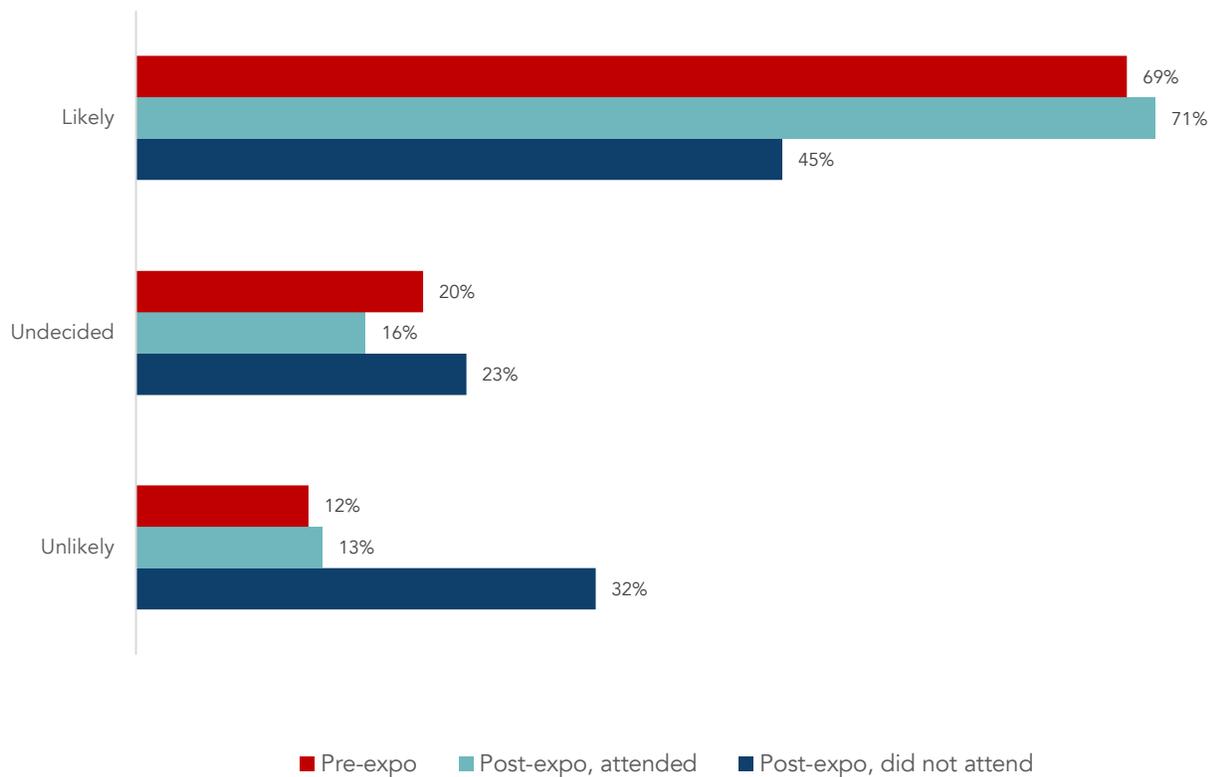
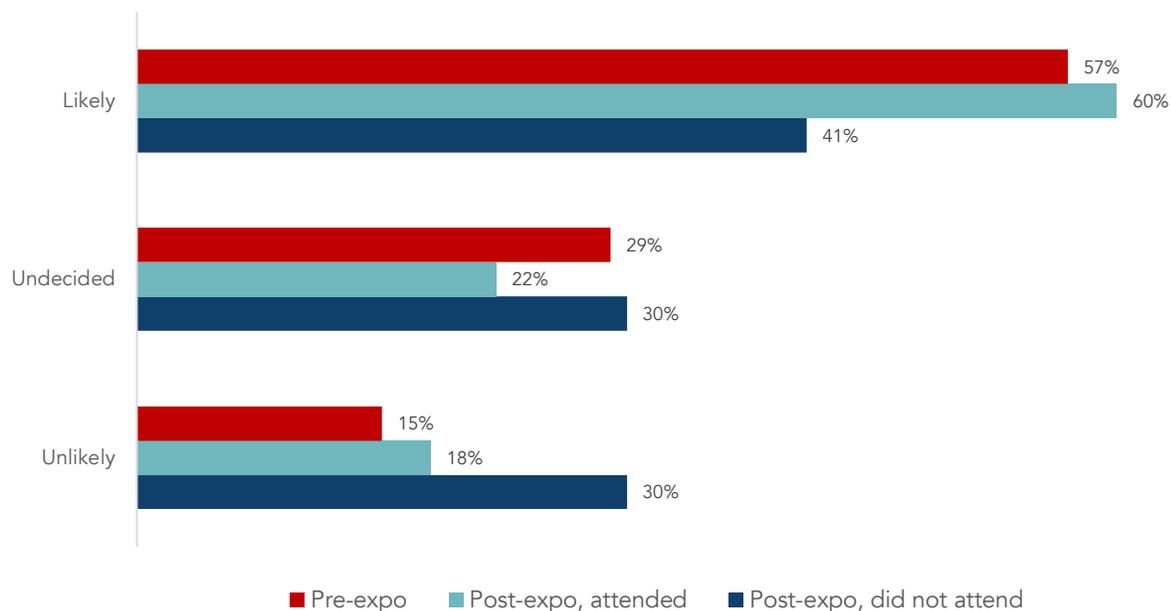
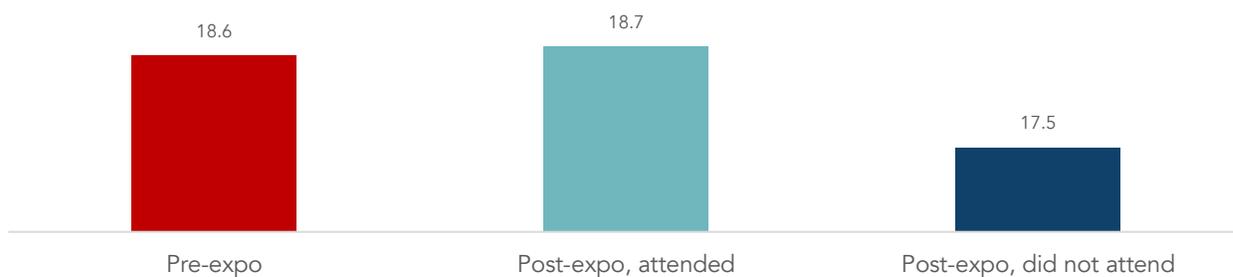


Figure 34. Mississippi Delta: Education Intentions and Plans to Obtain a Graduate Degree  
 A marginally statistically significant higher proportion ( $p < 0.068$ ) of students who attended the Delta Career Expo plan to obtain a graduate degree (60%) compared to those who did not attend (41%).



**Career Planning Intentions Scale.** At the post-test, students who attended the Coast Career Expo students had significantly higher planning intentions (mean composite score=18.7) compared to students who did not attend (mean composite score=17.5;  $p < 0.01$ ; see Figure 35). Differences were greatest among the scale’s elements that asked students about *being committed to learning more about my abilities/interests* as well as *intending to get all of the education I need for my career* (see Figure 36).

Figure 35. Mississippi Coast: Composite Score for Planning Intentions <sup>a, b, c, d, e</sup>  
 Students who attended the Coast Career Expo scored higher (sum score=18.7) for planning intentions compared to students who did not attend (sum score=17.5;  $p < 0.01$ ).



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5; summed across 5 elements for a range of 1 (student does not value the need for planning) to 25 (student values the need of planning).

<sup>b</sup> Students pre-expo: n=3,189.

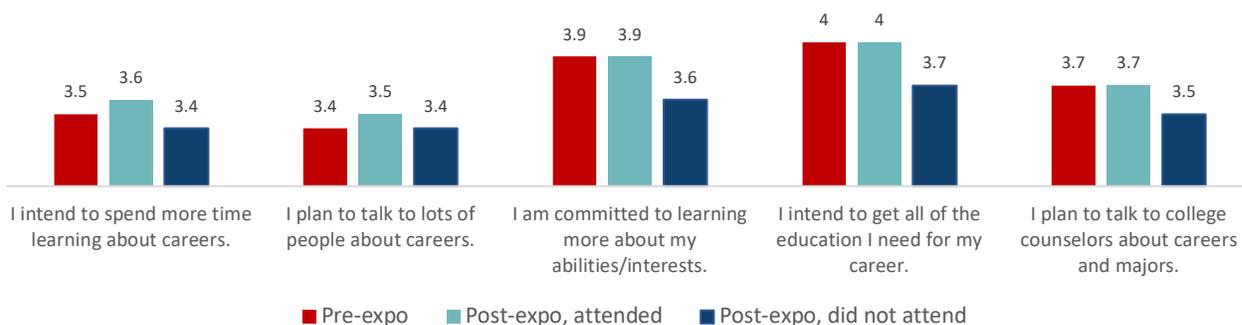
<sup>c</sup> Students post-expo, attended: n=1,860.

<sup>d</sup> Students post-expo, did not attend: n=119.

<sup>e</sup> There is a statistically significant difference between post-expo attended (sum score=18.7) versus did not attend (sum score=17.5) students,  $p < 0.01$ .

Figure 36. Mississippi Coast: Planning Intentions Scale Elements <sup>a</sup>

Differences were noted among students' beliefs about career planning based on Coast Career Expo attendance.

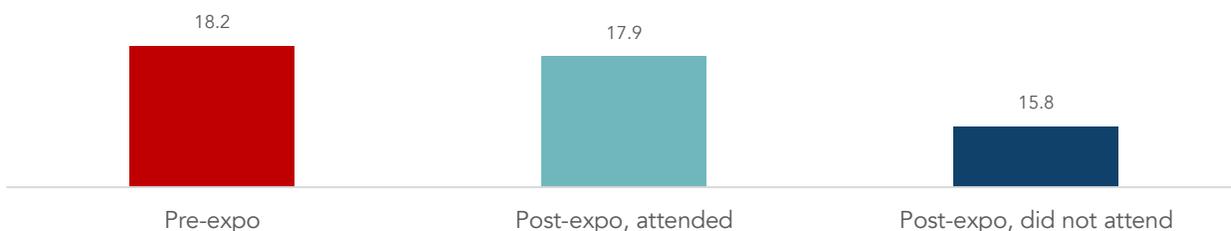


<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5.

This same trend held for the Delta. At the post-test, Delta students who attended the Career Expo had significantly higher career planning intentions (mean composite score=17.9) compared to students who did not attend (mean composite score=15.8;  $p=0.05$ ; see Figure 37). In addition, differences were greatest among the scale's elements that asked students on intending *to spend more time learning about careers*, being *committed to learning more about my abilities/interests*, and planning *to talk to college counselors about careers and majors* (see Figure 38).

Figure 37. Mississippi Delta: Composite Score for Planning Intentions <sup>a, b, c, d, e</sup>

Students who attended the Delta Career Expo scored higher (sum score=17.9) for planning intentions compared to students who did not attend (sum score=15.8;  $p=0.05$ ).



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5; summed across 5 elements for a range of 1 (student does not value the need for planning) to 25 (student values the need of planning).

<sup>b</sup> Students pre-expo: n=768.

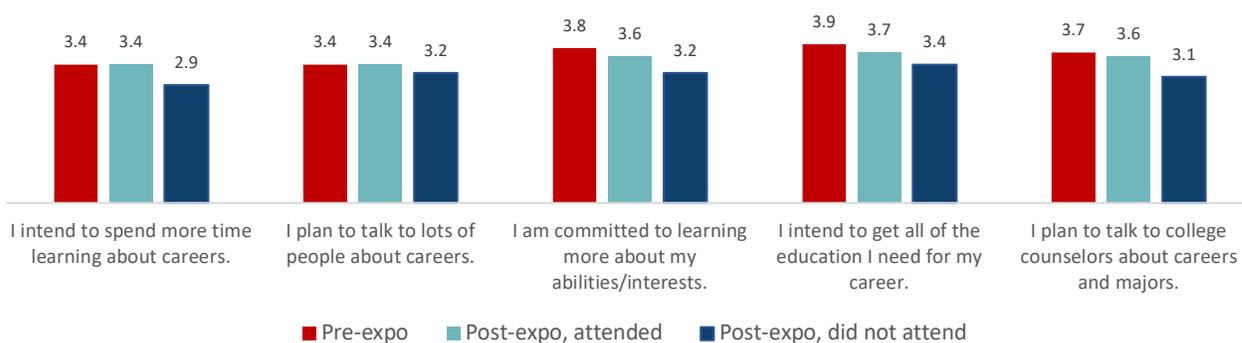
<sup>c</sup> Students post-expo, attended: n=161.

<sup>d</sup> Students post-expo, did not attend: n=40.

<sup>e</sup> There is a statistically significant difference between post-expo attended (sum score=17.9) versus did not attend (sum score=15.8) students, p=0.05.

Figure 38. Mississippi Delta: Planning Intentions Scale Elements <sup>a</sup>

Differences were noted among students' beliefs about career planning based on Delta Career Expo attendance.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5.

It is important to note that the differences present among Coast and Delta student cohorts should be interpreted with caution. Given the evaluation team was unable to track individual students pre to post, it may be that these differences are simply because a different cohort of students chose to attend the Career Expo than those who did not. More specifically, it is possible that students who did not attend the Career Expo had lower expectations about college attendance to start with. Augmenting future evaluation procedures so that individual students can be matched pre to post will assist in making more confident comparisons in the future.

### Career Pathways

When completing the online surveys, students were asked to indicate which career pathway they were most likely to pursue. The evaluation team then coded these pathways against the pre-determined career pathways that align with the Department of Education's career clusters (provided by P2P administrators). Tables X and X show the proportion of students who selected these career pathways before and after attending the Career Expos in the Coast and in the Delta. Overall, the most prevalent pathways pre and post-expo included:

1. Health science,
2. Arts, AV technology and communications,
3. Engineer and polymer science
4. Education and training
5. Law, public safety, corrections and security.

In comparing pre to post-expo Coast responses, the biggest changes in interest included arts, AV technology and communications (pre-expo 13.3% to post-expo 14.8%) and education and training (pre-expo 8.8% to post-expo 7.2%; see Table 5).

*Table 5. Mississippi Coast: Career Pathways Pre and Post the Coast Career Expo*  
**Health Science and Arts/AV Technology/Communications were the most prevalent career pathways among 8<sup>th</sup> grade Mississippi Coast students.**

Career Pathways	Mississippi Coast Cohort	
	Pre-expo n (%)	Post-expo n (%)
Health Science	926 (36.0)	593 (36.0)
Arts, AV Technology and Communications	342 (13.3)	244 (14.8)
Engineer and Polymer Science	235 (9.1)	150 (9.1)
Education and Training	225 (8.8)	118 (7.2)
Law, Public Safety, Corrections and Security	212 (8.2)	154 (9.4)
Architecture and Construction	114 (4.4)	68 (4.1)
Information Technology	101 (3.9)	47 (2.9)
Marine Science	77 (3.0)	42 (2.6)
Business Management and Administration	72 (2.8)	34 (2.1)
Agriculture Food and Natural Resources	57 (2.2)	36 (2.2)
Hospitality and Tourism	57 (2.2)	30 (1.8)
Aerospace	49 (1.9)	36 (2.2)
Human Services	25 (1.0)	27 (1.6)
Finance	17 (0.7)	14 (0.9)
Marketing	17 (0.7)	13 (0.8)
Government and Public Administration	13 (0.5)	6 (0.4)
Transportation, Distribution and Logistics	13 (0.5)	11 (0.7)
Energy	10 (0.4)	13 (0.8)
Manufacturing	9 (0.4)	11 (0.7)
<b>Total</b>	<b>2,571<sup>a</sup></b>	<b>1,647<sup>b</sup></b>

<sup>a</sup> Total number of students who responded to career pathways before attending the P2P Career Expo on the Mississippi Gulf Coast with a valid career pathway answer.

<sup>b</sup> Total number of students who responded to career pathways after the P2P Career Expo on the Mississippi Gulf Coast with a valid answer (includes attendees and non-attendees).

In comparing pre to post-expo Delta responses, the biggest change in interest included health science (pre-expo 44.4% to post-expo 41%; see Table 6).

*Table 6. Mississippi Delta: Career Pathways Pre and Post the Delta Career Expo*  
**Health Science and Arts/AV Technology/Communications were the most prevalent career pathways among 8<sup>th</sup> grade Mississippi Delta students.**

Career Pathways	Mississippi Delta Cohort	
	Pre-expo n (%)	Post-expo n (%)
Health Science	228 (44.4)	57 (41.0)
Arts, AV Technology and Communications	58 (11.3)	14 (10.1)
Law, Public Safety, Corrections and Security	42 (8.2)	13 (9.4)
Education and Training	38 (7.4)	8 (5.8)
Engineer and Polymer Science	29 (5.6)	8 (5.8)
Business Management and Administration	23 (4.5)	8 (5.8)
Agriculture Food and Natural Resources	15 (2.9)	3 (2.2)
Architecture and Construction	13 (2.5)	6 (4.3)
Information Technology	13 (2.5)	4 (2.9)
Transportation, Distribution and Logistics	13 (2.5)	0
Hospitality and Tourism	11 (2.1)	2 (1.4)
Aerospace	9 (1.8)	3 (2.2)
Marketing	8 (1.6)	3 (2.2)
Finance	6 (1.2)	2 (1.4)
Human Services	5 (1.0)	3 (2.2)
Government and Public Administration	2 (0.4)	3 (2.2)
Manufacturing	1 (0.2)	1 (0.7)
Energy	0	1 (0.7)
<b>Total</b>	<b>514<sup>a</sup></b>	<b>139<sup>b</sup></b>

<sup>a</sup> Total number of students who responded to career pathways before attending the Delta P2P Career Expo a valid career pathway answer.

<sup>b</sup> Total number of students who responded to career pathways after the Delta P2P Career Expo with a valid answer (includes attendees and non-attendees).

The distribution of pathway preferences at the post-test also remained fairly similar when comparing those who did and did not attend the Coast and Delta Career Expos. This suggests the P2P Career Expo did not bring about considerable change in students’ career priorities, although this is not particularly surprising given the limited amount of time students spend at the Career Expo. When comparing those who did and did not attend the Career Expo, students’ who attended the Coast and Delta events preferred future career pathways included:

1. Health science,

2. Arts, AV technology and communications,
3. Law, public safety, corrections and security,
4. Engineer and polymer science, and
5. Education and training.

In comparing post-expo Coast responses by attendance, the biggest differences in career pathway interest included health science (attended=36.2% to not attended=32.5%) and architecture and construction (attended=3.9% to not attended=7.5%; see Table 7).

*Table 7. Mississippi Coast: Career Pathways Post-Coast Career Expo by Attendance*  
**Health Science and Arts/AV Technology and Communications were the most prevalent career pathways among 8<sup>th</sup> grade students who attended the Mississippi Coast Career Expo.**

Career Pathways	Mississippi Coast Cohort	
	Post-expo, attended n (%)	Post-expo, not attended n (%)
Health Science	567 (36.2)	26 (32.5)
Arts, AV Technology and Communications	234 (15.0)	10 (12.5)
Law, Public Safety, Corrections and Security	146 (9.3)	8 (10.0)
Engineer and Polymer Science	142 (9.1)	8 (10.0)
Education and Training	114 (7.3)	4 (5.0)
Architecture and Construction	61 (3.9)	6 (7.5)
Information Technology	44 (2.8)	3 (3.8)
Marine Science	39 (2.5)	3 (3.8)
Aerospace	34 (2.2)	2 (2.5)
Agriculture Food and Natural Resources	34 (2.2)	2 (2.5)
Business Management and Administration	32 (2.0)	2 (2.5)
Hospitality and Tourism	27 (1.7)	3 (3.8)
Human Services	26 (1.7)	1 (1.3)
Finance	14 (0.9)	0
Energy	12 (0.8)	0
Marketing	12 (0.8)	1 (1.3)
Manufacturing	11 (0.7)	0
Transportation, Distribution and Logistics	10 (0.6)	1 (1.3)
Government and Public Administration	6 (0.4)	0
<b>Total</b>	<b>1,565<sup>a</sup></b>	<b>80<sup>b</sup></b>

<sup>a</sup> Total number of attendees who responded to career pathways after attending the Mississippi Coast P2P Career Expo with a valid career pathway answer.

<sup>b</sup> Total number of respondents who answered about career pathways and did not attend the Mississippi Coast P2P Career Expo with a valid answer.

In comparing post-expo Delta responses by attendance, the biggest differences in career pathway interest included health science (attended=46.5% to not attended=16.0%) and arts, AV technology and communications (attended=7.9% to not attended=20.0%; see Table 8).

*Table 8. Mississippi Delta: Career Pathways Post-Delta Career Expo by Attendance*  
**Health Science and Law/Public Safety/Corrections/Security were the most prevalent career pathways among 8<sup>th</sup> grade students who attended the Mississippi Delta Career Expo.**

Career Pathways	Mississippi Delta Cohort	
	Post-expo, attended n (%)	Post-expo, not attended n (%)
Health Science	53 (46.5)	4 (16.0)
Law, Public Safety, Corrections and Security	11 (9.6)	2 (8.0)
Arts, AV Technology and Communications	9 (7.9)	5 (20.0)
Business Management and Administration	7 (6.1)	1 (4.0)
Education and Training	7 (6.1)	1 (4.0)
Engineer and Polymer Science	7 (6.1)	1 (4.0)
Aerospace	3 (2.6)	0
Agriculture Food and Natural Resources	3 (2.6)	0
Architecture and Construction	3 (2.6)	3 (12.0)
Marketing	3 (2.6)	0
Government and Public Administration	2 (1.8)	1 (4.0)
Information Technology	2 (1.8)	2 (8.0)
Energy	1 (0.9)	0
Finance	1 (0.9)	1 (4.0)
Hospitality and Tourism	1 (0.9)	1 (4.0)
Manufacturing	1 (0.9)	0
Human Services	0	3 (12.0)
Transportation, Distribution and Logistics	0	0
<b>Total</b>	<b>114 <sup>a</sup></b>	<b>25 <sup>b</sup></b>

<sup>a</sup> Total number of attendees who responded to career pathways after attending the Mississippi Delta P2P Career Expo with a valid career pathway answer.

<sup>b</sup> Total number of respondents who answered about career pathways and did not attend the Mississippi Delta P2P Career Expo with a valid answer.

# WHAT WERE THE 8<sup>th</sup> GRADE STUDENTS EXPERIENCES AT THE MISSISSIPPI COAST AND DELTA P2P CAREER EXPOS?

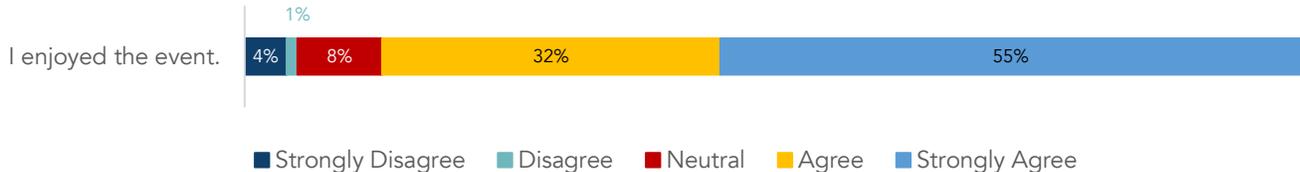
**Summary**

- Student satisfaction with the Mississippi Coast P2P Career Expo was very high with 82% satisfaction, and 85% saying they enjoyed the event.
- Student satisfaction with the Mississippi Delta P2P Career Expo was high, but somewhat lower with 68% satisfaction, and 70% saying they enjoyed the event.
- Elements that resonated most favorably with students in both events included the hands-on activities, talking with career experts, interaction with classmates, and the wide variety of career pathways in attendance.
- Having said that, fewer Delta attendees said they had an opportunity to engage in a hands-on activity.
- Suggestions made by the Mississippi students for future events included more interactive stations, physical activity, more space and time to enjoy the Career Expo, and more pathways that would include trucking, art, and a wider variety of healthcare and law options.

On the post-survey, students who attended the Coast and Delta Expos were asked to complete a set of 10 questions about their overall experience and satisfaction with the event. Students responded to these questions on a 5-point scale, on which higher responses reflect higher degrees of satisfaction.

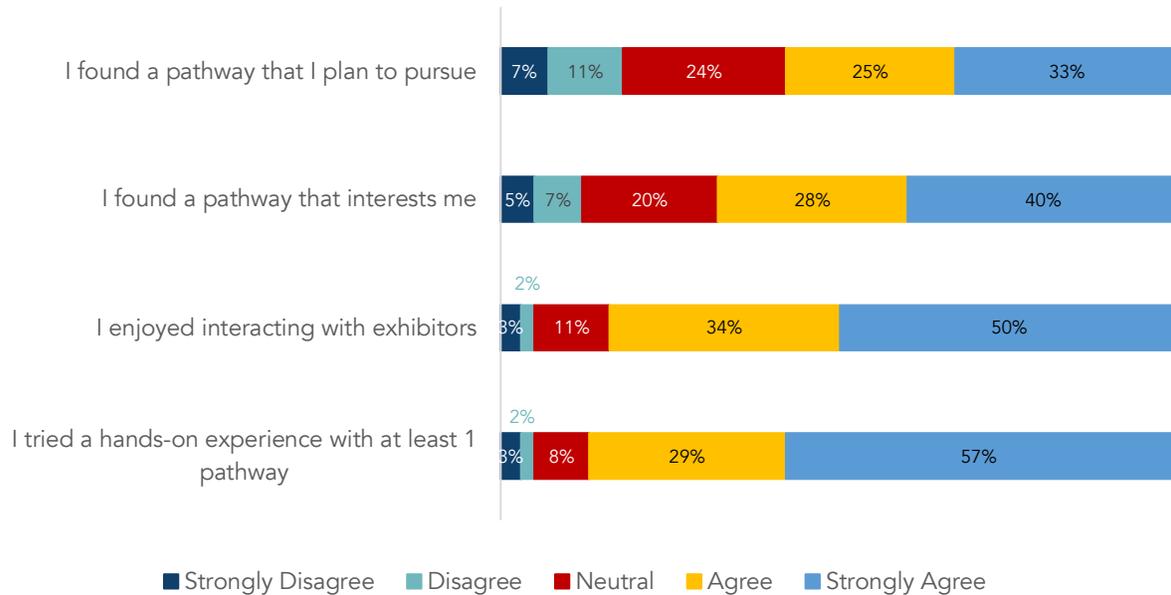
Students who attended the Coast P2P Career Expo reported strong satisfaction with the event. Overall, 85% agreed/strongly agreed that they enjoyed the event (see Figure 39), 84% agreed/strongly agreed that they enjoyed interacting with exhibitors, 68% agreed/strongly agreed that they found a pathway of interest, and 58% found a pathway they wanted to pursue. The majority of students, 86%, also reported that they participated with a hands-on experience at the Coast event (see Figures 40 and 41).

*Figure 39. Mississippi Coast: Student Enjoyment After the Coast Career Expo, n=1,959*  
**87% of Coast students agreed or strongly agreed that they enjoyed the event.<sup>a</sup>**



<sup>a</sup> Students who did not enjoy the event (responded with neutral, disagreed, or strongly disagreed) were mostly male (61%) and White (54%).

*Figure 40. Mississippi Coast: Student Feedback After Attending the Coast Career Expo*  
**Overall, Coast students showed strong support toward interacting with exhibitors and trying hands-on activities.<sup>a</sup>**



<sup>a</sup> There was a moderate correlation ( $r=0.3-0.4$ ) between all elements and overall satisfaction with the Mississippi Coast Career Expo.

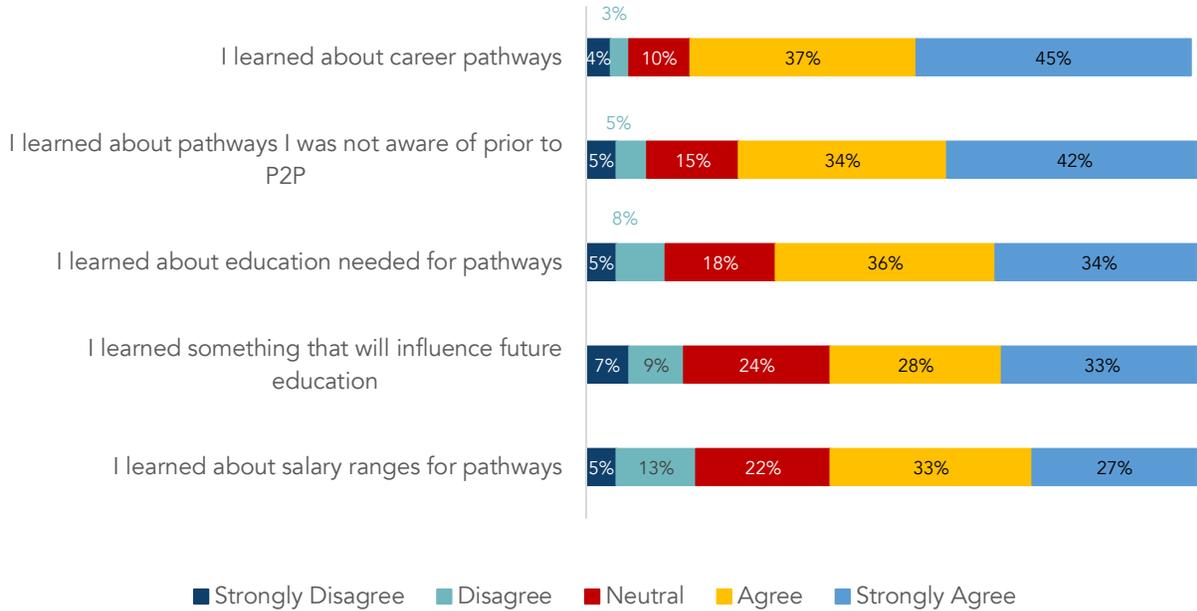
*Figure 41. Mississippi Coast: Student Feedback After Attending the Coast Career Expo, Means*  
**Students enjoyed interacting with exhibitors and trying hands-on activities.**



A high proportion of students agreed/strongly agreed that they gained new information by attending the Coast Career Expo. For example, 82% said they learned about career pathways, 76% said they learned about new pathways they were not previously aware of, and 70% said they learned about the education requirements for particular career pathways. Just under two-thirds (61%) said they learned something that will influence their future education (see Figure 42).

Figure 42. Mississippi Coast: Learned Elements Identified After Attending the Coast Career Expo

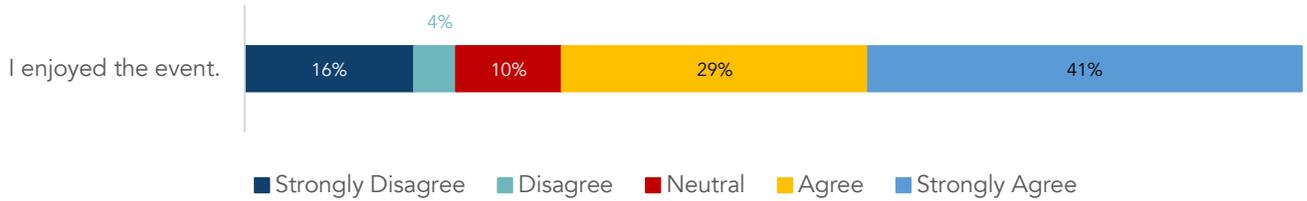
Students who attended the Career Expo reported gaining knowledge about new career pathways, education requirements, and compensation.<sup>a</sup>



<sup>a</sup> There was a moderate correlation ( $r=0.3-0.4$ ) between all elements and overall satisfaction with the Coast Career Expo.

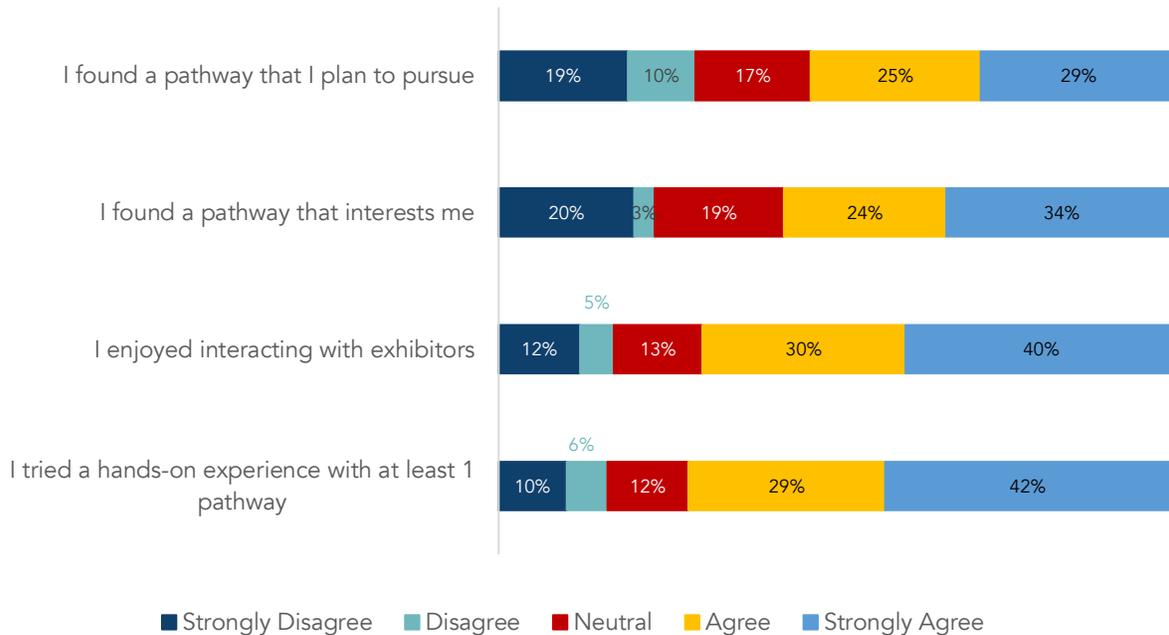
Students who attended the Delta P2P Career Expo also reported strong satisfaction with the event, although responses were slightly less positive. Overall, 70% agreed/strongly agreed that they enjoyed the event (see Figure 43), 70% agreed/strongly agreed that they enjoyed interacting with exhibitors, 58% agreed they found a pathway of interest, and 54% found a pathway they wanted to pursue. The majority of students, 71%, also reported that they participated in a hands-on experience at the Delta event (see Figures 44 and 45).

Figure 43. Mississippi Delta: Overall Student Enjoyment After the Delta Career Expo, n=175  
70% of students agreed or strongly agreed that they enjoyed the event.<sup>a</sup>



<sup>a</sup> Students who did not enjoy the event (responded with neutral, disagreed, or strongly disagreed) were mostly male (58%) and B/Multiracial (49%).

Figure 44. Mississippi Delta: Student Feedback After Attending the Delta Career Expo  
Overall, students showed strong support toward interacting with exhibitors and trying hands-on activities.<sup>a</sup>



<sup>a</sup> There was a moderate correlation ( $r=0.3$ ) between all elements and overall satisfaction with the Delta Career Expo.

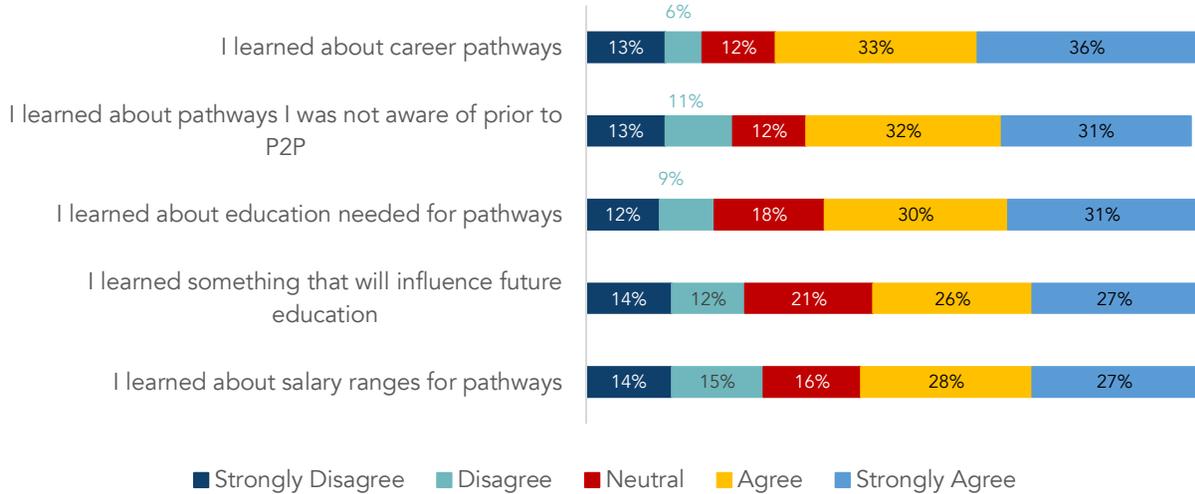
Figure 45. Mississippi Delta: Student Feedback After Attending the Delta Career Expo, Means Students enjoyed interacting with exhibitors and trying hands-on activities.



Again, a high proportion of students agreed/strongly agreed that they gained new information by attending the Delta Career Expo. For example, 69% said they learned about career pathways, 63% said they learned about new pathways they were not previously aware of, and 61% said they learned about the education requirements for particular career pathways. Just over half (53%) said they learned something that will influence their future education (see Figure 46).

Figure 46. Mississippi Delta: Learned Elements Identified After Attending the Delta Career Expo

Students who attended the Career Expo reported gaining knowledge about new career pathways, education requirements, and compensation.<sup>a</sup>

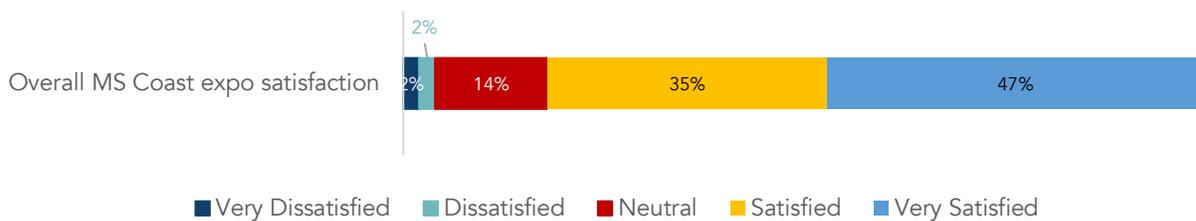


<sup>a</sup> There was a moderate correlation (r=0.3-0.4) between all elements and overall satisfaction with the Delta Career Expo.

Overall, student satisfaction with the Mississippi Coast P2P Career Expo was very high with 82% satisfaction (see Figure 47). Students reported that they enjoyed the hands-on activities, variety of career pathways presented, interaction with school peers in the Career Expo setting, inclusion of animals, talking with career experts, and all things related to healthcare and energy. When asked what could be changed for future events to be more successful, students suggested having more interactive stations, more physical activities, more time to explore the event, more space/fewer students at a time, and the option to purchase concessions.

Figure 47. Mississippi Coast: Overall Student Satisfaction After Attending the Coast Career Expo, n=1,957

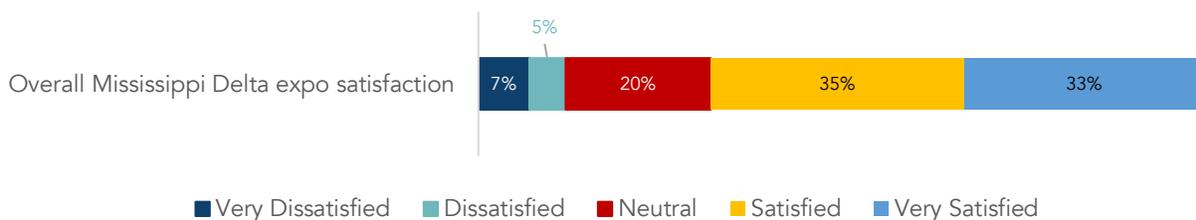
**Eighty-two percent of students were satisfied/strongly satisfied with the Coast Career Expo, mean (SD)=4.2 (0.9).**



Overall, student satisfaction with the Mississippi Delta P2P Career Expo was acceptable with 68% satisfaction (see Figure 48). Students who attended the event reported that they enjoyed the hands-on activities, healthcare stations, NASA station, interaction with exhibitors and students, and the inclusion of animals. When asked what could be changed for future events to be more successful, students from the Delta suggested a having longer time to explore and more career pathways focused on healthcare, trucking, art, and law.

Figure 48. Mississippi Delta: Overall Student Satisfaction After Attending the Delta Career Expo, n=173

**68% of students were satisfied/very satisfied with the Mississippi Delta Career Expo, mean (SD)=3.8 (1.2).**



## WHAT CHANGES WERE OBSERVED BETWEEN 8<sup>th</sup> AND 9<sup>th</sup> GRADE WITH RESPECT TO CAREER PLANNING?

### Summary

- Overall, there were few significant differences between 9<sup>th</sup> grader responses to the online survey, and their responses in the previous year. However, this may simply be due to the small number of students who completed both the 8<sup>th</sup> grade and the 9<sup>th</sup> grade survey (n=25). For this reason, these 9<sup>th</sup> grade results should be interpreted with caution.
- Of particular note, however, is the finding that career planning intentions (e.g. students' intentions to talk to counselors about their career options, or to spend time learning about career options) were lower among students in 9<sup>th</sup> grade (mean=3.81) than they were immediately following the 8<sup>th</sup> grade Career Expo (mean=4.02). Although these differences were not statistically significant, the data nonetheless suggest a dip in career planning intentions from 8<sup>th</sup> to 9<sup>th</sup> grade among this group of students.
- Similarly, there was a slight decrease in participating students' interest in thinking about a future career pathway in the 9<sup>th</sup> grade (80%) compared to the year before (84%).
- Interestingly, there was also a notable decrease in students' beliefs about the importance of understanding *what are my personal values?* from 8<sup>th</sup> grade (mean=4.5) to 9<sup>th</sup> grade (mean=4).
- Students' beliefs about the importance of education—and the likelihood that working hard at school would lead to positive outcomes—were also lower in the 9<sup>th</sup> grade (mean=3.84) when compared to immediately after the Career Expo (mean=4.21).
- Moreover, students' beliefs about the relationship between career planning and positive career outcomes also decreased from the 8<sup>th</sup> grade, immediately after the Career Expo (mean=4.3) to 9<sup>th</sup> grade (mean=4.0).
- Taken together, the 9<sup>th</sup> grade survey data provide tentative evidence to suggest that students experience a 'dip' in career planning intentions and beliefs when progressing from the 8<sup>th</sup> grade to the 9<sup>th</sup> grade.

Interestingly, 9<sup>th</sup> grade career decision outcome expectancies—a student's belief that engaging in career planning activities would lead to positive career outcomes—predicted 9<sup>th</sup> grade student career planning intentions over and above other factors explored in this survey. This suggests that activities designed to influence students' beliefs about career decision outcome expectancies may be required if programs are to shift student career planning in the longer-term.

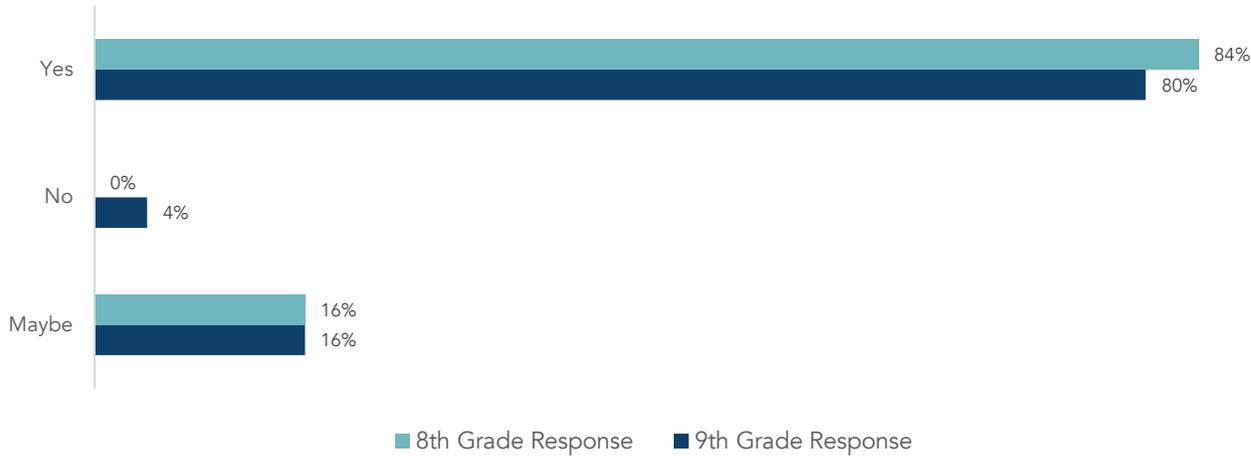
Twenty-five students completed the 9<sup>th</sup> grade career planning survey and were matched to their 8<sup>th</sup> grade post-Career Expo data. The following sections compares and tests responses and any

changes in career interests and planning behaviors that may have occurred over the 9<sup>th</sup> grade school year among students who attended a P2P Career Expo in the 8<sup>th</sup> grade.

### Thinking About a Career Pathway

There was a slight decrease in students' interest in thinking about a future career pathway in the 9<sup>th</sup> grade (80%) compared to their interest a year before, when they were asked immediately post attending a Career Expo in the 8<sup>th</sup> grade (84%; see Figure 49).

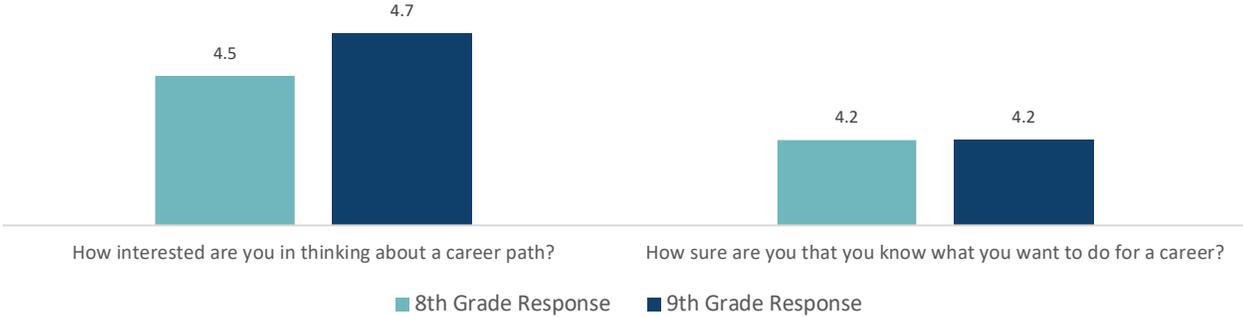
Figure 49. Have You Thought About a Career Pathway for Yourself?  
There was a slight downward trend from 8<sup>th</sup> to 9<sup>th</sup> grade in thinking about a career pathway.



### Interest and Certainty About a Career Pathway

Students were asked to respond on a 5-point scale *how interested are you in thinking about a career pathway for yourself* and *how sure are you that you know what you want to do for a career when you are older?* Overall, students reported being slightly more interested in thinking about a career path in the 9<sup>th</sup> grade (mean=4.7) compared to the 8<sup>th</sup> grade (mean=4.5). There was no difference noted over time when students were asked how sure they were what they wanted to do for a career (see Figure 50).

Figure 50. How Interested Are You in Thinking About a Career Pathway for Yourself<sup>a</sup>, and How Sure Are You That You Know What You Want to do for a Career When You Are Older?<sup>b</sup> There was a slight increase in interest of thinking about a future career pathway and virtually no change in being sure about knowing what students wanted to do for a career from 8<sup>th</sup> to 9<sup>th</sup> grade.



<sup>a</sup> Scaled responses for how interested are you in thinking about a career pathway for yourself: 5-point scale ranging from very uninterested=1 to very interested=5.  
<sup>b</sup> Scaled responses: 5-point scale ranging from very unsure=1 to very sure=5.

*Career Decision Making Factors Inventory*

**Need for Career Information Scale.** Overall mean scores on the Need for Information Scale were slightly lower at post-test in the 8<sup>th</sup> grade (mean=20) compared to the end of the 9<sup>th</sup> grade (mean=20.2). As a result, there was relatively little to no variability among the scale’s elements across both years among survey respondents who attended a Career Expo in the 8<sup>th</sup> grade (see Figures 51 and 52).

Figure 51. Composite Score for Need for Career Information Scale <sup>a, b, c, d</sup> 9<sup>th</sup> grade students reported a slightly higher score on the need for career information scale compared to their matched responses in the 8<sup>th</sup> grade (p=0.89).

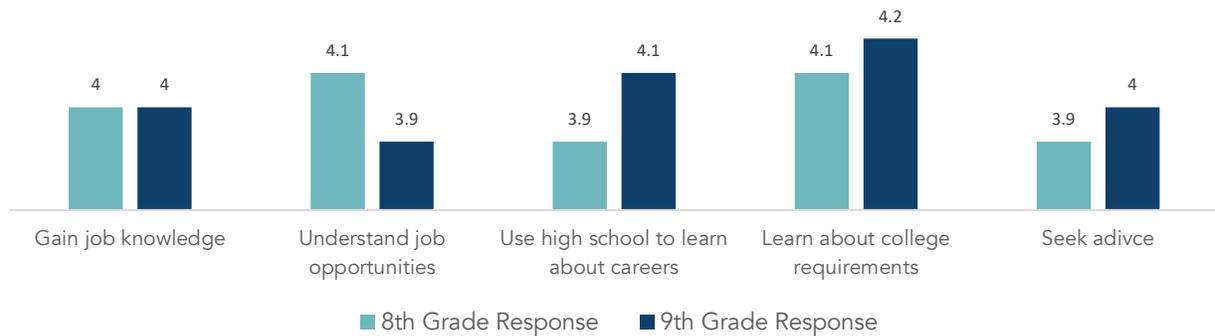


<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5, summed across 5 elements for range from 1 (more career certainty) to 25 (less career certainty).  
<sup>b</sup> Students 8<sup>th</sup> grade responses: n=24.  
<sup>c</sup> Students 9<sup>th</sup> grade responses: n=24.

<sup>d</sup> There is not a statistically significant difference between 8<sup>th</sup> grade students who attended (sum score=20) versus their matched response in the 9<sup>th</sup> grade sum score=20.2),  $p=0.89$ .

Figure 52. Need for Career Information Scale Elements <sup>a</sup>

There was little variability across the surveys between 8<sup>th</sup> and 9<sup>th</sup> grade school years for the need for career information.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5

**Self-Knowledge Scale.** Students in the 9<sup>th</sup> grade continued to agree that self-knowledge was important when determining future career pathways. There was a minimal increase in the overall need for self-knowledge in the 9<sup>th</sup> grade compared to 8<sup>th</sup> grade. Differences in individual elements of the self-knowledge scale were noted on items about knowing *what things are most important to me* and *what are my specific goals in life*. Of interest, there was a notable decrease across time in student’s awareness of *what are my personal values* (see Figures 53 and 54).

Figure 53. Composite Score for Need for Self-Knowledge Scale <sup>a, b, c, d</sup>

There was little variability across the surveys between 8<sup>th</sup> and 9<sup>th</sup> grade school years for the need for self-knowledge.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5; summed across 5 elements for a range of 1 (more career certainty) to 25 (less career certainty).

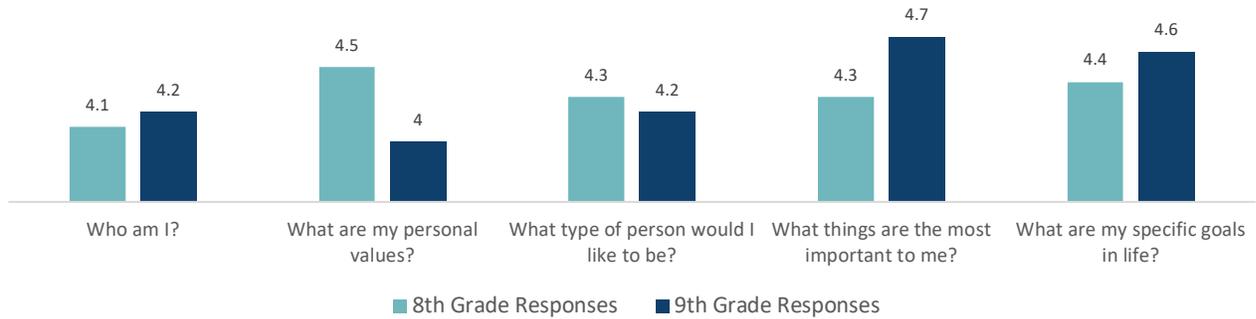
<sup>b</sup> Students 8<sup>th</sup> grade responses: n=24.

<sup>c</sup> Students 9<sup>th</sup> grade responses: n=24.

<sup>d</sup> There is not a statistically significant difference between 8<sup>th</sup> grade students who attended (sum score=21.4) versus their matched response in the 9<sup>th</sup> grade sum score=21.5),  $p=0.92$ .

Figure 54. Self-Knowledge Scale Elements <sup>a</sup>

There were minimal changes in the beliefs about self-knowledge from the 8<sup>th</sup> to 9<sup>th</sup> grade; however, there was a recognizable decrease in students' beliefs on personal values.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5.

### Career Outcome Expectations

**Education Performance Assessment Scale.** Student beliefs in the relationship between educational performance and positive career outcomes were slightly lower in the 9<sup>th</sup> grade than immediately after attending the Career Expo in the 8<sup>th</sup> grade (see Figure 55). Differences between the 8<sup>th</sup> and 9<sup>th</sup> grade were also observed across all scale elements with the greatest decrease noted for the items: *if I try hard enough, I will get good grades; if I do well in school, then I will be better able to achieve my future goals; and if I get good grades, I will be able to have the career of my choice* (see Figures 56).

Figure 55. Mean Composite Score for Education Performance Assessment Scale <sup>a, b, c, d</sup>

There was a decrease in students' beliefs about the importance of education in relation to their career goals from the 8<sup>th</sup> grade (mean=4.2) to 9<sup>th</sup> grade (mean=3.5).



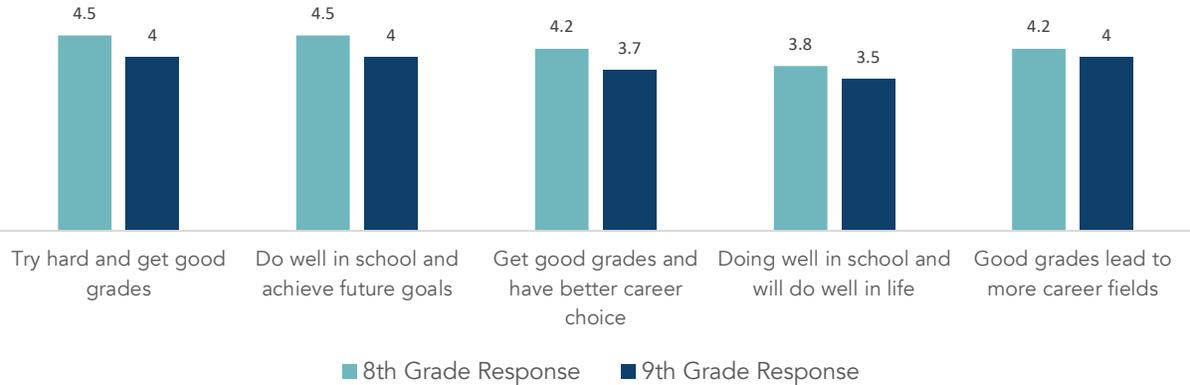
<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5; summed and taken the mean across 5 elements for range 1 (student does not value the need for career information to be successful) to 5 (student values the need for education performance to be successful).

<sup>b</sup> Students 8<sup>th</sup> grade responses: n=25.

<sup>c</sup> Students 9<sup>th</sup> grade responses: n=25.

<sup>d</sup> There is not a statistically significant difference between 8<sup>th</sup> grade students who attended (sum score=21.4) versus their matched response in the 9<sup>th</sup> grade sum score=21.5), p=0.09.

Figure 56. Education Performance Agreement Scale Elements <sup>a</sup>  
 Survey responses imply that students' concern for getting good grades and the impact education has on future career pathways decreased from the 9<sup>th</sup> grade to the 8<sup>th</sup> grade.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5.

**Career Decision Outcome Expectancies Scale.** Survey data suggest that students' views about the relationship between career planning and positive career outcomes also decreased from the 8<sup>th</sup> grade, immediately after the Career Expo (mean=4.3) to 9<sup>th</sup> grade (mean=4.0, p=0.30, see Figures 57 and 58).

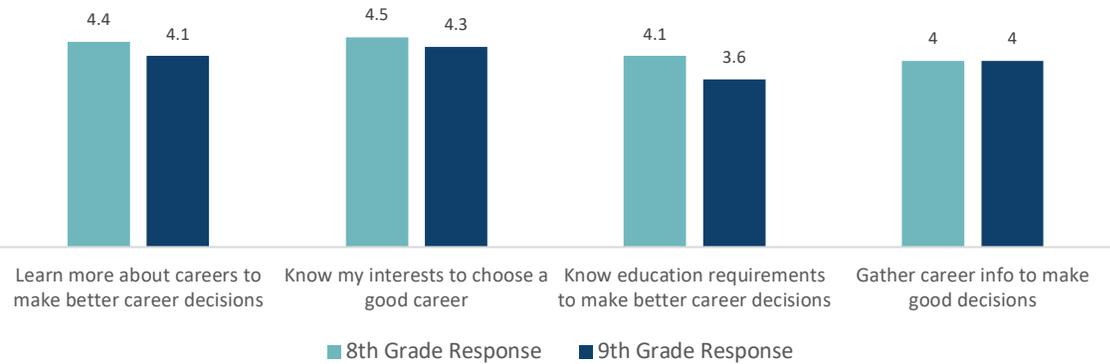
Figure 57. Mean Composite Score for Career Decisions Scale <sup>a, b, c, d</sup>  
 Students in the 9<sup>th</sup> grade had lower value on factors that influence career decisions compared to responses immediately post the Career Expo in the 8<sup>th</sup> grade.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5; summed and taken the mean across 4 elements for range 1 (student does not value the need for learning about a career to be successful) to 5 (student values the need for learning about all aspects of a career needed to be successful).  
<sup>b</sup> Students 8<sup>th</sup> grade responses: n=25.  
<sup>c</sup> Students 9<sup>th</sup> grade responses: n=25.  
<sup>d</sup> There is not a statistically significant difference between 8<sup>th</sup> grade students who attended (mean composite score=4.3) versus their matched response in the 9<sup>th</sup> grade mean composite score=4, p=0.30.

Figure 58. Career Decision Scale Elements <sup>a</sup>

Students beliefs that learning more leads to better career decisions decreased or stayed the same from the 8<sup>th</sup> to 9<sup>th</sup> grade on all Career Decision scale elements.



### Career Exploration Plans

In looking at students’ career exploration plans, students reported that they intend to do less career exploration in the 9<sup>th</sup> grade than they did in the 8<sup>th</sup> grade after attending a Career Expo (see Figures 59 and 60). In addition to the five elements that comprised the composite scale, there was a decrease noted when students were also asked how much they agreed that *if I know about the education I need for different careers, I will make better career decisions* (see Figure 60).

Figure 59. Mean Composite Score for Career Exploration Plans <sup>a, b, c, d</sup>

Students in the 9<sup>th</sup> grade had lower value on factors that influence career decisions compared to responses immediately post the Career Expo in the 8<sup>th</sup> grade.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5; summed and taken the mean across 5 elements for range 1 (student does not value the need for learning about a career to be successful) to 5 (student values the need for learning about all aspects of a career needed to be successful).

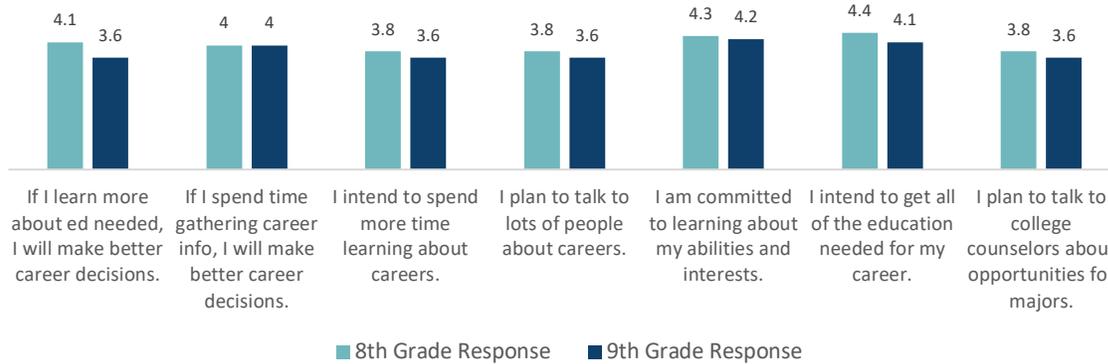
<sup>b</sup> Students 8<sup>th</sup> grade responses: n=25.

<sup>c</sup> Students 9<sup>th</sup> grade responses: n=25.

<sup>d</sup> There is not a statistically significant difference between 8<sup>th</sup> grade students who attended (mean composite score=4.0) versus their matched response in the 9<sup>th</sup> grade mean composite score=3.8, p=0.36.

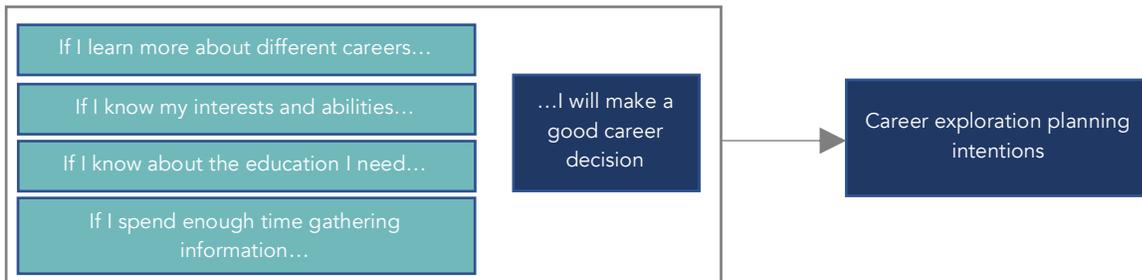
Figure 60. Career Exploration Plans <sup>a</sup>

Students' intentions to undertake career planning were slightly lower in the 9<sup>th</sup> grade.



<sup>a</sup> Elements not included in the mean composite score for Career Exploration Plans: *If I learn more about education needed, I will make better career decisions*; and *If I spend time gathering career information, I will make better career decisions*.

**Factors that influence career exploration plans.** In an effort to understand how P2P and their partners might best support 9<sup>th</sup> graders in their career exploration plans, CERE conducted additional analyses to look for factors that appear to influence career exploration plans. These analyses showed that career decision outcome expectancies predicted 9<sup>th</sup> grade career exploration plans over and above the other factors measured in the 9<sup>th</sup> grade survey ( $B=0.767, t=4.769, p<.001$ ). This suggests that activities designed to influence students' beliefs about career decision outcome expectancies may be required if programs are to shift student career planning in the longer-term.



### Career Planning Behaviors

**Educational Intentions Scale.** Consistent with the above trends, a higher proportion of 9<sup>th</sup> grade students reported being uncertain about obtaining a college degree (12%) after graduating from high school compared to immediately after attending the Career Expo in the 8<sup>th</sup> grade (0%; see Figure 61). Similarly, a higher proportion of 9<sup>th</sup> grade students reported being uncertain (32%) of obtaining a graduate degree compared to their response immediately after attending the Career Expo in the 8<sup>th</sup> grade (24%; see Figure 62).

Figure 61. Education Intentions and Plans to Obtain a College Degree

A higher proportion of students were undecided about attending college in the 9<sup>th</sup> grade (12%) compared to the 8<sup>th</sup> grade (0%).

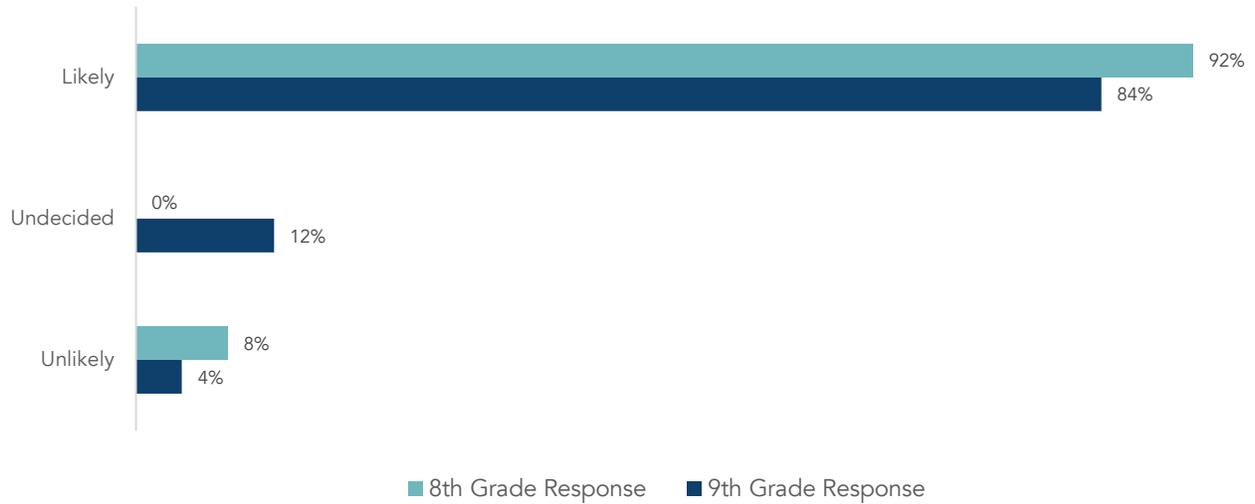
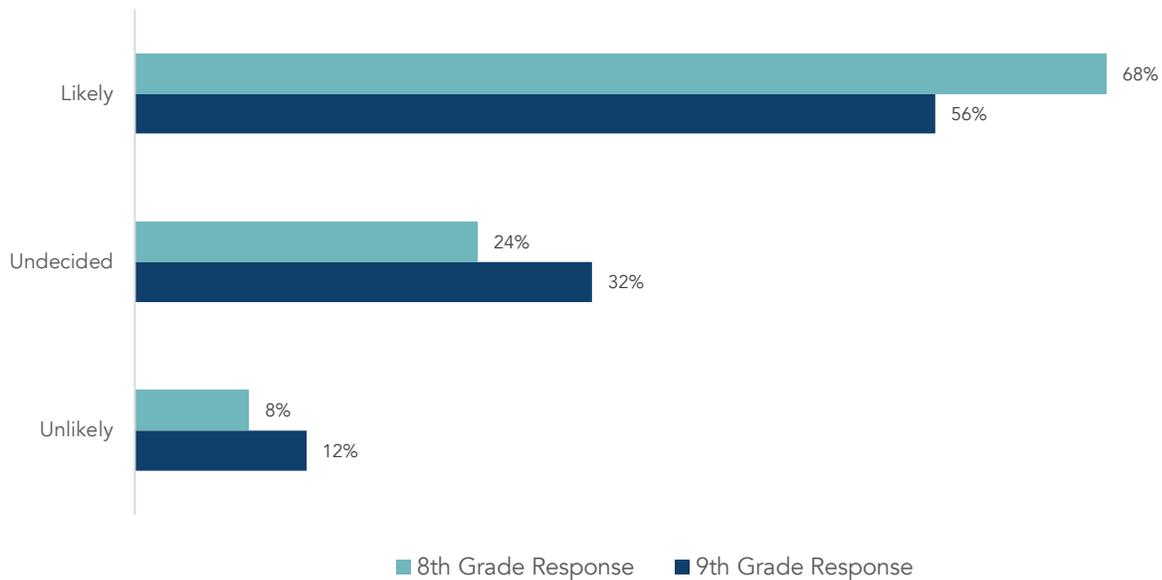


Figure 62. Education Intentions and Plans to Obtain a Graduate Degree

A smaller proportion of students in the 9<sup>th</sup> grade plan to obtain a graduate degree (56%) compared to when they were in the 8<sup>th</sup> grade and after they attended the Career Expo (68%).



## WHAT ARE GRADUATING SENIORS' CAREER PLANS?

### Summary

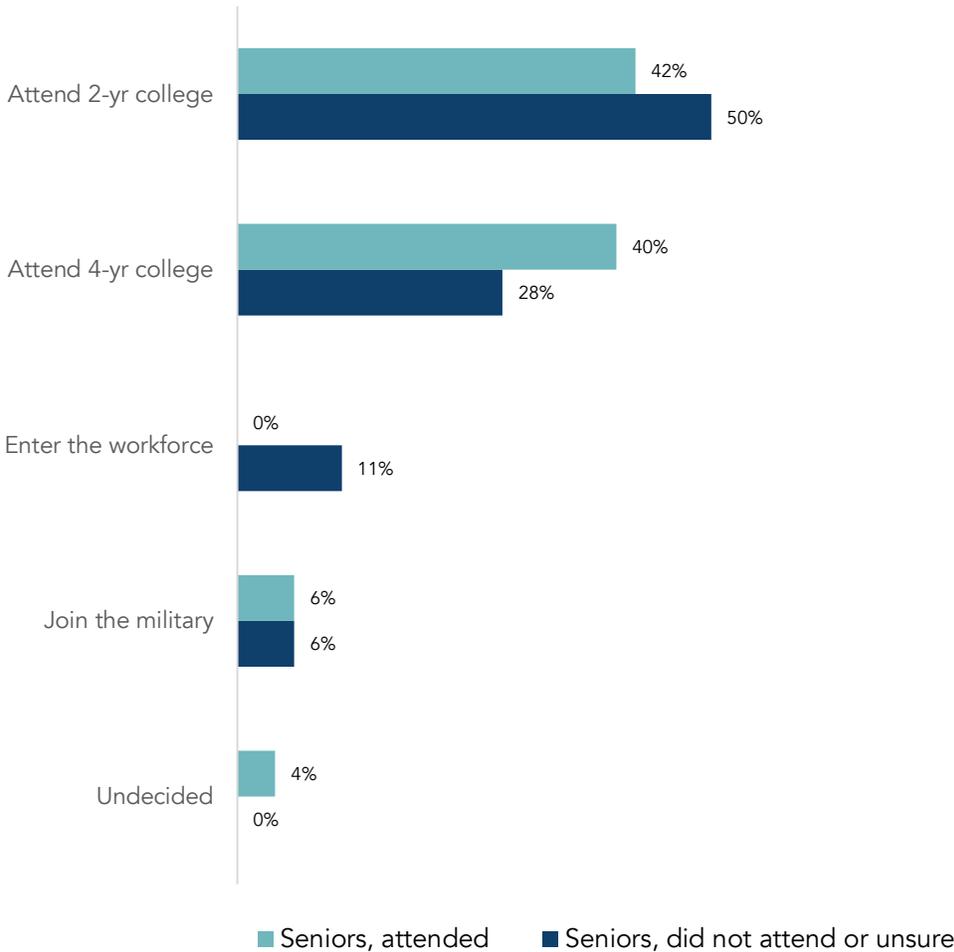
- Overall, attending a P2P Career Expo impacted graduating seniors and their future career and education plans, which can be interpreted as having a long-term effect.
- A higher proportion of graduating seniors who did not attend a Mississippi P2P Career Expo in the 8<sup>th</sup> grade (or were unsure about whether they attended) said they were sure about their career plans (94%) when compared to those who did attend (78%), however these differences were not statistically significant.
- In contrast, seniors who attended the P2P Career Expo were more likely to have plans to attend college after high school (80%) when compared to seniors who did not attend/were unsure (72%).
- There were no significant differences in seniors' beliefs about the need for / value of career information when comparing those who did and did not attend the Career Expo.
- 41% of graduating seniors said they had not received any type of career planning support from their school. Among the 59% of seniors who did receive some type of advice or training mechanisms (mean=2 types) from high school was done so according to the following:
  1. Two fifths of students (40%) said they took part in classroom lessons or discussions about post-graduation plans
  2. Just over one quarter (26%) took a full course related to job training or education options
  3. One quarter (25%) had at least 1 individual meeting with a school counselor, and
  4. Just under one quarter (24%) received some type of pamphlet or other literature about post-graduation plans.
- There were no statistically significant associations between support mechanisms and seniors who knew what they wanted to do when older.
- 86% of seniors agreed that they enjoyed the Career Expo they attended and 76% said the event they attended was influential on their post-high school graduation.
- 72% of graduating seniors said that teachers/school counsellors talked about the Career Expo at least once after having attended an event.

High school seniors who attended a P2P Career Expo in the 8<sup>th</sup> grade was queried for follow-up in an effort to gauge their future career plans. Analyses were conducted to test for a relationship between attending the P2P Career Expo and career planning behaviors among graduating seniors. The following analyses included 68 students who completed the online survey (see Appendix D for senior cohort details).

### What Are the Future Career Plans of Graduating Seniors After High School?

Seniors who attended a P2P Career Expo in the 8<sup>th</sup> grade appeared more likely to have plans to attend college after high school graduation (80%) compared to seniors who did not attend/were unsure (72%; see Figure 63).

Figure 63. Mississippi Seniors: Plans After High School Graduation  
 A greater proportion of seniors who went to a Career Expo reported plans to attend a 4-yr college (40%) compared to seniors who did not attend (28%; p=0.12).



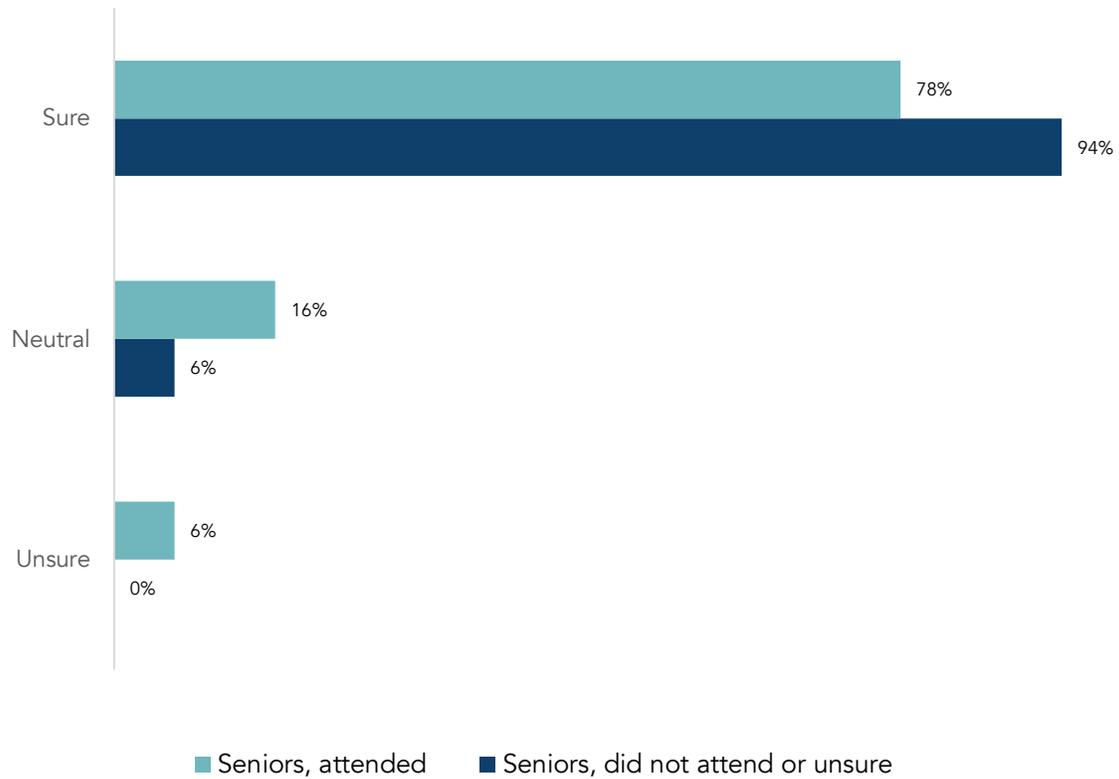
### How Sure Are Graduating Seniors About Future Career Plans?

When seniors were asked *how sure are you that you know what you want to do for a career?*, 78% said they were sure of a future career path and remembered attending a Career Expo in the 8<sup>th</sup> grade compared to 94 % who were sure and either did not or did not remember attending a Career

Expo ( $p=0.3$ ). This should be interpreted with caution given the low cell count numbers. (see Figure 64).

Figure 64. Mississippi Seniors: How Sure Are You That You Know What You Want to do for a Career?

Seniors who attended were less sure (78%) of their future career choice compared students who did not attend or did not remember attending (94%) ( $p=0.27$ ).

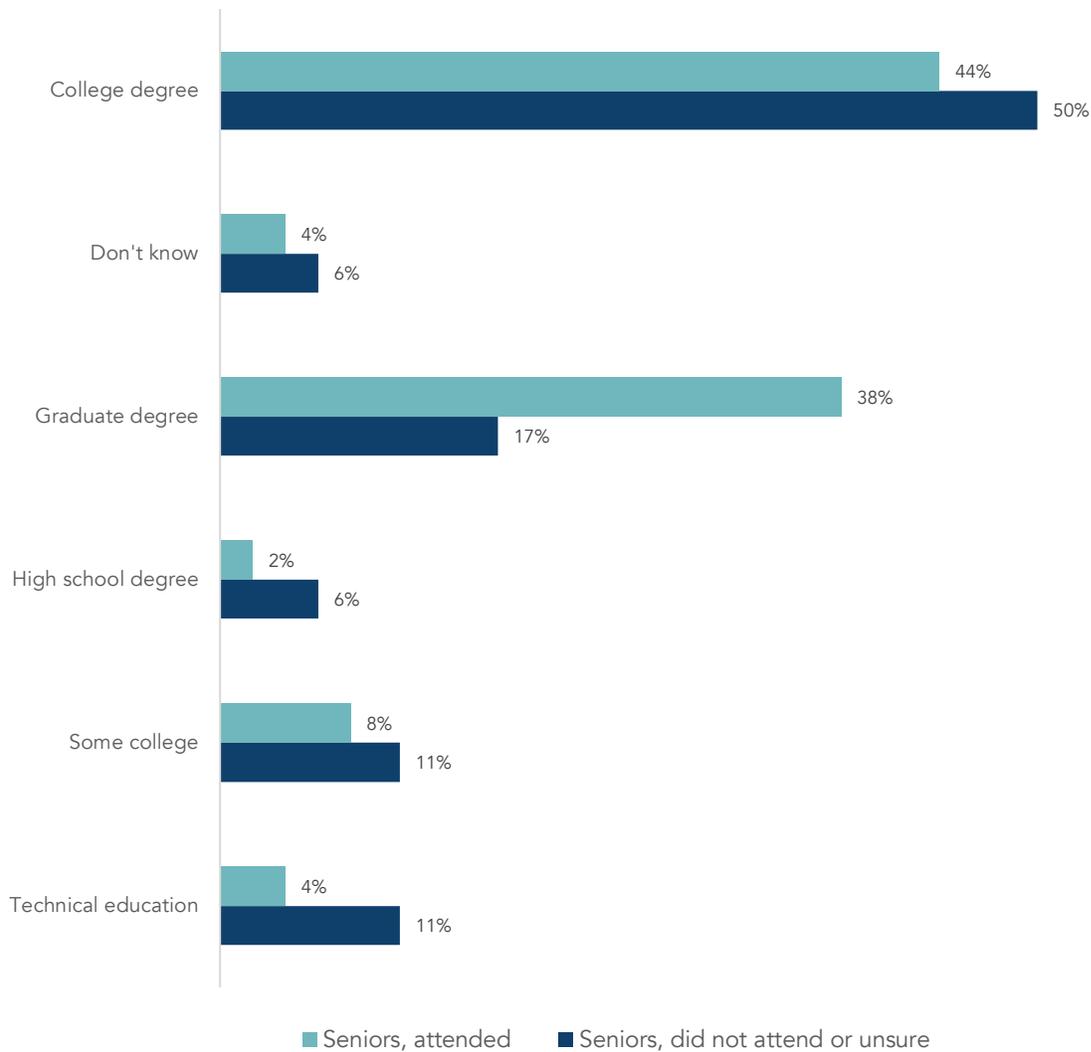


### What is the Perceived Education of Graduating Seniors to Achieve Future Career Plans?

In comparing seniors who attended or did not attend/unsure a Career Expo, there were differences noted; however, not at the statistically significant level ( $p=0.6$ ), likely due to low counts. Overall, more seniors who attended an event were likely to perceive a graduate degree being needed for a future career pathway (38%) compared to students who did not attend or were unsure of their attendance (17%) (see Figure 65).

Figure 65. Mississippi Seniors: Perceived Education Needed Q42\_n\_r

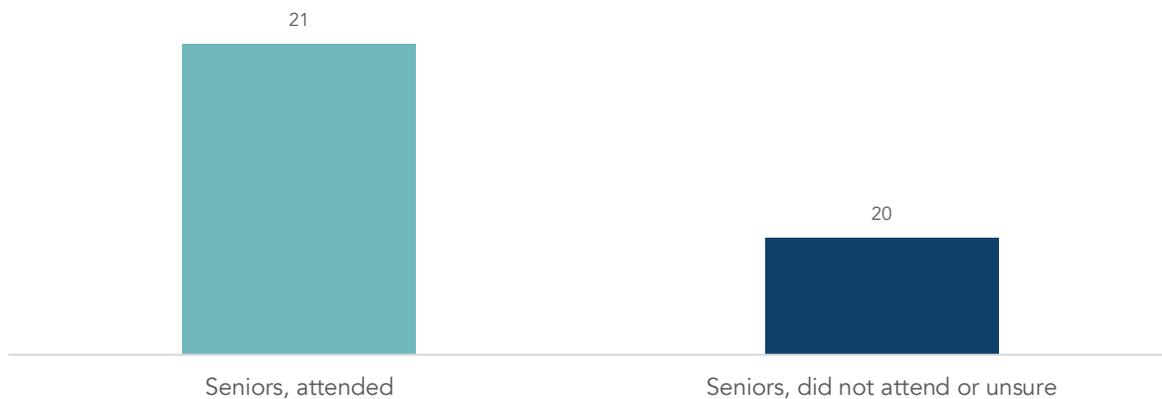
38% of seniors said they needed a graduate degree for their chosen career path compared to 17% of students who did not attend or were unsure if they attended ( $p=0.57$ ).



### Career Decision Making Factors Inventory

**Need for Career Information Scale.** Overall mean scores on the Need for Information Scale were slightly higher for students who attended (21.0) compared to students who did not/did not remember (20.0). The findings between comparison groups were not statistically significant,  $p<0.27$  (see Figures 66 and 67).

Figure 66. Mississippi Seniors: Composite Score for Need for Career Information Scale <sup>a, b, c, d</sup>  
 Seniors' perceived need for career information was mean=21 among Career Expo attendees compared to a mean=20 among seniors who did not attend/did not remember attending.



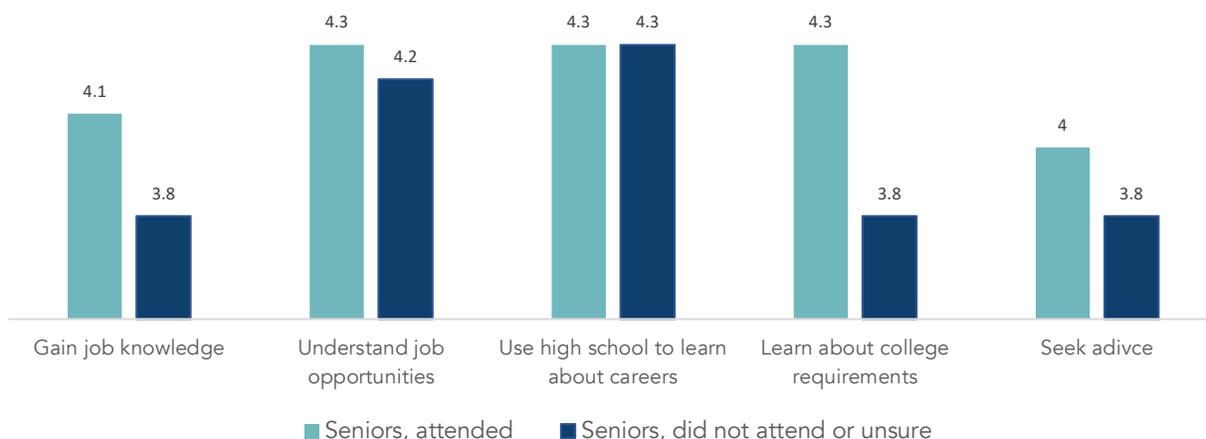
<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5, summed across 5 elements for range from 1 (more career certainty) to 25 (less career certainty).

<sup>b</sup> Seniors, attended: n=49.

<sup>c</sup> Seniors did not attend, unsure: n=18.

<sup>d</sup> There is not a statistically significant difference between attended (sum score=21) versus did not attend (sum score=20) seniors, p=0.27.

Figure 67. Mississippi Seniors: Need for Career Information Scale Elements <sup>a</sup>  
 Among seniors, there was little variability across the surveys by attendance at a Career Expo.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5

**Self-Knowledge Scale.** There were similar findings with respect to high school seniors' beliefs about the importance of self-knowledge when choosing a career pathway. While students agreed that understanding who they are, their personal values, and what type of person they want to be

were important when determining future career pathways, there was no difference when comparing students who did and did not attend an event (see Figure 68 and Figure 69).

*Figure 68. Mississippi Seniors: Composite Score for Need for Self-Knowledge Scale* <sup>a, b, c, d</sup>  
 The Career Expo did not appear to influence students' beliefs about the need for self-knowledge when selecting a career pathway.



<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5; summed across 5 elements for a range of 1 (more career certainty) to 25 (less career certainty).

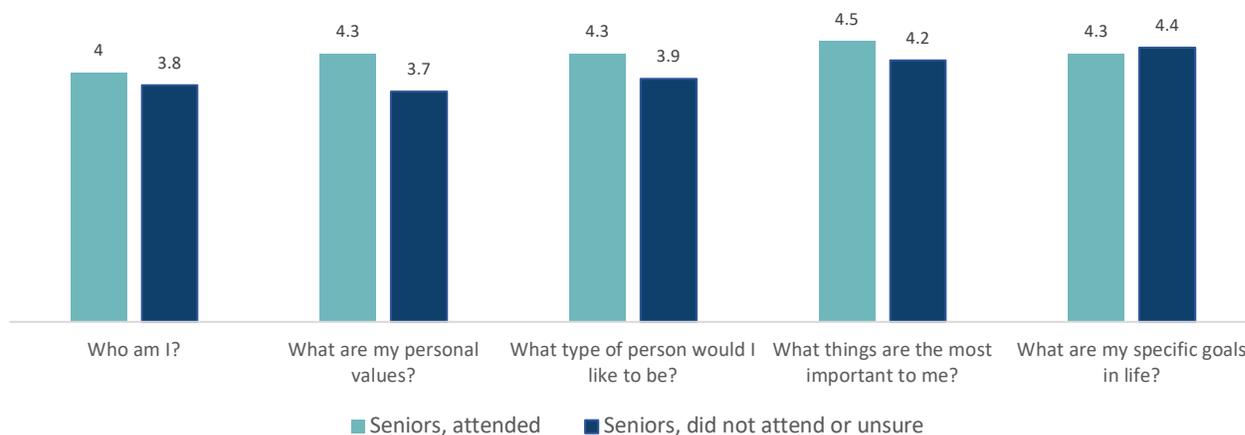
<sup>b</sup> Seniors, attended: n=47.

<sup>c</sup> Seniors did not attend, unsure: n=18.

<sup>d</sup> There is not a statistically significant difference between attended (sum score=21) versus did not attend (sum score=20) seniors, p=0.20.

*Figure 69. Mississippi Seniors: Self-Knowledge Scale Elements* <sup>a</sup>

There were minimal differences in beliefs about self-knowledge among high school seniors by P2P Career Expo attendance.

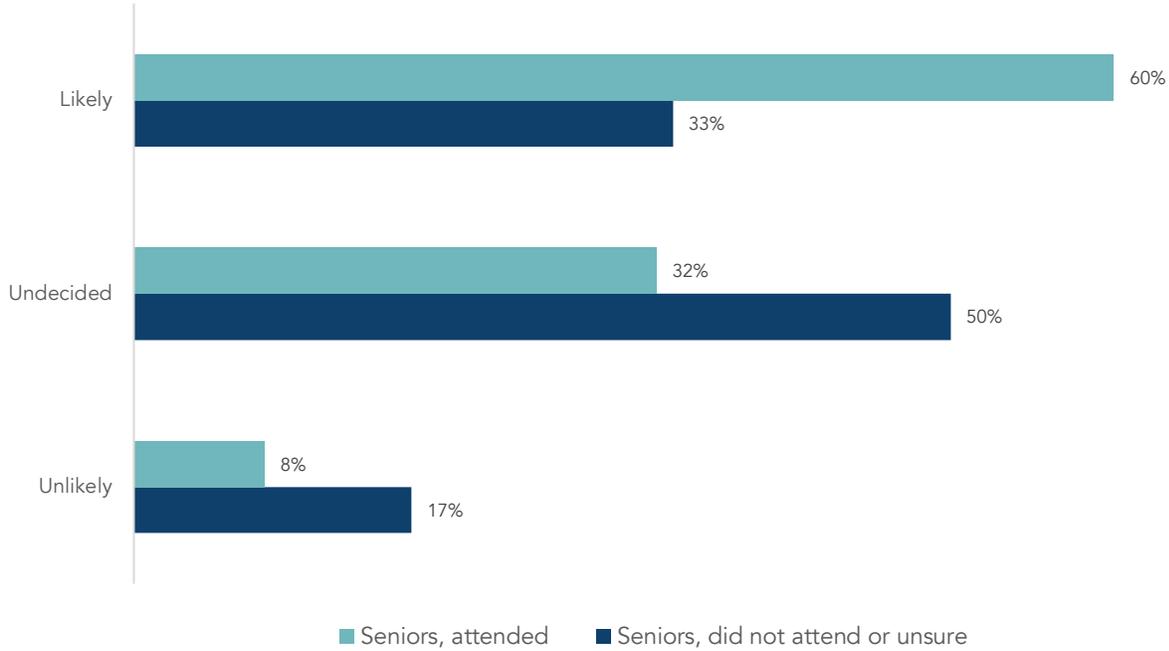


<sup>a</sup> Scaled responses: 5-point scale ranging from strongly disagree=1 to strongly agree=5.

*Career Planning Behaviors*

**Educational Intentions Scale.** Among high school seniors, a higher proportion who attended the Coast Career Expo said they were ‘likely’ to obtain a graduate degree (60%) when compared to students who did not attend the Career Expo or were unsure (33%,  $p=0.14$ ). Similarly, a smaller proportion of students who attended the Coast Career Expo were unsure of attending graduate school (32%) compared to undecided students who did not attend the Career Expo (50%; see Figure 70).

*Figure 70. Mississippi Seniors: Education Intentions and Plans to Obtain a Graduate Degree*  
A higher proportion ( $p=0.14$ ) of seniors who attended a Career Expo planned to obtain a graduate degree (60%) compared to those who did not attend or were unsure of attendance (33%).



*School-Based Career Planning*

As part of the online survey, the evaluation team asked high school seniors to describe the types of career planning support they received at school. With this set of questions, the aim was to (1) understand whether students had any post-Expo experiences related to career planning, and (2) to explore which type(s) of career planning activities might be related to career planning outcomes.

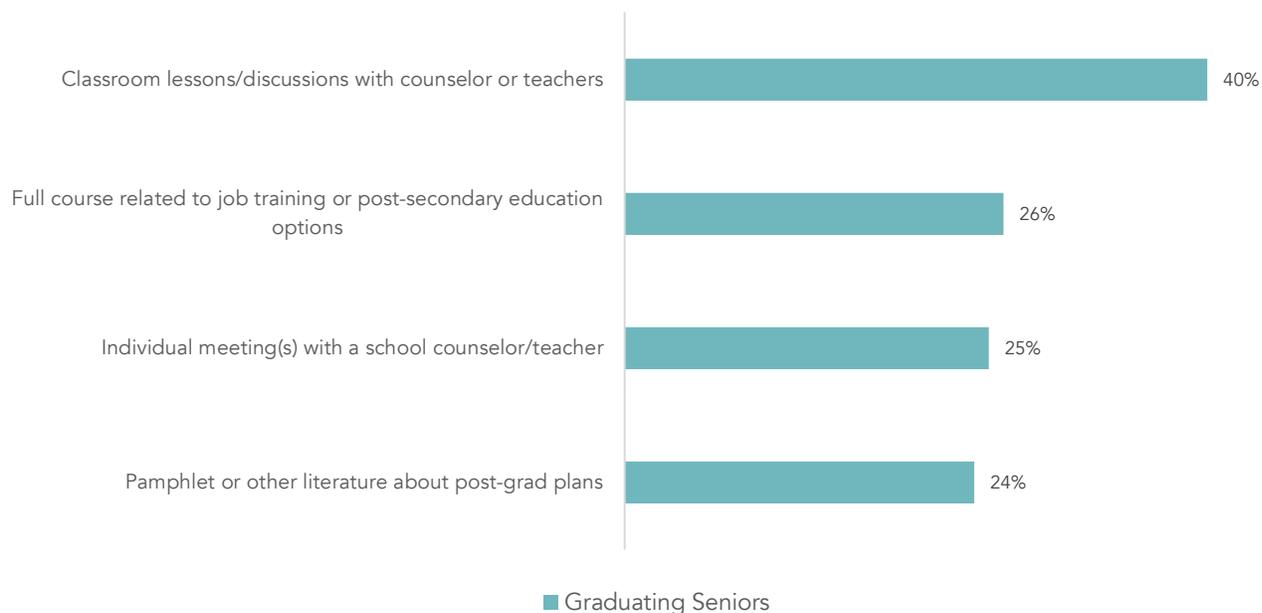
Among this cohort of graduating seniors, 41% said they had not received any type of career planning support from their school. Among the 59% of seniors who did receive some type of advice or training mechanisms (mean=2 types) from high school was done so according to the following:

- Two fifths of students (40%) said they took part in classroom lessons or discussions about post-graduation plans
- Just over one quarter (26%) took a full course related to job training or education options
- One quarter (25%) had at least 1 individual meeting with a school counselor, and
- Just under one quarter (24%) received some type of pamphlet or other literature about post-graduation plans (see Figure 71).

There were no statistically significant associations between support mechanisms and seniors who knew what they wanted to do when older. In addition, there was no correlation ( $r=0.23$ ) between the number of mechanisms received during senior year and career certainty.

Figure 71. Mississippi Seniors: Post-Graduate Advice or Training Received from High School,  $n=68$

Most graduating seniors, 59%, received at least one type of advice or training prior to graduation from their high school of enrollment.

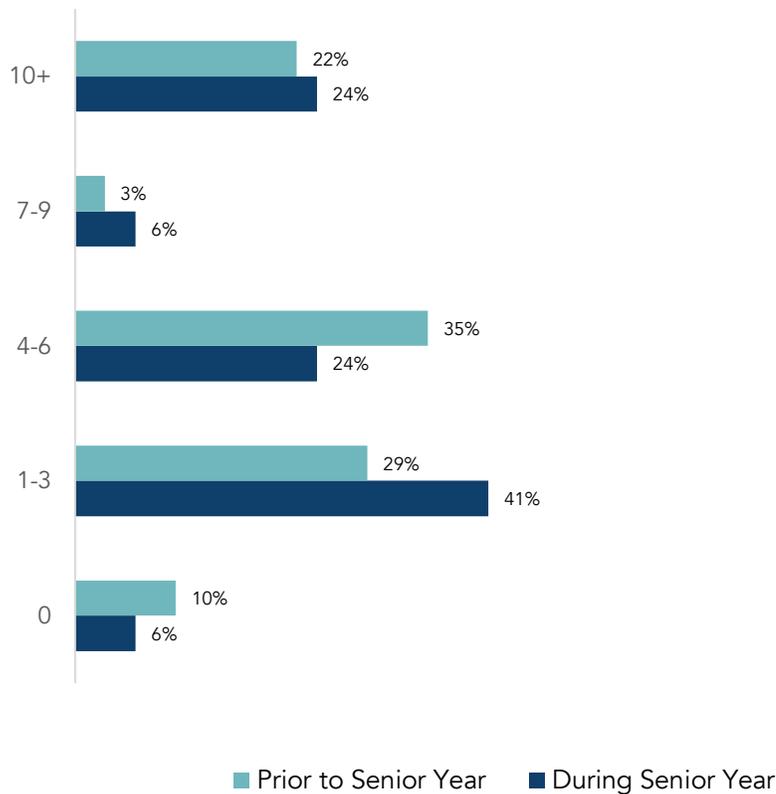


Among the 40% of students who had **career-related conversations with teachers**, seniors said they had an average of 4.6 conversations about career planning in the last 12 months and 4.5 in the years prior to their senior year. Participating students described these conversations

as somewhat helpful (mean=6.8 on a scale that ranged from 0=not helpful at all to 10=extremely helpful; see Figure 72).

Figure 72. Mississippi Seniors: Proportion of One-on-one Conversations with a Teacher About Future Career Plans

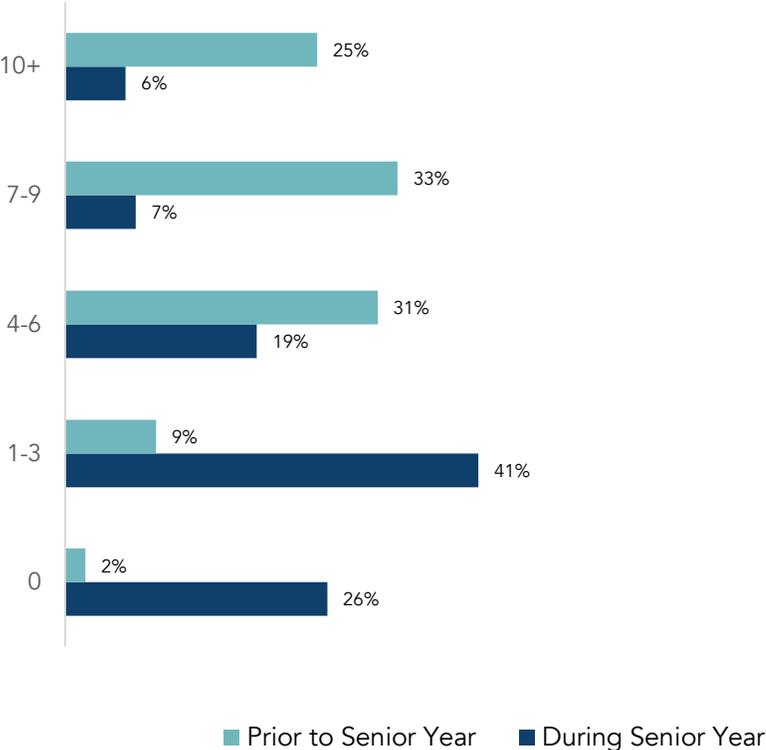
Seniors had an average of 4.6 conversations with teachers during senior year about future career plans.



Among the quarter of students who had **career-related conversations with school counsellors**, seniors reported a similar number of conversations. This group of seniors had a mean 4.3 conversations with school counselors about career planning over the last 12 months, describing them as somewhat helpful (mean=5.8 on a scale that ranged from 0=not helpful at all to 10=extremely helpful). Prior to their senior year, these students had, on average, 3.8 conversations with school counsellors about career planning (see Figure 73).

Figure 73. Mississippi Seniors: Proportion of One-on-one Conversations with a School Counselor About Future Career Plans

Seniors had an average of 4.3 conversations with a school counselor during senior year about future career plans.

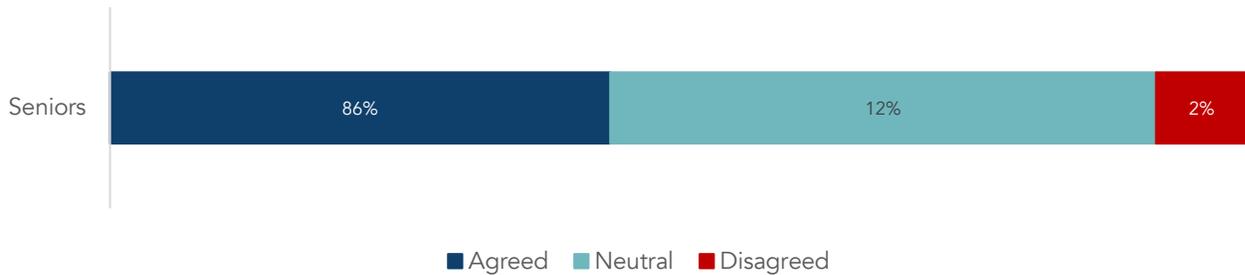


*Career Expo Influence on Graduating Seniors*

Graduating seniors were also queried on the impact that attending a P2P Career Expo in the 8<sup>th</sup> grade had on their future plans. Eighty-six percent of seniors agreed that they enjoyed the Career Expo they attended and 76% said the event they attended was influential on their post-high school graduation (see Figures 74 and 75). In addition, 72% of graduating seniors said that teachers/school counsellors talked about the Career Expo at least once after having attended an event.

Figure 74. Mississippi Seniors: Did You Enjoy the Event?

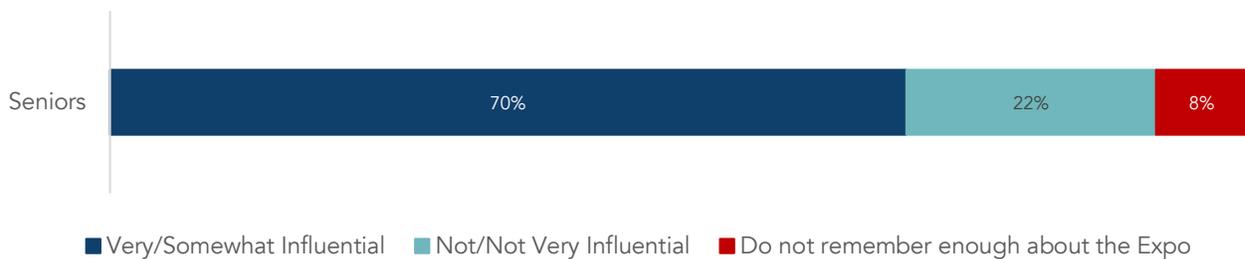
Most seniors, 86%, agreed that they enjoyed attending the Career Expo in the 8<sup>th</sup> grade.



<sup>a</sup> Observations, n=50.

Figure 75. Mississippi Seniors: How Influential Do You Think the P2P Career Expo Was on Your Post-high School Graduation Plans?

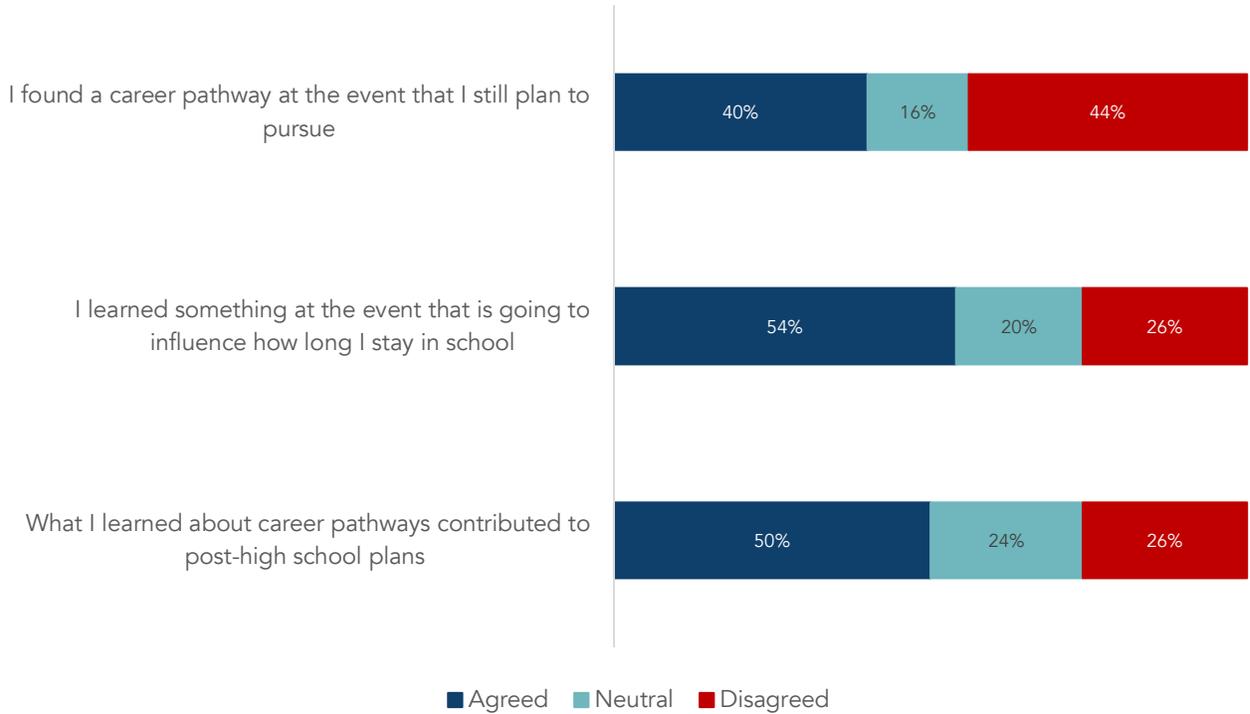
Most seniors, 70%, reported post-high school graduation plans being influenced as a result of attending the Career Expo in the 8<sup>th</sup> grade.



<sup>a</sup> Observations, n=50.

Mississippi seniors reported that attending a Career Expo in the 8<sup>th</sup> grade not only influenced how long they would stay in school post-high school graduation, but that they also found a career pathway of interest at the event while agreeing that what they learned at the event influenced their post-high school plans (see Figure 76).

Figure 76. Mississippi Seniors: What Was Your Experience at a Career Expo?  
 Overall, seniors agreed that attending a Career Expo influenced future career pathways and plans.



<sup>a</sup> Observations, n=50.

## CONCLUSIONS & RECOMMENDATIONS

The P2P Career Expo appears to be a highly positive experience for those who attend. Students who attended the Mississippi Coast and Delta P2P Career Expos felt the event helped to shape their awareness of, and thinking about, career opportunities and pathways. Students also enjoyed opportunities to speak with career professionals and take part in interactive activities.

Comparative data also show that students who attend are more likely to have begun thinking about career pathways and used the P2P Career Expo to refine their understanding about the educational requirements for their intended careers. In this way, the P2P Career Expos in Mississippi appear to represent a positive starting point for students' thinking about career opportunities. This is consistent with earlier findings about P2P Career Expos held elsewhere and also in comparison to the results reported from the 2019 South Carolina Career Expo.

### RECOMMENDATIONS

- Acknowledging that the P2P Career Expo in South Carolina did not appear to shift students' underlying beliefs about career planning, it may be that there is a need for a partnership with schools and school counselors to provide more career planning support to graduating seniors throughout high school; however, this is likely out of the current scope of the P2P goals and objectives.
- While the vast majority of students enjoyed their time at the P2P Career Expo, the survey data suggest that a small group of students (est. 15% from the Coast event and 30% from the Delta event) did not rate the event highly. With this in mind, it may be useful for P2P to engage further with these groups to better understand their experience(s) and the factors that might further engage Delta students.
- Potential suggestions for adaptation emerging from the survey data include broadening the pathways present to include careers in trucking, art, and more law and healthcare options.
- Additionally, an interesting finding from this study is that there are a small number of career pathways for which there was little to no interest among participating students (e.g. Finance, Energy, and Government/Public Administration from the Coast and Aerospace, Agriculture Food/Natural Resources, Energy, and Transportation/Distribution/Logistics from the Delta). It may be valuable to map student interests to anticipated job growth in Career Expo locations so that P2P can assess whether some pathways—specifically those with higher expected jobs growth over the coming years—might benefit from additional support when developing exhibits to ensure they attract an appropriate number of students.

- It is recommended that future rounds of data collection include mechanisms to identify individual students so that individual-level change from pre to post Career Expo can be captured in more detail.

# APPENDIX A. MEASUREMENT CHARACTERISTICS

## Measurement Characteristics

The Career Factors Inventory includes two subscales: 1) Need for Career Information and 2) Need for Self-Knowledge. Both scales in the Career Factors Inventory contains six scored items and were summed to create an overall composite score per student with a scoring range from 25 (less career certainty) to 1 (more career certainty). See Table A1 for the specific questions that comprise each scale that create the overall Career Factors Inventory and Figure A1 for scoring.

Table A1. Career Factors Inventory

**These scales were included to measure students' level of agreement on the need to be well informed about careers and self prior to choosing a career pathway.**

### Need for Career Information <sup>a, b</sup>

Before choosing or entering a particular career area I still need to gain practical knowledge of different jobs through as much part-time and summer work as possible.

Before choosing or entering a particular career area I still need to find out what present and predicted job opportunities are like for a certain career area or areas.

Before choosing or entering a particular career area I still need to use my free time and school courses to help determine what type of career I might enjoy and do well in.

Before choosing or entering a particular career area I still need to familiarize myself with one or a number of college majors and their requirements.

Before choosing or entering a particular career area I still need to seek advice from others regarding my choice.

### Need for Self-Knowledge <sup>a, b</sup>

Before choosing or entering a particular career area I still need to attempt to answer "who am I?"

Before choosing or entering a particular career area I still need to attempt to answer "what are my personal values?"

Before choosing or entering a particular career area I still need to attempt to answer "what type of person would I like to be?"

Before choosing or entering a particular career area I still need to attempt to answer "what things are the most important to me?"

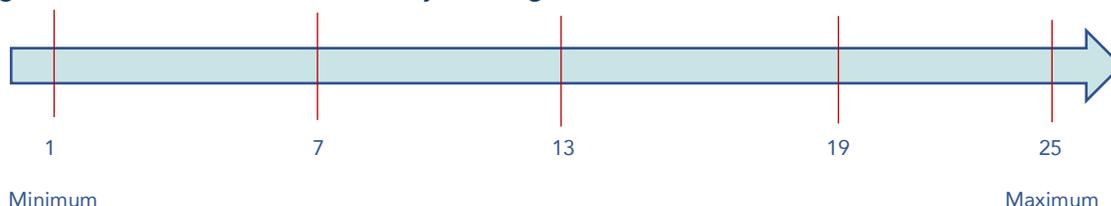
Before choosing or entering a particular career area I still need to attempt to answer "what are my specific goals in life?"

<sup>a</sup> Scaled responses: strongly agree=5, agree=4, neutral=3, disagree=2, strongly disagree=1.

<sup>b</sup> Need for Career Information scale and Need for Self-Knowledge scale scoring: sum responses ranging from 1 (more career certainty) to 25 (less career certainty).

The Need for Career Information Scale and the Need for Self-Knowledge Scale were each scored separately by summing each individual’s responses within each component. When interpreting responses, higher scores equate to a student’s greater desire to seek career information prior to entering a career path (Need for Career Information scale) and the degree to which they recognize the need to understand one’s self in order to make quality career path decision (Need for Self-Knowledge scale).

Figure A1. Career Factors Inventory Scoring Mechanism



The Outcome Expectations measure also includes two subscales: 1) outcomes expectations related to the Educational Performance scale and 2) outcomes expectations related to the Career Decision-making Behaviors scale. See Table A2 for questions used to collect data and Figures A2 and A3 for scoring.

Table A2. Outcome Expectations

**These scales were included to measure how much students agree that education performance and knowledge will impact future career outcomes.**

**Education Performance Agreement <sup>a, b</sup>**

- If I try hard enough, I will get good grades.
- If I do well in school, then I will be better able to achieve my future goals.
- If I get good grades, I will be able to have the career of my choice.
- Doing well in school also means I will do better with the rest of my life.
- If I get a good grade point average, then I will be able to get into more career fields.

**Career Decision <sup>a, c</sup>**

- If I learn more about different careers, I will make a better career decision.
- If I know my interests and abilities, then I will be able to choose a good career.
- If I know about the education I need for different careers, I will make a better career decision.
- If I spend enough time gathering information about careers, I can learn what I need to know to make a good decision.

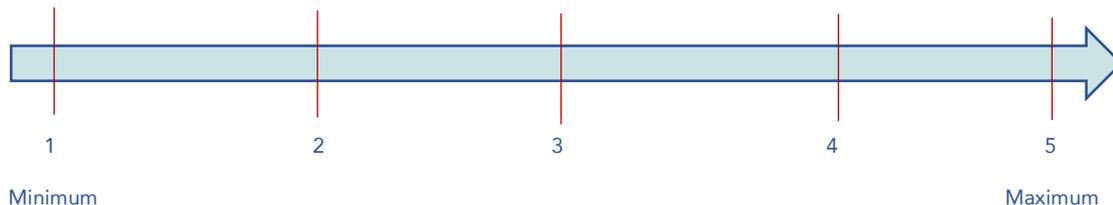
<sup>a</sup> Scaled responses: strongly agree=5, agree=4, neutral=3, disagree=2, strongly disagree=1.

<sup>b</sup> Education Performance Agreement scoring: mean of the sum of responses ranging from 1 (poor) 5 (desired).

<sup>c</sup> Career Decision Scale scoring: mean of the sum of responses ranging from 1 (poor) to 4 (desired).

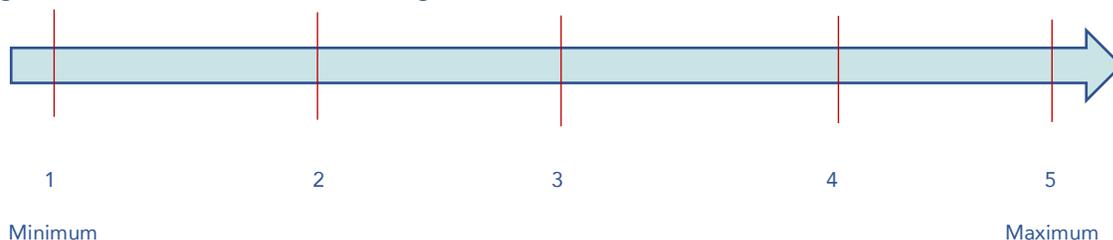
The Education Performance Agreement Scale was scored by summing each element’s response and taking the mean of that sum. Higher scores equate to a student’s belief that excelling academically is associated with success (see Figure A2).

Figure A2. Education Performance Agreement Scoring Mechanism



Similarly, the Career Decision Scale was scored by summing each element’s response and taking the mean of that sum. Higher scores equate to a student’s belief that the more information gained about a future career path is associated with success (see Figure A3).

Figure A3. Career Decision Scoring Mechanism



The Planning Intentions scale was scored by summing each of its five elements’ responses for a possible rang of five to 25. Higher scores equate to a student’s belief that seeking information and planning ahead is associated with success (see Table A3 and Figure A4).

Table A3. Planning Intentions

**This scale was included to measure how much students agree that behaviors associated with planning for the future will impact future career outcomes.**

Planning Intentions <sup>a, b</sup>

I intend to spend more time learning about careers than I have been.

I plan to talk to lots of people about careers.

I am committed to learning more about my abilities and interests.

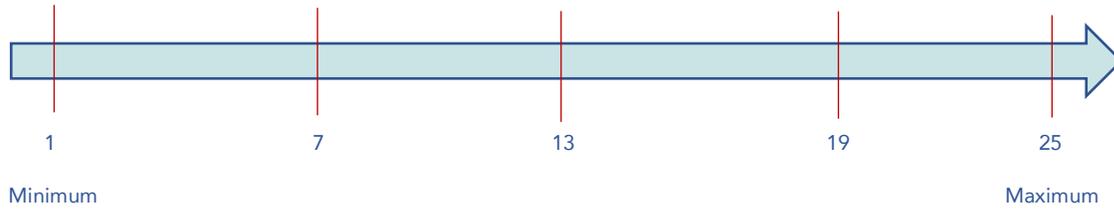
I intend to get all of the education I need for my career choice.

I plan to talk to advisers or counselors in my college about career opportunities for different majors.

<sup>a</sup> Scaled responses: strongly agree=5, agree=4, neutral=3, disagree=2, strongly disagree=1.

<sup>b</sup> Planning Intentions scale scoring: sum responses ranging from 1 (poor) to 25 (desired).

Figure A4. Planning Intentions Scoring Mechanism



Finally, a two-item scale related to educational intentions was also included. See Table A4 for both questions that comprise this scale designed to collect students' intentions on future education plans.

Table A4. Educational Intentions

**This scale was included to measure future plans related to educational intentions.**

Education Intentions <sup>a</sup>

How likely are you to complete a 4-year degree after high school?

How likely are you to complete a 4-year degree after high school AND then complete an advanced degree (master's degree, PhD, MD, or JD)?

<sup>a</sup> Scaled responses: very likely=5, likely=4, neutral=3, unlikely=2, very unlikely=1.

# APPENDIX B. DETAILED DEMOGRAPHIC DATA: COAST AND DELTA CAREER EXPO COHORTS

## DATA MANAGEMENT PROCEDURES

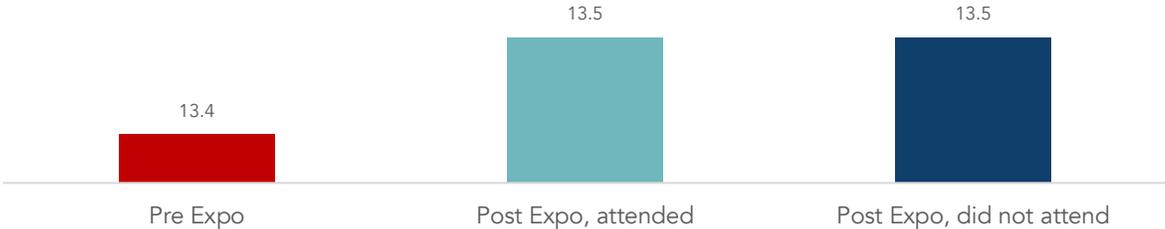
As described above, surveys were completed through the online survey software platform, Qualtrics, with distribution to participating students occurring via their respective school administrators. Due to this administrative mechanism, CERE had no knowledge of how many surveys were distributed and thus a yield rate was not calculated.

All data were downloaded by CERE researchers and were not accessible nor seen by any school personnel or survey participants. Data management, cleaning and analyses included steps to ensure that all responses were valid and useful. Pre and post-expo surveys that were started but lacked sufficient data to calculate subscales were not included in the analyses. Also, students who did not completely finish the entire survey were eliminated from any analyses.

## WHO ARE THE 2019 MISSISSIPPI COAST AND DELTA P2P CAREER EXPO STUDENTS?

Among the 8<sup>th</sup> grade students in Mississippi who participated in the pre and post-expo surveys for the Coast and Delta events, the mean age was slightly less than 14 years (see Figures B1 and B2), likely to be female among pre-expo students and post-expo students who attended the event and White/Caucasian for the Coast Career Expo and Black/African American for the Delta Career Expo (see Figures B3, B4, B5, and B6).

Figure B1. Mississippi Coast: Mean Age by Career Expo Attendance <sup>a</sup>  
Students are approximately 14 years of age.



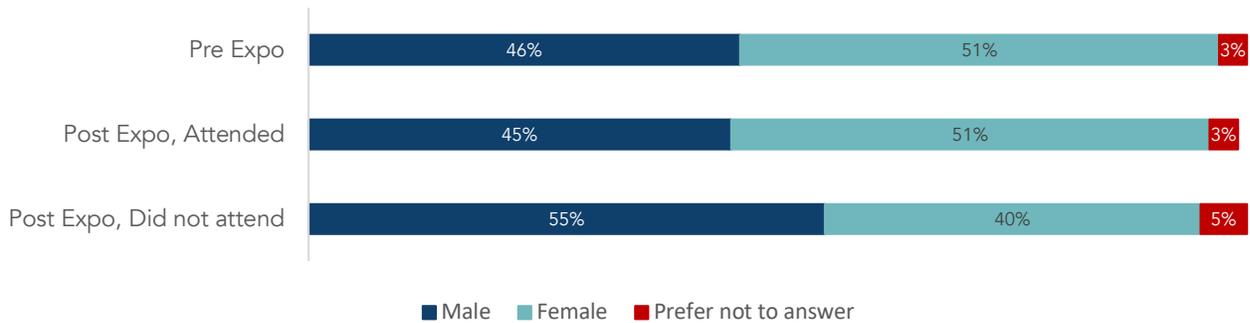
<sup>a</sup> Observations by attendance: pre-expo, n=3,346; post-expo, attended, n=1,915; post-expo, did not attend, n=121.

Figure B2. Mississippi Delta: Mean Age by Career Expo Attendance <sup>a</sup>  
 Students are approximately 14 years of age.



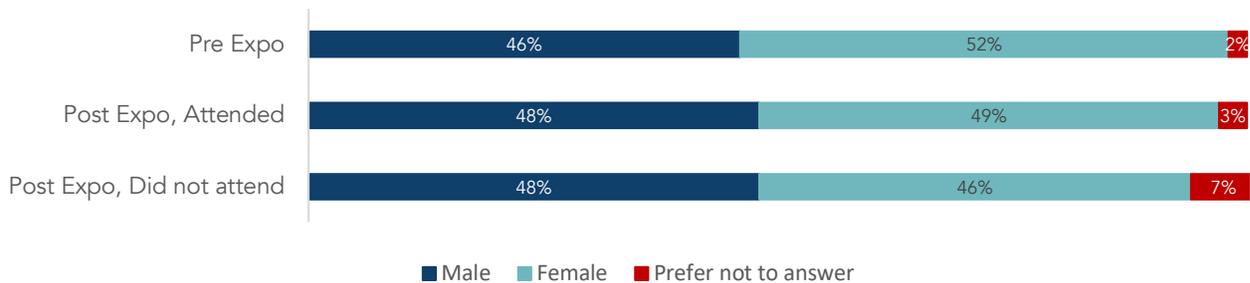
<sup>a</sup> Observations by attendance: pre-expo, n=786; post-expo, attended, n=170; post-expo, did not attend, n=43.

Figure B3. Mississippi Coast: Gender by Career Expo Attendance <sup>a</sup>  
 More females (51%) attended the Mississippi Coast event than males (45%).



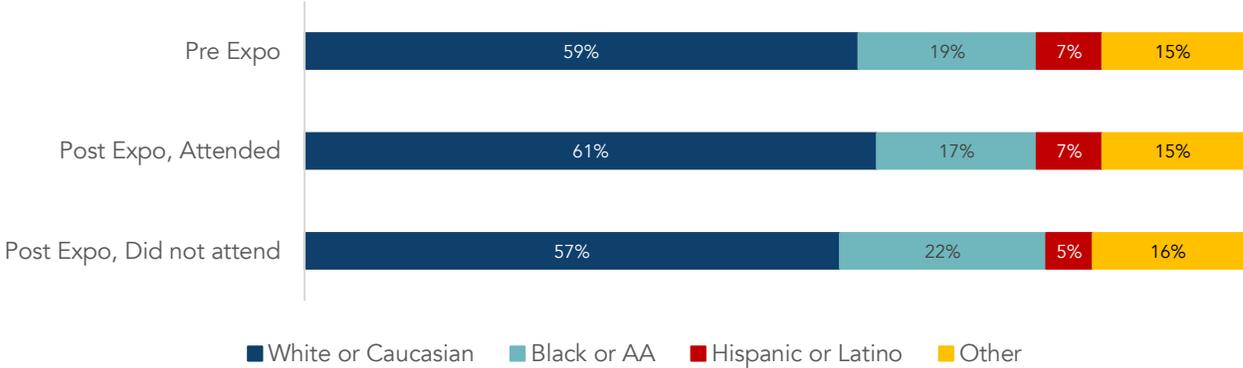
<sup>a</sup> Observations by attendance: pre-expo, n=3,399; post-expo, attended, n=1,972; post-expo, did not attend, n=130.

Figure B4. Mississippi Delta: Gender by Career Expo Attendance <sup>a</sup>  
 Attendance of the Mississippi Delta event did not vary by gender (females who attended, 49%; males who attended, 48%).



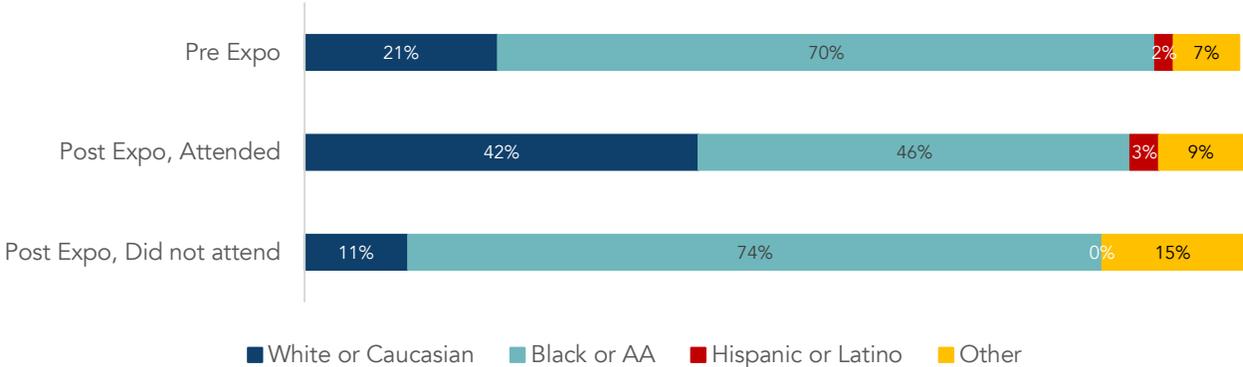
<sup>a</sup> Observations by attendance: pre-expo, n=820; post-expo, attended, n=178; post-expo, did not attend, n=46.

Figure B5. Mississippi Coast: Ethnicity by Career Expo Attendance  
 Most students who attended the Coast event were White (61%) or Black (17%).



<sup>a</sup> Observations by attendance: pre-expo, n=3,399; post-expo, attended, n=1,971; post-expo, did not attend, n=131.

Figure B6. Mississippi Delta: Ethnicity by Career Expo Attendance  
 Most students who attended the Mississippi Delta event were Black/African American (46%) or White/Caucasian (42%).



<sup>a</sup> Observations by attendance: pre-expo, n=820; post-expo, attended, n=178; post-expo, did not attend, n=46.

Students were asked to identify their current school of enrollment. Table B1 displays current 8<sup>th</sup> grade enrollment by Career Expo attendance for the Coast event. Schools that had students with no post event survey completions for the Coast included the following: Biloxi Jr. High, George County Middle, Leaksville Jr. High, N.R. Burger Middle, North Wool Market Middle, Northeast Jones Middle, Pass Christian Middle, Perry Central Middle, Richton High, Sand Hill, Sacier, South Hancock Middle, South Jones High, St. Martin Middle, St. Patrick Catholic High, and West Jones.

Table B1. Mississippi Coast: 8th Grade School Enrollment by Career Expo Attendance  
 Students identified being enrolled from 36 schools for the 2018 Mississippi Gulf Coast Career Expo.

Schools	Mississippi Coast Cohort		
	Pre-expo	Post-expo, attended	Post-expo, did not attend
	n (%)	n (%)	n (%)
Bay Waveland Middle	100 (3.2)	99 (5.3)	1 (0.9)
Bayou View Middle	236 (7.5)	226 (12.1)	10 (8.8)
Biloxi Jr. High	266 (8.4)	0	0
Christian Collegiate Academy	25 (0.8)	20 (1.1)	0
Colmer Middle	231 (7.3)	231 (12.3)	10 (8.8)
D'Iberville Middle	154 (4.9)	23 (1.2)	2 (1.8)
East Central Middle	192 (6.1)	148 (7.9)	5 (4.4)
Gautier Middle	166 (5.3)	125 (6.7)	8 (7.1)
George County Middle	168 (5.3)	0	0
Gulfport Central Middle	1 (0.03)	2 (0.1)	0
Hancock Middle	262 (8.3)	202 (10.8)	10 (8.8)
Leakesville Jr. High	58 (1.8)	0	0
Long Beach Middle	70 (2.2)	1 (0.1)	0
Magnolia Middle	0	12 (0.6)	2 (1.8)
McLain Attendance Center	21 (0.7)	14 (0.7)	8 (7.1)
N.R. Burger Middle	53 (1.7)	0	0
North Gulfport Middle	75 (2.4)	1 (0.1)	0
North Wool Market Middle	41 (1.3)	0	0
Northeast Jones Middle	7 (0.2)	0	0
Ocean Springs Middle	96 (3.0)	127 (6.8)	25 (22.1)
Our Lady Academy	42 (1.3)	34 (1.8)	2 (1.8)
Pass Christian Middle	60 (1.9)	0	0
Pearl River Central	0	159 (8.5)	8 (7.1)
Perry Central Middle	30 (1.0)	0	0
Poplarville Middle	109 (3.5)	48 (2.6)	3 (2.7)
Resurrection Catholic	38 (1.2)	37 (2.0)	2 (1.8)
Richton High	1 (0.03)	0	0
Sand Hill	17 (0.5)	0	0
Saucier	1 (0.03)	0	0
South Hancock Middle	1 (0.03)	0	0
South Jones High	9 (0.3)	0	0
St. Martin Middle	83 (2.6)	0	0
St. Patrick Catholic High	67 (2.1)	0	0
Stone Middle	61 (1.9)	180 (9.6)	6 (5.3)
West Jones	192 (6.1)	0	0
West Wortham Middle	215 (6.8)	185 (9.9)	11 (9.7)
<b>TOTAL</b>	<b>3,148</b>	<b>1,874</b>	<b>113</b>

Table B2 displays current 8<sup>th</sup> grade enrollment by Career Expo attendance for the Delta event. Schools that had students with no post event survey completions for the Delta included the following: Cleveland Central Middle, Greenwood, Humphreys County Jr. High, Leflore County, Quitman County Middle, Simmons, St. Joseph Catholic, Washington, and West Bolivar Middle.

*Table B2. Mississippi Delta: 8th Grade School Enrollment by Career Expo Attendance*  
Students identified being enrolled from 18 schools for the 2019 Mississippi Delta Career Expo.

Schools	Mississippi Coast Cohort		
	Pre-expo n (%)	Post-expo, attended n (%)	Post-expo, did not attend n (%)
Bayou Academy	53 (7.0)	42 (26.3)	1 (2.5)
Cleveland Central Middle	158 (20.7)	0	0
Coleman Middle	83 (10.9)	3 (1.9)	3 (7.5)
Deer Creek	10 (1.3)	10 (6.3)	0
Greenwood	124 (16.3)	0	0
Humphreys County Jr. High	57 (7.5)	0	0
Leflore County	57 (7.5)	0	0
Leland School Park	0	24 (15.0)	5 (12.5)
O'Bannon	0	1 (0.6)	0
Quitman County Middle	56 (7.3)	0	0
Ray Brooks	0	1 (0.6)	0
Riverside	48 (6.3)	35 (21.9)	7 (17.5)
Simmons	28 (3.7)	0	0
St. Joseph Catholic	16 (2.1)	0	0
South Delta	0	1 (0.6)	0
T.L. Weston Middle	1 (0.1)	43 (26.9)	24 (60)
Washington	38 (5.0)	0	0
West Bolivar Middle	33 (4.3)	0	0
<b>TOTAL</b>	<b>762</b>	<b>160</b>	<b>40</b>

## APPENDIX C. SURVEY RELIABILITY DATA

To examine the reliability of these scales within the Mississippi Coast and Delta student populations, Cronbach’s alpha coefficients were calculated for each scale per student cohort based on Career Expo attendance (see Table C1). Overall, the scales demonstrated strong internal consistency and, importantly, they performed similarly regardless of Career Expo attendance (i.e., pre-expo, post-expo overall, post-expo did attend, and post-expo did not attend). These results support the supposition that overall, the scales used in this report reliably measured the constructs they were intended to measure. All subscales were scored per the guidance of the original scale authors.

*Table C1. Cronbach’s Alpha for Survey Scales by Mississippi Coast and Delta P2P Career Expo Attendance*

**All subscales resulted in robust Cronbach alphas except for the Need for Career Information Scale among the pre-expo cohort, which performed somewhat less than desirable results as the universal standard is alpha=0.8.**

Location		Career Factors Inventory		Outcome Expectations		Education Intention
		Need for Career Info	Need for Self-knowledge	Education Performance	Career Decision	
Coast	Pre-expo	<b>0.70</b>	0.86	0.91	0.82	0.80
	Post-expo	0.78	0.90	0.92	0.84	0.80
	Post-expo, attended	0.78	0.89	0.92	0.84	0.80
	Post-expo, did not attend	0.79	0.90	0.91	0.84	0.79
Delta	Pre-expo	<b>0.67</b>	0.83	0.93	0.86	0.77
	Post-expo	0.83	0.89	0.94	0.90	0.87
	Post-expo, attended	0.85	0.90	0.93	0.91	0.86
	Post-expo, did not attend	0.74	0.86	0.95	0.87	0.87

A factor analysis was conducted to explore findings related to student experiences at both the Coast and Delta P2P Career Expos. On the post-survey, students who attended the Career Expos were asked to complete a set of 10 questions about their overall experience and satisfaction with the event. Students responded to these questions on a 5-point scale, on which higher responses reflect higher degrees of satisfaction and then questions were tested for factorability. Among Coast students, factorability resulted in all 10 questions loading into one factor with an eigen of 5.8 that explained 93% of the total variance. Each variable loaded with a minimum of 0.7 to 0.8 thereby

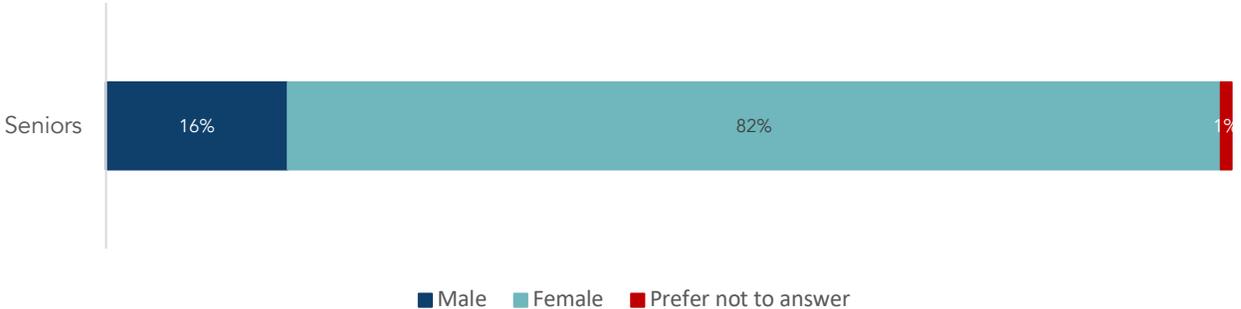
ensuring their relevance to the satisfaction factor defined for the Coast Career Expo. Among Delta students, factorability resulted in all 10 questions loading into one factor with an eigen of 7.5 that explained 96% of the total variance. Each variable loaded with a minimum of 0.8 to 0.9 thereby ensuring their relevance to the satisfaction factor defined for the Delta Career Expo.

# APPENDIX D. DETAILED DEMOGRAPHIC DATA: SENIOR SURVEY

## WHO ARE THE GRADUATING SENIORS OF 2019?

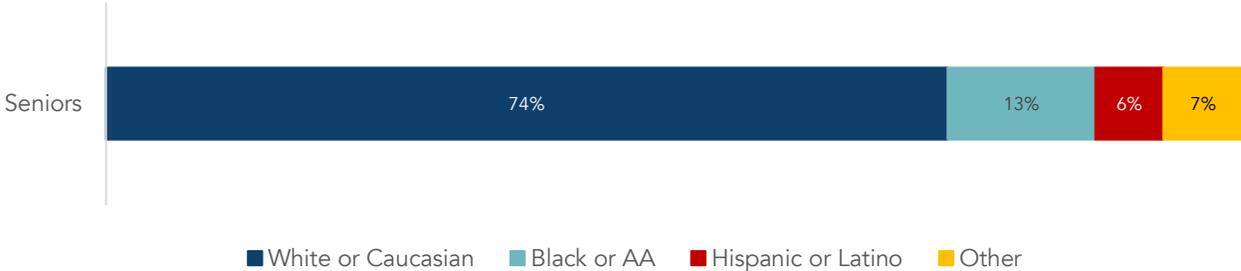
Among the 68 graduating seniors who completed the survey, the mean age was 17.7 years with 82% female (see Figure D1) and 74% White/Caucasian (see Figure D2).

Figure D1. Mississippi Seniors: Gender <sup>a</sup>  
More females (82%) completed the senior survey compared to males (16%).



<sup>a</sup> Observations, n=68.

Figure D2. Mississippi Seniors: Ethnicity  
Most seniors who completed the survey were White (74%) or Black (13%).



<sup>a</sup> Observations, n=68.

Table D1 includes the 8<sup>th</sup> grade school of enrollment for the Mississippi seniors who completed a survey prior to graduation.

Table D1. Mississippi Seniors: 8th Grade School Enrollment of Graduating Seniors  
 Seniors identified being enrolled from 8 schools in the 8<sup>th</sup> grade.

Schools	Mississippi Seniors n (%)
Colmer Middle	11 (16.2)
Gautier Middle	15 (22.1)
George County Middle	1 (1.5)
Hancock Middle	19 (27.9)
Magnolia Middle	1 (1.5)
Middle School of Poplarville	14 (20.6)
North Gulfport	1 (1.5)
Stone Middle	4 (5.9)
<b>TOTAL</b>	<b>68</b>

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Lent, R.W., Brown, S.D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79-122.