Labor Market Opportunities, Program Choice and Success among Community College Students

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Background

• Only 20% of students who entered a CC in 2007 seeking an associate’s degree or certificate received an award within 3 years (NCES 2012).
• Of those who do earn a credential, less than half end up working in jobs related to their credential.
• Research suggests that
  – Non-academic support is an important determinant of CC persistence, above and beyond academic and financial difficulty
  – Students have limited information about how labor market opportunities vary across fields
  – Economic benefits of CC vary not only by award type, but also by program of study (e.g., higher returns in health and certain technical fields; limited return to short certificates)

➢ Potential for non-academic supports geared toward career exploration and choice
Project 1 – Student Information and Program Choice

• Research Questions
  – How much information to CC students have of labor market opportunities (LMO) associated with different programs/careers?
  – How important is LMO in student choice of program?
  – Could better LMO increase degree completion and/or economic well-being of CC students?

• Collaborators
  – Rachel Baker, Stanford University
  – Eric Bettinger, Stanford University
  – Ioana Marinescu, University of Chicago

• Setting
  – Two community colleges in the Bay Area of CA
Activities to Date

• Review of relevant existing literature
  – Most prior work focuses on students at selective four-year institutions, such as Duke and NYU
  – Non-pecuniary benefits are important determinant of program
  – Explain 45% of choice behavior for males and >75% for females
  – Earnings potential is more important factor for men than women
  – Students do update their beliefs about economic returns to programs when presented with new information
    • Asymmetric: update for good news, but not for bad news

• Focus groups with students in Summer 2013
• Surveys administered in Winter 2014
• Currently working to analyze data
Survey Sample

- Our target population: award-oriented students who hadn’t yet decided on a major
- Tried to recruit college-level, academic classes without prerequisites
- Convenience sample: presented to faculty senates and sent emails to department chairs to recruit volunteers
- Administered the survey in 12 classes, with total enrollment of about 470
- Courses covered a diverse set of fields, including psychology, environmental science, language arts and biology
- Classes had daily attendance of around 80%, so we obtained responses from 376 students
## Summary Statistics

<table>
<thead>
<tr>
<th>Description</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Aged Student (&lt;23 yrs old)</td>
<td>0.653</td>
</tr>
<tr>
<td>First-Time Student</td>
<td>0.233</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.253</td>
</tr>
<tr>
<td>White</td>
<td>0.288</td>
</tr>
<tr>
<td>Asian</td>
<td>0.505</td>
</tr>
<tr>
<td>Low Income Student (inc &lt; $50K)</td>
<td>0.404</td>
</tr>
<tr>
<td>Low Parental Education (no college)</td>
<td>0.412</td>
</tr>
<tr>
<td>Percent Chance leave CC with Certificate</td>
<td>17.6</td>
</tr>
<tr>
<td>Percent Chance leave CC with AA</td>
<td>18.0</td>
</tr>
<tr>
<td>Percent Chance leave CC with no degree</td>
<td>13.9</td>
</tr>
<tr>
<td>Percent Chance transfer directly from CC</td>
<td>50.5</td>
</tr>
</tbody>
</table>
Broad fields students within which students are most likely to major

<table>
<thead>
<tr>
<th>Field</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health, math, science or engineering field</td>
<td>38</td>
</tr>
<tr>
<td>Business, computer science or applied technology</td>
<td>17</td>
</tr>
<tr>
<td>Creative arts, language arts, fine arts, or intercultural studies</td>
<td>24</td>
</tr>
<tr>
<td>Humanities, social sciences or education</td>
<td>31</td>
</tr>
</tbody>
</table>
Students are uncertain about program choice

- 77% students report they are considering majors in more than one broad field
  - Average student is at least considering 2.6 fields
Expectations about employment and salary within a field vary dramatically across students.

Distribution of Expected Probability of Employment, by major:

- Science & Math
- Business & Technology
- Language Arts
- Humanities
- No Award
Expectations about employment and salary within a field vary dramatically across students.
What are the most important determinants of program choice?

<table>
<thead>
<tr>
<th>Reason for selecting major</th>
<th>% students listing in Top 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will Lead to a Job I Will Enjoy</td>
<td>87%</td>
</tr>
<tr>
<td>Like the Subject</td>
<td>82%</td>
</tr>
<tr>
<td>Will Allow Me to Help People</td>
<td>62%</td>
</tr>
<tr>
<td>Will Lead to a Stable Job</td>
<td>61%</td>
</tr>
<tr>
<td>Will lead to a Good Income</td>
<td>48%</td>
</tr>
<tr>
<td>Classes Are Easy</td>
<td>43%</td>
</tr>
<tr>
<td>Can Continue My Education</td>
<td>42%</td>
</tr>
<tr>
<td>Can Lead to Different Jobs</td>
<td>39%</td>
</tr>
<tr>
<td>Will lead to a Family Supporting Income</td>
<td>38%</td>
</tr>
<tr>
<td>Like the Professors</td>
<td>30%</td>
</tr>
<tr>
<td>My Friends Are Majoring in It</td>
<td>15%</td>
</tr>
<tr>
<td>My Parents Want Me to Major in It</td>
<td>8%</td>
</tr>
<tr>
<td>I Know People Majoring in It</td>
<td>4%</td>
</tr>
</tbody>
</table>
What are the most important determinants of program choice?

• Preliminary analysis!
• Student enjoyment of coursework is most important factor
• Expected salary is also a significant predictor of program choice
• Other demographic predictors
  – Women less likely to choose business, comp. sci. and technology
  – Less affluent students less likely to choose creative or language arts
Project 2 – Community College to Career

• Broad Objective: Develop or expand mechanisms to support students’ efficient transition from college to the workforce

• Research Question: Can student outcomes be improved through structured career exploration?

• Collaborators: Peter Bahr (University of Michigan)*

• Setting: Large community college in Southeast Michigan
Activities to Date

• Conducted three rounds of focus groups administrators, counselors, advisors and students
• Review of the literature on student support interventions, specifically surrounding career exploration
• Reviewed existing software products – e.g., Focus 2, Career Cruising, MyPlan
• Developed two interventions, which we are currently piloting
Interventions

• Target students
  • Undecided students: new and continuing
• The objective is to help students
  • Select a field of study
  • Develop an academic “roadmap,” and
  • Make progress through the necessary coursework
• Interventions
  1) On-line Career Exploration + Individual Meetings with a Counselor (Focus 2 Your Future)
  2) Career Exploration Course + Advisor Follow-up Each Semester
Focus 2

• Both interventions will rely heavily on Focus 2 software, already available at the CC
• Designed to walk users through a step-by-step process to identifying a career that suits their interests and values
• Modules allow students to assess their own interests, academic strengths and weaknesses, values and personality attributes that relate to career choice
• Provides tools to help students conduct research on potential careers
• Specific to an institution and provides academic information accordingly
• Assessment results and career matches are provided to the user immediately
The six required modules come from these two sections
Printable reports can be used in meetings with counselors and advisors
Assessments can be retaken as many times as desired
Focus 2 Your Future

- Target students are incentivized to complete four steps
  1) Complete six modules within Focus 2
  2) Attend a meeting with a counselor to interpret the results of the Focus 2 modules
  3) Conduct independent research on 1-2 potential careers
  4) Attend a second meeting with a counselor to map their career decisions to a course of study
- Students can earn up to $100 for participation
- Pilot with 50 students in Fall 2014
Career Exploration Course + Advisor Follow-up Each Semester

- Students are incentivized to take a one-semester career exploration course and meet regularly with an advisor.
- This approach is more involved and offers more extensive exposure to career options and even more continuing support.
- Will be piloted in Winter 2014 semester.
- Course will include:
  - Exposure to career options
  - Linking educational pursuits to career options
  - Assessments and inventories (Focus 2)
  - Written exercises
  - Individualized feedback and interpretation
  - “Hands-on” learning (site visits, guest speakers, job shadowing, internships)
Conclusions

• Focus on support for career exploration seems promising
• If successful, we hope to scale and formally evaluate these interventions next year
• Feedback welcome!