Fast Track to Success: Pathways to Completion at Chaffey College

Presented by Angela Leontas, Carli Straight, Cindy Walker, Giovanni Sosa, and Jan Connal
• Fall 2009
  • Research on emerging trends for Educational Master Plan - Acceleration
  • VP Instruction promoted the idea of exploring acceleration

• Spring 2010
  • Scheduled 9 classes (Math and Spanish) in compressed formats for Fall 2010

• Summer 2010
  • Basic Skills Leadership Institute focus for Chaffey’s project was Accelerated Learning
The Accelerated Path to Fast Track

• Fall 2010
  • 9 Fast Track classes (compressed format)
  • Created the Accelerated Learning Task Force
  • Decided to focus on compressed courses first, curriculum changes later

• Spring 2011
  • 12 Fast Track classes scheduled with an additional 30 Fast Track (second half of semester) classes added later to meet base/growth
  • VP of Instruction promoted the growth of Fast Track to meet several goals
  • Met with each department/coordinator/dean to advocate Fast Track scheduling for Fall 2011/Spring 2012
  • MSLQ Survey of Fast Track students
    • Self-efficacy
Acceleration and Self-efficacy

• Which factors predict course performance in Fast Track courses?
  • Demographics (gender, age, work hours, ethnicity)
  • The Motivated Strategies for Learning Questionnaire (MSLQ; Pintrich et al., 1991)
# Acceleration and Self-Efficacy

<table>
<thead>
<tr>
<th>Self-Efficacy Assessment (MSLQ; Pintrich et al., 1991) - Survey Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I believe I will receive an excellent grade in this class</td>
</tr>
<tr>
<td>2. I’m certain I can understand the most difficult material presented in the readings for this course</td>
</tr>
<tr>
<td>3. I’m confident I can learn the basic concepts taught in this course</td>
</tr>
<tr>
<td>4. I’m confident I can understand the most complex material presented by the instructor in this course</td>
</tr>
<tr>
<td>5. I’m confident I can do an excellent job on the assignments and tests in this course</td>
</tr>
<tr>
<td>6. I expect to do well in this class</td>
</tr>
<tr>
<td>7. I’m certain I can master the skills being taught in this class</td>
</tr>
<tr>
<td>8. Considering the difficulty of this course, the teacher, and my skills, I think I will do well in this class</td>
</tr>
</tbody>
</table>
The Average Grades Earned on the Basis of Self-Efficacy (SE) Scores among Fast Track Students (N = 294; Spring 2011)

<table>
<thead>
<tr>
<th>Avg. Grade (GPA Scale)</th>
<th>Low SE</th>
<th>Medium SE</th>
<th>High SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>68</td>
<td>136</td>
<td>90</td>
</tr>
</tbody>
</table>

- Low SE: Avg. Grade = 2.25, $d = 1.21$
- Medium SE: Avg. Grade = 2.98, $d = 0.63$
- High SE: Avg. Grade = 3.49, $d = 0.51$
The Average Success Rates on the Basis of Self-Efficacy (SE) Scores among Fast Track Students (N = 294; Spring 2011)

- Low SE: 73.5% (N = 50/68)
- Medium SE: 89.0% (N = 121/136)
- High SE: 96.7% (N = 87/90)
Fast Track is on the Speedway

- Fall 2011/Spring 2012
  - 100 + Fast Track sections in both Fall 2011 and Spring 2012
  - Accelerated Learning Faculty Inquiry Team
    - Research
      - Focus Groups (student and faculty)
      - Surveys (students, instructors, and counselors)
      - Syllabi analysis (60 + syllabi)
    - Results
      - Best Practices
      - Syllabus Statement for Fast Track
      - Tips for Students
      - Changes to the Fast Track Website
      - Recommendations for the Task Force
      - Shared data across campus, committees, etc.
<table>
<thead>
<tr>
<th>Faculty Inquiry Team: Fast Results on Fast Track</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>What We Thought Before the FIT</strong></th>
<th><strong>What We Discovered</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fast Track was best for motivated, prepared students who wanted challenging work</td>
<td>• Fast Track is beneficial for <em>any</em> student who is willing/able to attend class regularly and do the work</td>
</tr>
<tr>
<td>• Fast Track instruction was the same as full-term except in a shorter time period</td>
<td>• Fast Track instruction required modifications for the instructor in planning, grading, and structuring of activities.</td>
</tr>
<tr>
<td>• Students would take the same number of units, just in a different way through Fast Track</td>
<td>• Many students took more units when taking Fast Track courses.</td>
</tr>
</tbody>
</table>
Student Perceptions of Fast Track

Fall 2011 Student Survey Results

• Compared to full-term courses, survey respondents:
  • Preferred the faster pace in Fast Track courses
  • Felt more connected to their instructors in Fast Track courses
  • Felt more connected to their classmates in Fast Track courses

• Survey respondents were highly satisfied with their Fast Track course experiences
  • $M = 4.31$ on a scale from 1 - 5
  • 91.5% would take another Fast Track course at Chaffey
Student Perceptions of Fast Track

Fall 2011 Student Survey Results, cont’d.

• Facilitators of success in Fast Track
  • Regular class attendance (59.8%)
  • Shorter time period motivates to do well (57.9%)
  • No time to procrastinate (51.9%)

• Barriers to success in Fast Track
  • Other family/work responsibilities (29.2%)
  • Not enough time to complete assignments (28.4%)
  • Work schedule (23.0%)
Digging deeper into self-efficacy

• Do students experience a change in self-efficacy (SE) from beginning to end of the semester?

• Will analysis with a new cohort of students replicate those found with the SP2011 cohort?

• Will Pre-test SE also predict course performance?
The Average Grades Earned on the Basis of Post-Test Self-Efficacy (SE) Scores among Fast Track Students Completing both the Pre and Post-Test Surveys (N = 795; Spring 2012)

<table>
<thead>
<tr>
<th>SE Level</th>
<th>Avg. Grade (GPA Scale)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SE</td>
<td>2.29</td>
<td>187</td>
</tr>
<tr>
<td>Medium SE</td>
<td>3.15</td>
<td>408</td>
</tr>
<tr>
<td>High SE</td>
<td>3.47</td>
<td>200</td>
</tr>
</tbody>
</table>

Effect sizes:
- Low SE to Medium SE: $d = 0.86$
- Medium SE to High SE: $d = 1.19$
- Low SE to High SE: $d = 0.35$
The Average Success Rates on the Basis of Post-Test Self-Efficacy (SE) Scores among Fast Track Students Completing both the Pre- and Post-Test Surveys (N = 822; Spring 2012)

- **Low SE**: 73.6% (N = 145/197, d = .58)
- **Medium SE**: 93.8% (N = 392/418, d = .23)
- **High SE**: 98.1% (N = 203/207, d = .80)
The Average Grades Earned on the Basis of Pre-Test Self-Efficacy (SE) Scores among Fast Track Students Completing only the Pre-Test Survey (N = 236; Spring 2012)

- Low SE: N = 50, Avg. Grade = 1.59, $d = .60$
- Medium SE: N = 114, Avg. Grade = 2.44, $d = .65$
- High SE: N = 72, Avg. Grade = 2.55, $d = .08$

The graph shows the average grades and effect sizes for students with different levels of self-efficacy scores.
The Average Success Rates on the Basis of Pre-Test Self-Efficacy (SE) Scores among Fast Track Students only Completing the Pre-Test Survey (N = 312; Spring 2012)

- Low SE: 34.7% (N = 25/72)
- Medium SE: 58.2% (N = 89/153)
- High SE: 63.2% (N = 55/87)

Effect sizes:
- Low SE: $d = .48$
- Medium SE: $d = .10$
- High SE: $d = .58$
The Average Grades Earned by those Completing the Self-Efficacy Measure at Pre-Test and those Completing the Measure at both Pre and Post-Test (Spring 2012)

<table>
<thead>
<tr>
<th>Group</th>
<th>Avg. Grade (GPA Scale)</th>
<th>d</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both</td>
<td>3.03</td>
<td>0.63</td>
<td>795</td>
</tr>
<tr>
<td>Pre-Test Only</td>
<td>2.29</td>
<td></td>
<td>236</td>
</tr>
</tbody>
</table>
The Average Success Rates of those Completing the Self-Efficacy Measure at Pre-Test and those Completing the Measure at both Pre and Post-Test (Spring 2012)

<table>
<thead>
<tr>
<th>Success Rate</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both</td>
<td>802</td>
</tr>
<tr>
<td>Pre-Test Only</td>
<td>312</td>
</tr>
</tbody>
</table>

90.0% 54.2%

$d = .84$
### Predictors of Course Performance among Fast Track Students Completing both the Pre and Post-Test Self-Efficacy (SE) Measure (N = 623)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B (SE)</th>
<th>Beta</th>
<th>Zero-Order r</th>
<th>Semi-Partial r</th>
<th>Effect Size</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Efficacy (Post)**</td>
<td>.09 (.01)</td>
<td>.42</td>
<td>.42</td>
<td>.41</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>Age Range**</td>
<td>.13 (.03)</td>
<td>.18</td>
<td>.19</td>
<td>.18</td>
<td>.36</td>
<td></td>
</tr>
<tr>
<td>Af. American vs. Others*</td>
<td>-.31 (.15)</td>
<td>-.08</td>
<td>-.05</td>
<td>-.07</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td>Hispanic vs. Others</td>
<td>-.14 (.09)</td>
<td>-.07</td>
<td>-.12</td>
<td>-.05</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>First-Gen Status</td>
<td>.06 (.08)</td>
<td>.03</td>
<td>.05</td>
<td>.03</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>Asian vs. Others</td>
<td>.10 (.16)</td>
<td>.03</td>
<td>.07</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.01 (.08)</td>
<td>-.002</td>
<td>-.11</td>
<td>-.002</td>
<td>.004</td>
<td></td>
</tr>
<tr>
<td>Work Hours</td>
<td>&lt;.01 (&lt;.01)</td>
<td>.005</td>
<td>.05</td>
<td>.005</td>
<td>.01</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05; **p < .01

$R^2 = .22$
Sequence Completion and Success

Tracking through the English course sequence
ENGL-550 → ENGL-450
ENGL-450 → ENGL-1A

• Success rates in the first course of the English sequence were higher in Fast Track than in non-Fast Track courses
• Progression from the first to the second course in the English sequence was greater in Fast Track than in non-Fast Track courses
• Success rates in the second course in the English sequence were higher in Fast Track than in non-Fast Track courses
Sequence Completion and Success

Fast Track

- **ENGL-550**
  - 61 Students
  - 52 Successful
  - Success Rate = 85.2%

- **ENGL-450**
  - 51 Students
  - 43 Successful
  - Progressed 83.6%
  - Success Rate = 84.3%

Non- Fast Track

- **ENGL-550**
  - 672 Students
  - 446 Successful
  - Success Rate = 66.4%

- **ENGL-450**
  - 334 Students
  - 229 Successful
  - Progressed 49.7%
  - Success Rate = 68.6%
Sequence Completion and Success

Tracking through the Math course sequence

MATH-510 → MATH-520
MATH-520 → MATH-410
MATH-410 → MATH-425
MATH-425 → MATH-25

• Success rates in the first course of the Math sequence were higher in Fast Track than in non-Fast Track courses for one sequence and lower for three sequences* (*small data sets for some courses)

• Progression from the first to the second course in the Math sequence was greater in Fast Track than in non-Fast Track courses for two sequences and lesser for two sequences* (*small data sets for some courses)

• Success rates in the second course in the English sequence were higher in Fast Track than in non-Fast Track courses for two sequences and lower for two sequences
Sequence Completion and Success

Fast Track

MATH-425
111 Students
65 Successful
Success Rate = 58.6%

MATH-25
45 Students
40.5% Progressed
26 Successful
Success Rate = 57.8%

Non-Fast Track

MATH-425
1,178 Students
620 Successful
Success Rate = 52.6%

MATH-25
235 Students
19.9% Progressed
151 Successful
Success Rate = 64.3%
## Success Rates By Department

### Success Rates by Department in Fast Track and Non-Fast Track Courses, AY 2011-12

| Department | Fast Track | Non-Fast Track | | [d] |
|------------|------------|----------------|------|
|             | Success Rate | Total GOR | Success Rate | Total GOR | |
| ACCTG      | 46.2        | 132         | 60.3        | 1,502      | .28 |
| ANTHRO     | 84.7        | 274         | 75.8        | 2,078      | .22 |
| BUSOT      | 69.1        | 563         | 71.4        | 2,762      | .05 |
| CDE        | 79.7        | 158         | 74.1        | 1,662      | .13 |
| CIS        | 78.1        | 525         | 62.6        | 2,807      | .34 |
| ECON       | 73.7        | 118         | 71.5        | 1,238      | .05 |
| ENGL       | 82.9        | 561         | 69.2        | 9,206      | .32 |
| HIST       | 62.2        | 246         | 58.1        | 4,929      | .08 |
| MATH       | 63.5        | 1,640       | 54.1        | 9,328      | .19 |
| PHIL       | 68.9        | 119         | 66.4        | 2,672      | .05 |
| PS         | 61.3        | 137         | 60.7        | 2,473      | .01 |
| PSYCH      | 70.6        | 419         | 68.3        | 4,229      | .05 |
| READ       | 94.1        | 324         | 73.4        | 2,972      | .60 |
| SOC        | 73.8        | 206         | 74.7        | 3,525      | .02 |
| SPAN       | 76.4        | 254         | 72.5        | 1,890      | .09 |
| **TOTAL**  | **76.4**    | **8,618**   | **69.9**    | **99,067** | **.15** |

- **Green**: FT is higher than Non-FT
- **Yellow**: FT and Non-FT are similar
- **Red**: FT is lower than Non-FT
Retention Rates By Department

Retention Rates by Department in Fast Track and Non-Fast Track Courses, AY 2011-12

| Department | Fast Track | Non-Fast Track | | d |
|------------|------------|----------------|---|
|            | Retention Rate | Total GOR | Retention Rate | Total GOR |
| ACCTG      | 75.0       | 132          | 80.5          | 1,502  | .13 |
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| CIS        | 92.0       | 525          | 87.7          | 2,807  | .14 |
| ECON       | 83.9       | 118          | 88.0          | 1,238  | .12 |
| ENGL       | 93.6       | 561          | 90.0          | 9,206  | .13 |
| HIST       | 86.2       | 246          | 87.1          | 4,929  | .03 |
| MATH       | 85.3       | 1,640        | 82.8          | 9,328  | .07 |
| PHIL       | 95.8       | 119          | 87.0          | 2,672  | .32 |
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| PSYCH      | 94.7       | 419          | 91.3          | 4,229  | .14 |
| READ       | 97.8       | 324          | 92.4          | 2,972  | .26 |
| SOC        | 89.3       | 206          | 91.0          | 3,525  | .06 |
| SPAN       | 91.3       | 254          | 89.5          | 1,890  | .06 |

**TOTAL**

- **FT is higher than Non-FT**
- **FT and Non-FT are similar**
- **FT is lower than Non-FT**
Fast Track: The Curriculum Phase

• Spring 2012
  • Curriculum Revisions for English and Reading began
  • English and Reading – merging departments and curriculum
    • Changing from
      • 3 courses below college level in English + 5 courses below college level in Reading to 3 courses
      • 3 courses total below college level in Reading/English

• Summer 2012
  • Reading/English curriculum created and completed

• Fall 2012
  • Reading/English curriculum approved by the Curriculum Committee

• Fall 2013
  • Reading/English courses implementation/replacing old sequences
Fast Track Pit Stops

• Schedule of Classes
• Calendar
• Website
• Last day to add/drop
• Linking courses in sequences
• Inputting courses in Datatel
• Training faculty
• Adjusting support services
  • Workshops and groups in the Success Centers
  • Counseling
  • Admissions
  • Bookstore
  • Financial Aid
Scaling Up Fast Track

- Courage/Leadership
- Research
- Innovation
- Collaboration
- Shared Governance/Administrative Support/Faculty Support
- Sharing Evidence/Data
- Educate/Advocate
- Faculty Inquiry
- Structural/Procedural Modifications
- Commitment from all areas
- Feedback/Response to Feedback
Acceleration Case Study

• Let’s apply strategies for collecting and analyzing evidence and strategies for scaling up to a case study.
Accelerating Your Own Practice

• Brainstorm possible ways you can scale up acceleration on your campus using the worksheet.

• Share your ideas in groups of 3 to 4 people.

• What is the first thing you plan to do regarding creating and/or scaling up your accelerated program when you get back to your campus?
For more information ....

- http://www.chaffey.edu/fasttrack/index.shtml
- http://www.chaffey.edu/research/