Improving College Readiness through Curricular Innovation

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What are the expectations for college readiness?
“What students must know and be able to do to succeed in entry-level courses at Texas postsecondary institutions.”

TEC, §28.008(b)(1)
• Intellectual and historical curiosity, the ability to read carefully, the ability to make connections between/among diverse ideas.

• I expect them to have intellectual curiosity about the world and society, to be able to pose questions about the unknown or the uncertain, and to be able to express themselves with a certain degree of clarity.
Some time management and responsibility, as well as basic grammar and sentence structure abilities. I did not expect any area knowledge or advanced research skills.
Misalignment in ways of thinking and doing in high school and college
WHAT IS COLLEGE READINESS?

Texas College and Career Readiness Standards
**WHAT IS COLLEGE READINESS?**

<table>
<thead>
<tr>
<th>Content Knowledge</th>
<th>Key Cognitive Skills</th>
<th>Foundational Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELA, Math, Science, Social Sciences</td>
<td>Intellectual Curiosity, Reasoning, Problem Solving, Academic Behaviors, Work Habits, Academic Integrity</td>
<td>Reading, Writing, Researching, across the curriculum, Use of Data Technology</td>
</tr>
</tbody>
</table>
3 KEY IDEAS

Readiness is not a binary.
Readiness is achievable.
Readiness is teachable.
ADDRESSING THE MISALIGNMENT

• College Readiness Assignments (CRAs)
  ○ Are designed to assist students in achieving college readiness through mastery of the College and Career Readiness Standards (CCRS)
  ○ Targeted for use in high school, developmental education, and entry-level college courses
  ○ Are project-based assignments with scoring rubrics based on the CCRS
  ○ Are not full-length courses
WHAT’S IN A CRA?

- Maps to Standards
  - Texas Essential Knowledge and Skills (TEKS)
  - College and Career Readiness Standards (CCRS)
- Instructor Task Information
- Resources
- Student Notes
- Student Handouts
- Scoring Rubric
FIELD TESTING

- Tested 50 assignments in 4 core disciplines
- Designed to assess usability and effectiveness
- Partners at 18 different institutions, including high schools, community colleges and 4-year institutions
- Began with more than 75 faculty and more than 3,000 students participating
- We recruited additional informal field testers to give feedback on the assignments
- All CRAs were field tested by faculty in a variety of different courses
- All field testers participated in professional development
In conjunction with our external evaluation partner, Texas A&M University, data was collected:

- Surveys about Professional Development
- Surveys about CRA implementation
- Surveys about field testers’ perceptions of students’ college readiness
- Classroom observations
- Individual interviews
- Collection of scoring guides
- Collection of exemplar assignments
## Preliminary Data

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Number of Students (about whom we received data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle School</td>
<td>13</td>
</tr>
<tr>
<td>High School</td>
<td>1,008</td>
</tr>
<tr>
<td>2-yr College</td>
<td>300</td>
</tr>
<tr>
<td>4-yr University</td>
<td>34</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>1,355</strong></td>
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</table>
## PRELIMINARY DATA: EFFECTIVENESS

4-1. Paired-sample T-test between Pre-CRMS and Post-CRMS

<table>
<thead>
<tr>
<th>#</th>
<th>Description</th>
<th>N</th>
<th>Mean</th>
<th>mean diff (Post-Pre)</th>
<th>t-statistics</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td># 1</td>
<td>Key content knowledge in this subject</td>
<td>119</td>
<td>Post: 2.96</td>
<td>0.891</td>
<td>6.997***</td>
<td>0.000</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Pre: 2.07</td>
<td></td>
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<tr>
<td># 2</td>
<td>Mastery of big ideas</td>
<td>119</td>
<td>Post: 3.29</td>
<td>0.353</td>
<td>4.333***</td>
<td>0.000</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Pre: 2.93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># 3</td>
<td>Study skills and academic behaviors</td>
<td>119</td>
<td>Post: 3.33</td>
<td>0.353</td>
<td>4.078***</td>
<td>0.000</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Pre: 2.97</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td># 7</td>
<td>Research skills</td>
<td>119</td>
<td>Post: 3.13</td>
<td>0.345</td>
<td>3.913***</td>
<td>0.000</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Pre: 2.79</td>
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<tr>
<td># 16</td>
<td>Tries multiple strategies to construct an answer</td>
<td>119</td>
<td>Post: 2.60</td>
<td>0.319</td>
<td>3.177**</td>
<td>0.002</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Pre: 2.28</td>
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<tr>
<td># 17</td>
<td>Accurate self awareness of academic abilities</td>
<td>119</td>
<td>Post: 3.38</td>
<td>0.319</td>
<td>3.456**</td>
<td>0.001</td>
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<td></td>
<td></td>
<td></td>
<td>Pre: 3.06</td>
<td></td>
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<tr>
<td># 8</td>
<td>Data skills</td>
<td>119</td>
<td>Post: 2.84</td>
<td>0.294</td>
<td>3.172**</td>
<td>0.002</td>
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<td></td>
<td></td>
<td></td>
<td>Pre: 2.55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># 13</td>
<td>Ability to transfer knowledge to new or different contexts</td>
<td>119</td>
<td>Post: 3.34</td>
<td>0.261</td>
<td>2.88**</td>
<td>0.005</td>
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<td></td>
<td></td>
<td></td>
<td>Pre: 3.08</td>
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Positive Response

"[I had] a young lady who started this assignment with poor attitude, thinking that it was just busy work. I asked her group whether they were learning anything new about that college textbooks had to offer, and her response was, "It's just the same ole' same ole'." Later on, I overheard her remark to her group that she didn't know that there was so much "other stuff" in a textbook. As she got into the assignment, her interest took a major turn for the better."

"I saw very positive results from the CRA I did, and the students learned a lot."
PRELIMINARY DATA: USABILITY

• Positive Response
  o “I enjoyed participating in these CRAs and will probably use these or similar assignments for future classes.”
  o “Thank you for giving me ideas to improve my teaching.”
  o “Thank you so much, good experience! Would like to use some of the CRAs during the school year.”
PRELIMINARY CONCLUSIONS

- CRAs do improve students’ college readiness
  - Content Knowledge, Key Cognitive Skills, Foundational Skills
- Teachers appreciate having CRAs as a tool
- Readiness is a P-20 Pipeline issue
• CRAFTx.org
  o Online resources and training materials will be expanded and refined
  o All CRAs will be viewable and downloadable
  o 10 CRAs will be fully-online for independent study
  o Site launch for the public in Fall 2013


