The South Carolina Course Alignment Project (SC CAP)

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South Carolina Commission on Higher Education
Description

• Implemented in response to the Education and Economic Development Act of 2005 (EEDA) which:
  – established a new vision for education based on the idea of “Personal Pathways to Success” for all students
  – integrates academic and career-technology education into a unified system that seeks to offer more ways for all students to succeed

• Led by the South Carolina Commission on Higher Education in partnership with the South Carolina Technical College System and the South Carolina Department of Education

• Facilitated by the Educational Policy Improvement Center (EPIC) (www.epiconline.org)
Current State of High School-College Alignment

• College readiness is a key policy issue in many states

• Local demand for more college opportunities is leading to solutions that meet some local needs
  - Examples: dual enrollment, AP, International Baccalaureate, early college high schools

• Local solutions are not necessarily leading to coordinated strategies
  - Everyone is “inventing the wheel” locally, but little is shared statewide or incorporated into state policy

• Goal is to learn from local efforts to develop coherent state policy and local practice that results in more students being college ready
Connecting Local Partnerships and State Policy

• Lessons learned locally need to inform state policy development and evolution

• Colleges and high schools must work together to find solutions and adapt practices to address local challenges

• State policy must be sufficiently flexible to support local strategies and solutions that increase the pool of college-ready students and the success of college students
Project Goals

• **Immediate Goal of the Project:**
  – Develop and teach paired, sequenced courses (one exit-level high school course paired with an entry-level college course) in English, mathematics, and science

• **Longer-Term Goals of the Project:**
  – Improve high school graduation rates
  – Reduce the need for remedial instruction
  – Improve college retention and graduation rates
  – Use a statewide framework that supports local solutions
  – Create clear pathways between high school and college coursework to reduce curriculum redundancy
  – Strengthen faculty resources by creating regional networks of professional educators who can share ideas, collaborate, and modify their current policies and practices as they learn how to prepare all students for postsecondary success
  – Make policy recommendations to strengthen alignment statewide
Achiving SC CAP Goals

- 2008: Adopt South Carolina College Readiness Reference Standards - available at: [www.che.sc.gov/CHE_Docs/AcademicAffairs/EEDA/SC_College_Readiness_Standards.pdf](http://www.che.sc.gov/CHE_Docs/AcademicAffairs/EEDA/SC_College_Readiness_Standards.pdf)
- 2008: Conduct alignment study of current courses
- 2008-2009: Nominate, select, and assemble Statewide Course Design Team Members (15 design team members)
- 2009: Develop paired courses and materials
- 2009-2010: Conduct pilot implementation of paired courses in SC classrooms (32 Pilot Implementers)
- 2010-2011: Revise courses based on Pilot Implementer feedback; Recruit faculty and work with regional partners
- 2011-2012: Teach the revised courses and work with new recruits
  - 2012 - 2014: Recruit additional implementers for statewide expansion
  - 2014: Develop a Center for College and Career Readiness
Project Activities

- **Phase I: Analyze Alignment Issues and Develop a Statewide Process to Support the Initiative**
  - Conduct an environmental scan examining K-16 alignment issues in South Carolina and present findings to stakeholders
  - Undertake a public outreach process to support the project
  - Create a project steering committee (provosts/chiefs academic officers, district superintendents, and principals)
  - Develop an interactive website to provide access to and manage project information
  - Identify college readiness standards to use in South Carolina, consistent with high school state academic standards
  - Conduct a discrepancy analysis of exit-level high school courses and entry-level college courses in English, mathematics, and science
  - Identify exemplar course components in existing high school courses
  - Identify areas where potential paired courses (high school exit-level courses paired with entry-level college courses) could be developed
  - Recruit voluntary pilot sites and pilot faculty implementers for paired course development and implementation
Project Activities

• Phase 2: Create Course Alignment Materials
  – Convene the SC CAP steering committee, curriculum experts, and design committees to guide pilot course development
  – Conduct ongoing public outreach to provide information and support for improving college readiness and the transition between high school and college
  – Develop and pilot paired courses in the areas of English, mathematics, and science
Project Activities

• Phase 3: Disseminate Alignment Materials Broadly and Encourage Their Adoption Statewide
  – Identify benchmark and exemplar documents from the paired courses pilot data
  – Conduct strategic outreach to support districts and campuses interested in implementing paired courses
  – Provide technical assistance and oversight for districts and campuses implementing paired courses
  – Develop a framework for ongoing support and management of paired courses
  – Analyze connections between paired courses, state assessments, and postsecondary placement procedures
Definition of College/Career Readiness Used by the SC CAP

• The level of preparation a student needs in order to enroll and succeed - without remediation - in a credit-bearing course:
  - at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program, or
  - in a high-quality certificate program that enables students to enter a career pathway with potential future advancement

• Succeed = completing the course at a level of proficiency so that the student can take the next course in the sequence or complete the certificate
Four Keys To College And Career Readiness

- **Key Cognitive Strategies**
- **Key Content Knowledge**
- **Key Learning Skills & Techniques**
- **Key Transition Knowledge & Skills**

**STRUCTURE OF KNOWLEDGE**
- Key terms and terminology
- Factual information
- Linking ideas
- Organizing concepts

**TECHNICAL KNOWLEDGE & SKILLS**
- Challenge level
- Value
- Attribution
- Effort

**OWNERSHIP OF LEARNING**
- Goal setting
- Persistence
- Self-awareness
- Motivation
- Help seeking
- Progress monitoring
- Self-efficacy

**LEARNING TECHNIQUES**
- Time management
- Study skills
- Test-taking skills
- Note-taking skills
- Memorization/recall
- Strategic reading
- Collaborative learning
- Technology

**CONTEXTUAL**
- Aspirations
- Norms/Culture

**PROCEDURAL**
- Institution choice
- Admission Process

**FINANCIAL**
- Tuition
- Financial Aid

**CULTURAL**
- Postsecondary norms

**PERSONAL**
- Self-advocacy in an institutional context

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Creating College Readiness: Lessons Learned from Research

• Few high school students are fully prepared in all four dimensions of college readiness
• Readiness requires strategies to be practiced and honed throughout high school
• Students should be challenged cognitively even if they are still developing literacy and language skills
Creating College Readiness: Lessons Learned from Research

- Waiting to remediate students once they get to college is not effective
  - Remedial courses are high school content at college prices and decrease chances of graduation
  - Two-thirds of community/technical college students place into at least one remedial course. Of those, less than 25% graduate within 8 years

- States need to provide a policy framework that supports alignment between secondary and postsecondary

- High schools and colleges need to communicate directly to aid student transitions

Principles of College Readiness Used by the SC CAP

• Create and maintain a college-going culture in the school

• Create a core academic program that is aligned with and leads to college readiness by the end of 12th grade

• Make the senior year meaningful and challenging; keep all students fully engaged

• Hold high, common expectations for all students, then provide differing degrees of scaffolding based on student need

• Emphasize key cognitive strategies such as reasoning, problem solving, and research skills
Principles of College Readiness Used by the SC CAP

• Reduce choice in favor of focus, particularly for students who will be first-generation college attenders
• Create assignments and grading policies that more closely approximate college expectations each successive year of high school
• Promote key self-management skills and provide students feedback on how well they are developing these skills
• Prepare students for the complexity of applying to college and the differences between high school and college
• Build partnerships with and connections to postsecondary programs and institutions
Strengthening Teacher Knowledge of College Readiness Through Paired Courses

- High school teachers need opportunities to work collaboratively with postsecondary faculty
  - Each group learns from the other
  - “Paired” assignments link high school and college
  - Introduce college-level expectations in a controlled fashion in high school

- Teachers learn about new developments in their subject area in partnership with postsecondary faculty
How Can High School Teachers Adapt Exit-Level Courses?

• Teach content as a framework for cognitive development
• Give more complex multi-day, multi-draft assignments regularly
• Expect students to conduct research in the form of literature reviews
• Expect students to weigh evidence to interpret conflicting points of view
• Have significantly higher expectations for student work quality
  - Expect or require high levels of accuracy and precision, proper conventions and formatting, organization, and strength of argument
How Can College Faculty Adapt Entry-Level Courses?

- Use high school faculty partners as a resource
- Modify freshman courses
  - More assessments
  - Different kinds of assessments
  - More information about on-campus resources (e.g., tutor labs)
  - More explanation about use of office hours
  - More references to using the syllabus for deadlines
Hold All Students to College Readiness Expectations

• For students with basic skill deficiencies or limited English proficiency, provide *scaffolding*, but *do not hold them to separate, lower standards*
  - Scaffolding can be removed gradually as students demonstrate increasing proficiency
• While not all students will be ready by graduation, *all* will have engaged in challenging academic experiences geared toward readiness
Paired Course Model

Paired courses consist of two courses, one exit-level high school course and one entry-level college course, designed in tandem to sequence curriculum and performance expectations.

- The high school exit-level course includes six essential elements: faster paced curriculum; emphasis on writing, feedback, editing and rewriting; clear grading expectations and detailed scoring rubrics; key outcomes that are measurable; emphasis on the development of cognitive strategies, such as analytical thinking and intellectual curiosity; and frequent evaluation and feedback from external sources, the teacher and peers. *Expectation:* Students are prepared for what they will be expected to know and be able to do in their college courses.

- The entry-level college course builds upon the foundation of the senior exit course in a way that creates continuity for students. Its features are similar but with a greater demand for independent study, writing, and problem-solving than expected in the senior exit course.
## Paired Course Model: Student Outcomes

<table>
<thead>
<tr>
<th>Key Cognitive Strategies</th>
<th>Key Content Knowledge</th>
<th>Key Learning Skills and Techniques</th>
<th>Key Transition Knowledge and Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High School Level:</strong> Recognizes when an initial solution is not effective in solving a problem and looks for an alternative strategy</td>
<td><strong>High School Level:</strong> Utilizes techniques such as strategic reading to help read and understand a wide range of nonfiction and technical texts</td>
<td><strong>High School Level:</strong> Begins to recognize areas that need self-improvement such as study skills or writing skills</td>
<td><strong>High School Level:</strong> Begins to understand how own experiences and culture are similar or different to the culture of the academic world</td>
</tr>
<tr>
<td>College Level: Develops and applies multiple strategies to solve complex problems routinely</td>
<td>College Level: Engages texts critically, draws complex inferences, and analyzes and evaluates the information within and across texts</td>
<td>College Level: Predicts where a lack of skill is likely to cause self to stumble academically and develops a plan of action to address the weakness using available resources</td>
<td>College Level: Understands complexities of higher education environment and initiates interactions with professors and peers.</td>
</tr>
</tbody>
</table>
## SC CAP Paired Courses

<table>
<thead>
<tr>
<th>High School Courses</th>
<th>College/University Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English Language Arts</strong></td>
<td></td>
</tr>
<tr>
<td>English 3 (American Literature/Composition)</td>
<td>American Literature</td>
</tr>
<tr>
<td>English 3 (American Literature/Composition)</td>
<td>Freshman Composition</td>
</tr>
<tr>
<td>English 4 (British Literature/Composition)</td>
<td>British Literature</td>
</tr>
<tr>
<td>English 4 (British Literature/Composition)</td>
<td>Freshman Composition</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>College Biology</td>
</tr>
<tr>
<td>Chemistry</td>
<td>College Chemistry</td>
</tr>
<tr>
<td>Physics</td>
<td>College Physics (Algebra-based)</td>
</tr>
<tr>
<td>Physics</td>
<td>College Physics (Calculus-based)</td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td></td>
</tr>
<tr>
<td>Math Tech 4</td>
<td>College Algebra</td>
</tr>
<tr>
<td>Math Tech 4</td>
<td>Probability and Statistics</td>
</tr>
<tr>
<td>Pre-Calculus</td>
<td>Elementary Calculus</td>
</tr>
</tbody>
</table>
Aligned course pairs developed by secondary and postsecondary faculty teams to promote a seamless transition for students

Three Design Teams (English, mathematics, and science) worked to:

- produce example syllabi
- establish sample performance standards
- align the courses to South Carolina College Readiness Reference Standards

The paired courses include:

- Paired assignments
- Common scoring rubrics
- Common formats for assessments
- Aligned grading criteria
- Clear, measureable course outcomes
- Similar pacing of courses
- Common approach to writing (edit, review, revise, rewrite – iterative process)
Paired Course Packets Include

1. Introduction for administrator
2. Introduction for instructor
3. Course syllabus
4. Alignment to SC state standards
5. Alignment to SC college readiness standards
6. Elements of paired course alignment
7. Letter to high school students and their parents
8. Lab/classroom activities and scoring rubrics
9. Out of class assignments and scoring rubrics
10. Assessments and scoring rubrics
11. List of recommended readings, resources, and websites
Aligned Curricular Guides (Syllabi)

- Facilitate communication within and between:
  - Departments
  - Schools and community colleges/universities
  - Parents and students
- Students can be held accountable for deadlines
- Fewer questions from parents:
  - Can use student curricular guide for planning and important dates
  - Common format for all curricular guides ensures transparency of all courses
- Prepare students for college expectations:
  - College syllabi/curricular guides are considered to be contracts between students and faculty
- Common look and feel of curricular guide has a professional appearance
Example Paired Courses - English

Five paired courses for students:
- High School English 3
- High School English 4
- College Freshman Composition
- College American Literature
- College British Literature

All five courses expect students to:
- Meet deadlines
- Demonstrate academic integrity in written assignments
- Develop work habits that allow them to complete complex writing assignments
- Demonstrate evidence of intellectual openness
- Analyze source material in a meaningful way
- Show strong writing skills
Example Paired Courses – English Appropriate Skills

• High School Courses
  – Emphasize proper grammar and writing mechanics in the English 3 course
  – Practice proper grammar and writing mechanics in the English 4 course
  – Practice reading and thinking critically
  – Provide opportunities to use both oral and written formats to discuss texts

• College Courses
  – Assumes the student has mastered grammar and mechanics
  – Expects students to be able to read and think critically
  – Expects students to use both oral and written formats to discuss texts
### Example Paired Courses – English Scoring Rubric

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thesis</strong></td>
<td>Thesis and purpose are missing and undeterminable OR thesis has no relation to the writing task.</td>
<td>Thesis and purpose may be obvious or unimaginative, somewhat vague OR only loosely related to writing task.</td>
<td>Thesis is somewhat original, fairly clear, matches the writing task.</td>
<td>Develops fresh insight, challenges reader’s thinking. Thesis &amp; purpose are clear to reader; closely match the writing task.</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td>Unclear organization OR organizational plan is inappropriate to thesis. No transitions.</td>
<td>Some signs of logical organization. May have abrupt or illogical shifts &amp; ineffective flow of ideas.</td>
<td>Organization supports thesis &amp; purpose. Transitions are mostly appropriate. Sequence of ideas could be improved.</td>
<td>Fully &amp; imaginatively supports thesis &amp; purpose. Sequence of ideas and transitions are effective.</td>
</tr>
<tr>
<td><strong>Support and Reasoning</strong></td>
<td>Offers simplistic, undeveloped, or cryptic support for the ideas. Inappropriate or off-topic generalizations, faulty assumptions, errors of fact.</td>
<td>Offers somewhat obvious support that may be too broad. Details are too general, not interpreted, irrelevant to thesis, or inappropriately repetitive.</td>
<td>Offers solid but less original reasoning. Assumptions are not always recognized or made explicit. Contains some appropriate details or examples.</td>
<td>Substantial, logical, &amp; concrete development of ideas, explicit assumptions. Details are germane, original, &amp; convincingly interpreted.</td>
</tr>
</tbody>
</table>
# Example Paired Courses – English Scoring Rubric

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</thead>
<tbody>
<tr>
<td><strong>Sources &amp; Citation</strong></td>
<td>Neglects important sources. Overuse of quotations or paraphrase to substitute own ideas (possibly uses source material without acknowledgement).</td>
<td>Uses relevant sources but lacks in variety of sources and/or skillful combination of sources. Quotations &amp; paraphrases may be too long and/or inconsistently referenced.</td>
<td>Uses sources to support, extend, &amp; inform, but not substitute own development of idea. Does not overuse quotes, but may not always conform to required style manual.</td>
<td>Uses sources to support, extend, &amp; inform, but not substitute own development of idea. Combines material from a variety of sources, including personal observations, scientific data, and authoritative testimony. Does not overuse quotes.</td>
</tr>
<tr>
<td><strong>Audience Awareness</strong></td>
<td>Little or no awareness of audience or form’s requirements. Egocentric. A written form of speech for one’s self.</td>
<td>Stance is that of a novice attempting to please an expert.</td>
<td>Stance is somewhat tentative &amp; meets reader’s needs with some skills, but is not as consistently successful.</td>
<td>Stance is that of an expert who consistently &amp; skillfully anticipates reader’s needs. Rhetorically sophisticated.</td>
</tr>
<tr>
<td><strong>Style, Diction, and Writing Conventions</strong></td>
<td>Superficial &amp; stereotypical language. Oral rather than written language patterns predominate. Mechanical &amp; use errors so severe that writer’s ideas are hidden.</td>
<td>Sentences show little variety, simplistic. Diction is somewhat immature; relies on clichés. Tone may have some inconsistencies in tense &amp; person. Repeated weakness in mechanics &amp; usage. Pattern of flaws.</td>
<td>Sentences show some variety &amp; complexity. Uneven control. Diction is accurate, generally appropriate, less advanced. Tone is usually appropriate. Mechanical &amp; usage errors that do no interfere with meaning.</td>
<td>Sentences are varied, complex &amp; employed for effect. Diction is precise, appropriate, using advanced vocabulary. Tone is mature, consistent, and suitable for topic &amp; audience. Essentially error free. Evidence of superior control of diction.</td>
</tr>
</tbody>
</table>
Example Paired Courses - Physics

Three paired physics courses for students with differing math backgrounds:

– High School Physics
– College Physics: Algebra-Based
– College Physics: Calculus-Based

All three courses expect students to:

– Develop problem-solving and critical thinking skills
– Make observations and measurements of phenomena in the environment
– Record observations accurately and with precision
– Analyze observations in a meaningful way
– Synthesize and interpret observations to yield a deeper understanding of how the universe works
Example Paired Courses – Physics
Appropriate Math Level

- High School Physics
  - Create and read graphs
  - Look at proportional relationships
  - Make measurements and simple calculations

- College Physics: Algebra-Based
  - Use algebra and trigonometry for problem solving
  - Encourage symbolic problem solving
  - Find the slopes of graphs and area under graphs

- College Physics: Calculus-Based
  - Use calculus to analyze the universe
  - Solve problems symbolically
  - Discourage memorization of equations
  - Derive equations from basic principles
SC CAP Partnership Activities

• Implementers build partnerships by
  – Visiting each others’ classrooms
  – Sharing instructional strategies and equipment
  – Holding joint faculty meetings
  – Developing assignments and scoring rubrics for assignments
  – Engaging in philosophical debates about best ways to
    approach teaching particular topics and in what order

• Implementers also:
  – Discuss ways their institutions enhance connections between
    and among each other
  – Share examples that illustrate how their students struggle
    with the transition from high school to college
  – Develop solutions to support students through transition
Feedback from Implementers

About the paired course materials and training provided:

“The training and documents showed what I needed to teach my high school students to prepare them for next year.”

“I used the syllabus as is. It is rigorous and clearly written…I also liked the rubrics and assignments that were enclosed with the information. I really liked it all!”

About the partnerships created:

“I think the conversations with the team members were the most beneficial part of this process. It was so nice to see what was really occurring in the high school as well as the liberal art colleges. It was through these conversations that I began to understand why students were having such difficulty taking their college exams when high school was ‘easy.’”

“I found the contact with cluster partners to be much more useful. The syllabus gave us the basics that we needed to cover, however, the one-on-one aspect of the cluster group or individual conversations allowed me to find out the depth that needed to be presented and allowed me to focus more on the level of understanding that needed to be reached.”
Feedback from Implementers

About changes in student expectations:

“Students are given expectations of what they should already know: study skills, work habits, and academic integrity. They are also told what skills they will develop during the year: analysis and reasoning, intellectual openness, and research techniques.”

“One of the most significant things in English is that the students now truly believe that revision of writing is the key to success in college. They also have a much deeper understanding of what the expectations of a professor are. It has been powerful to have others at the college level reinforcing what I have said all along.”

“I raised the level of expectations for my students and myself and taught a topic I have avoided before (fluids).”

“(With my cluster partners) we discussed areas of weakness of first year college students in hopes of better preparing them at our (high school) level. I really believe it all gets back to holding students to higher expectations without second chances. Our Principal asks us to allow students to retake tests until they get the grade they want. Students can do this as many times as they want. Although this is his policy, I do not allow it because my expectations are to better prepare them for what they will experience in college. They won’t be allowed to retake tests until they get the grade they like.”
Feedback from Implementers

About the benefits of the South Carolina Course Alignment Project:

“As a result of this project...my students have done more research, more multi-drafting, more reading, and been tested on more college level materials than in my previous four semesters of teaching this course.”

“The paired course project is one of the best ideas that SC has had during my 31 years of teaching...and has the ability to form lasting roots on the education of our students.”
SC CAP Video
Creating Stronger High School-College Partnerships

https://www.epiconline.org/south_carolina
Questions?

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