Community college systems across the country are engaged in efforts to understand both what their students are learning and how well they are learning. However, to gauge student learning accurately across institutions and systems requires some comparability in what students are expected to learn in any given course, such as freshman composition. This is a challenge in California, where the decentralized governance structure for its 112-college system, coupled with faculty autonomy, has meant that course curricula are developed locally. Many efforts are now underway to collect data on student learning in California’s community colleges and to strengthen the curricula of individual colleges.1

Across all of these efforts, one fundamental question has arisen: Are all the community college courses that have the same general name (e.g., English 1A)—and for which students are assessed for placement—comparable, statewide, in what students are expected to learn? Such comparability is important for various reasons, including ensuring that both prospective and enrolled students receive reliable information about course expectations. When it comes to placement issues, comparability helps ensure that everyone has the same understanding of what it means for students to be ready for college-level work.

One way of trying to understand the degree of comparability across courses that have similar names across California community colleges is to compare each course’s Student Learning Outcomes (SLOs). SLOs are intended to be clear and assessable statements describing the knowledge, skills, abilities, and attitudes a student will be able to demonstrate at the end of the given course. (SLOs differ from course objectives in that the latter are specific teaching objectives that drive course content and activities.) Developing SLOs is an iterative process, the specifics of which vary by institution. Because each college determines the level of detail in its SLOs, as well as their structural organization, some sets of SLOs consist of two or three paragraphs describing overarching skills, whereas others consist of a general statement followed by a bulleted list of detailed skills. Colleges started their SLO development at different times and, thus, update their SLOs at different times.

Given broad interest in ensuring the similarity of required courses across community colleges, as well as similarity in signals sent to current and prospective students about course expectations, the Academic Senate of the California Community Colleges initiated a study to determine the comparability of SLOs in one particular course for which all California community colleges had already developed learning outcomes: English 1A (freshman composition).

1 These efforts include: 1) the CB (Course Basic) 21 Project to create rubrics to document the pathway through credit and noncredit basic skills courses in English (writing), reading, mathematics, and ESL; 2) a collaboration between the Academic Senate for California Community Colleges and the Research and Planning Group for the California Community Colleges to develop an SLO Terminology Glossary (2009) that defines Student Learning Outcomes (SLOs), course objectives, and Institutional Learning Outcomes; 3) the Basic Skills Outcomes Capacity (BSOC) Study (2009) that assessed the types of evidence community colleges are collecting on basic skills courses and how that evidence is being used; and 4) the C-ID, a course-identification numbering system being developed to ease the transfer and articulation burdens in California’s higher education institutions. (Email correspondence with Janet Fulks, Academic Senate representative, December 2009.)
In addition to being the first college-level English course offered by community colleges, English 1A is a core element in all lower division general education requirements in the community colleges, as well as the California State University (CSU) and University of California (UC) systems. It is also the first level of English that is transferable between the community colleges and California’s public four-year institutions. Faculty members at each community college have developed their individual curriculum for this course with the intention that the coursework align with requirements for freshman-level courses in the UC and CSU systems. The UC laid out specific requirements for an English 1A course to be transferable, including minimum standards for coursework. The CSU used a course descriptor against which it compared freshman composition courses at community colleges in order to assign the course a common identifier used to facilitate articulation between the systems. Almost all English 1A courses in the community colleges obtained this identifier, and the courses were then articulated among California public higher education institutions, as well as among private colleges.

Due to capacity limitations, the Academic Senate could not conduct the SLO research itself; instead, its representatives asked researchers from the Regional Educational Laboratory West (REL West) at WestEd to analyze SLOs that the Academic Senate had collected. Representatives from the Academic Senate and REL West met twice. At the first meeting, the research team received background on the history and goals of SLOs in the community colleges and discussed the materials to be used in the analysis. The second meeting focused on reviewing initial analyses and discussing next steps.

This brief presents analyses conducted by REL West researchers on the Academic Senate’s sampling of SLOs for English 1A, representing 57 of the 110 community colleges that, at the time of this analysis, made up the California community college system (which has since added two colleges). Because, as discussed above, SLOs vary in structure, style, and content, it would be difficult to compare these widely varying sets of individual SLOs to each other. Thus, in consultation with representatives from the Academic Senate, REL West researchers decided to compare each college’s set of SLOs by rating them against widely accepted rubrics for two dimensions: 1) cognitive complexity and 2) objectives/competencies for introductory college composition courses. The rubric for cognitive complexity is Webb’s Depth of Knowledge (DOK) Level Descriptors for Reading and Writing (descriptors that were specifically developed for use in standards and assessment alignment studies to rate each statement’s level of complexity—see appendix A).

Two rubrics were used for rating objectives/competencies. The first is known as the ICAS Statements. The Intersegmental Committee of the Academic Senates, or ICAS, consists of Academic Senate leaders from each of the three segments of public higher education in California (i.e., CSU, UC, and CCC) and meets regularly to address academic issues of importance across the systems. The ICAS Statements developed by this committee, and used in examining the SLOs for this study, identify expectations for what entering freshman need to know and be able to do in order to take college-level work in the three postsecondary systems (see appendix B).

The other rubric used for this study of SLO comparability is the IMPAC Course Descriptor that lists objectives for English 1A. The Intersegmental Major Preparation Articulated Curriculum, or IMPAC, project—a cross-system faculty-designed and -run effort to ensure that students transferring from California’s community colleges to UC or CSU are prepared for their chosen major and can avoid having to repeat coursework. To that end, the project has developed recommended course objectives in key disciplines. While the ICAS Statements focus on expectations for entering freshmen, the IMPAC focuses on courses that students will need in order to transfer to the UC or CSU systems. This study used the English 1A course expectations (see appendix C).

When SLOs are mapped against these rubrics, differences and similarities among them become apparent in terms of how the SLOs rate against those two dimensions. The results of the analyses can help the Academic Senate and other stakeholders provide information to individual colleges to support the further development and refinement of individual colleges’ courses through their work on SLOs.

This research brief was authored by Rachel Lagunoff, Andrea Venezia, Su Jin Jez, and Laura Jaeger
Materials Used for Analyses

» SLOs from 57 anonymous California community colleges.

» Norman Webb’s Depth of Knowledge (DOK) Level Descriptors for reading and writing (see appendix A), which look at cognitive complexity.
   – Developed specifically for standards and assessment alignment studies, these descriptors are widely used by practitioners and researchers.
   – Descriptions of work representing each DOK level are available for reading and writing, aiding in consistency of ratings.
   – The four DOK levels relate well to the range of skills represented in the SLOs.

» The Intersegmental Committee of the Academic Senate’s (ICAS) competencies for reading and writing (see appendix B). In 2002, the ICAS, representing the CCC, CSU, and UC, published a set of competencies for entering college freshmen in reading, writing, and critical thinking.

» The Intersegmental Major Preparation Articulated Curriculum (IMPAC) course descriptor, developed by California Community Colleges (CCC), California State University (CSU), and University of California (UC), that lists objectives for English 1A (see appendix C).
   – While labeled “objectives,” the IMPAC descriptors vary between addressing overall results or outcomes (e.g., IMPAC objective B) and more specific skills or objectives (e.g., IMPAC objective D).

Reporting Findings

» Since the ratings were aggregated at the college level (as described in Data Sources and Methodology, p. 9), any match to the rubric categories in DOK, IMPAC, or ICAS means that there was at least one rating between the category and some statement within a college’s SLOs.
   – For example, if any of the language in the SLOs of college #50 had a match to the ICAS category COMP (reading comprehension; see appendix B), it means that at least one of the college’s SLO statements matched the COMP descriptor.
   – Researchers did not quantify how many matches they found in each category for each college.
Summary of Findings

» As shown in Figure 3 on page 7, all the colleges matched with the combined “Writing Processes” category and 49 matched with the combined “Reading Comprehension” category of ICAS statements. In addition, the majority of the colleges (ranging from 30 to 53) matched with the IMPAC statements. These data indicate that the colleges are asking students to acquire similar knowledge and skills in their English 1A courses.

» There are differences across colleges’ SLOs in their organization and level of detail.

» SLO statements vary, with some describing student learning outcomes and others describing course objectives; some are specific about what students should learn, while others are specific about what the course should contain.

» DOK levels:
  – All colleges had at least one statement at DOK level 3, demonstrating expectations for higher-level knowledge and skills, but there were variations. For example, the SLOs for some colleges consisted mostly of broad statements at DOK level 3 or 4, whereas those for other colleges included many detailed skills at DOK level 1 or 2.

» ICAS matches:
  – The SLOs of all 57 colleges had matches in the combined “Writing Process” category, and 49 had matches in the combined “Reading Comprehension” category.
  – There was less comparability in the categories of Making the Reading/Writing Connection and Fostering Habits of Mind (28 and 25 colleges, respectively, had matches).

» IMPAC matches:
  – Forty-eight of the colleges had matches to A; 47 to B; 44 to C; 53 to F; and 30 to H.
  – The high incidence of matches does not necessarily mean that colleges have the same combination of, or foci for, SLOs.

» All colleges addressed writing process skills in their SLOs, confirming that these skills are considered a core element of English 1A. Forty-seven colleges also included reading comprehension skills in their SLOs, suggesting a general consensus that reading is a relevant component of the English 1A course.
Specific Findings

Highest DOK Rating for SLOs for Each College

» Every college had at least a rating of 3, with 81 percent of the colleges having 3 as the highest rating and 19 percent having 4 as the highest rating (see figure 1 below and appendix A for a description of the DOK levels).

» Colleges received the DOK rating based on a match between their SLO statements and levels 1–4 of the Webb descriptors.

Figure 1. Distribution of Colleges’ Highest Webb’s Depth of Knowledge Ratings (n=57)
ICAS Competency Rating for SLOs for Each College

» Nearly all colleges had an SLO that matched the TASK and ARRA categories (56 and 52, respectively).

» Least commonly matched to SLOs was READ, with only 9 colleges.
  – These SLOs may have had a reading statement that matched COMP.

» In between the most and least commonly rated categories were COMP (47), STYL (42), INVE (34), MAKI (28), FOST (25), DOUN (23), DAIT (19), and READ (9).

Figure 2. ICAS Distribution (n=57)

![Bar chart showing percentage of CCs (Number of CCs on bar)]

Key

FOST = Fostering habits of mind essential for success: academic literacy and critical thinking

MAKI = Making the reading/writing connection

READ = Reading competencies

COMP = Comprehension and retention

DOUN = Depth of understanding

DAIT = Depth of analysis and interaction with the text

INVE = Invention

ARRA = Arrangement

STYL = Style/expression

TASK = Writing tasks
Combined ICAS Competency Rating for SLOs for Each College

» Given the overlap of many of the ICAS knowledge and skills categories, researchers conducted another analysis that combined related categories to examine SLO alignment in two broader categories of Writing Process and Reading Comprehension (see figure 3). The determination of the categories (i.e., which ones to collapse together) was based on the advice of content area experts from the Academic Senate of the California Community Colleges.

» Researchers combined the categories of INVE, ARRA, STYL, and TASK into a Writing Process category.

» Researchers combined the categories of READ, COMP, DOUN, and DAIT to create the Reading Comprehension category.

» Researchers did not combine FOST and MAKI into either the Reading Comprehension or Writing Process categories.

» All 57 colleges had SLOs rated within the Writing Process category, and 49 colleges had SLOs rated within the Reading Comprehension category.

### Figure 3. Collapsed ICAS Distribution (n=57)

<table>
<thead>
<tr>
<th>ICAS Category</th>
<th>Writing Process</th>
<th>Reading Comprehension</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLOs Rated</td>
<td>57</td>
<td>49, 8</td>
</tr>
</tbody>
</table>

*Writing Process includes INVE, ARRA, STYL, and TASK.
**Reading Comprehension includes READ, COMP, DOUN, and DAIT.

IMPAC Objective Rating for SLOs for Each College

» For IMPAC (see figure 4 below), the most commonly matched category was F, with 53 of the 57 colleges having at least one SLO matched to F category; next was A, with 48 colleges, followed by B (47), C (44), and H (30).

### Figure 4. IMPAC Distribution (n=57)

<table>
<thead>
<tr>
<th>IMPAC Category</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>F</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLOs Matched</td>
<td>48</td>
<td>47</td>
<td>44</td>
<td>53</td>
<td>30</td>
</tr>
<tr>
<td>Percentage</td>
<td>85</td>
<td>82</td>
<td>77</td>
<td>93</td>
<td>52</td>
</tr>
</tbody>
</table>

**Key**

A = Critically read, analyze, and evaluate a variety of primarily non-fiction texts for their rhetorical and technical merit, with consideration of the principles of unity, coherence, tone, persona, purpose, methods, and the effects on a target audience.

B = Write an analytical or argumentative essay, consisting of introduction, body, and conclusion, with an arguable thesis and persuasive support.

C = Write a unified, well-developed, well-organized, and clearly written essay of at least 1,000 words.

F = Find, analyze, interpret, and evaluate outside sources, including online information. Incorporate sources as appropriate, using MLA or APA documentation format.

H = Use a variety of rhetorical strategies, which may include textual analysis, comparison/contrast, causal analysis, and argument.

IMPAC categories A, B, C, F, and H were the categories of interest for the Academic Senate.
Data Sources and Methodology

The Academic Senate collected the English 1A SLOs analyzed for this study during the 2007–2008 academic year through a voluntary submission process for individual colleges. Due to capacity constraints within the Academic Senate, REL West offered to analyze the SLOs. The Academic Senate removed all identifying information from the SLOs before sending them to REL West.

Fifty-seven of the then-110 community colleges in the state system submitted their SLOs.

As a group, those that submitted SLOs are:
- large (over 16,000 FTEs, or full-time equivalent students), medium (between 2,000 and 16,000 FTEs), and small (2,000 FTEs);
- from different parts of the state, both geographically and in terms of whether they are rural, urban, or suburban;
- from areas with four-year transfer institutions in close proximity and from areas where no local transfer option exists;
- from single-college districts and multi-college districts; and
- far along or at the beginning stage in their SLO development process.

Academic Senate representatives indicated that the colleges have since changed their SLOs; therefore, the analyses in this report represent a snapshot in time.

For purposes of analysis, each college’s set was divided into individual statements in a rating chart, based on paragraphing, numbering, bulleting, and/or punctuation (e.g., a list following a colon). For example: If a college had three bulleted paragraphs, each paragraph would be entered into the rating chart as a separate “ratable” statement; if a college had a list of nine numbered statements, each numbered statement would be considered a separate “ratable” statement; and if a college had a list of eight numbered overarching statements, each followed by a bulleted list of three to 13 detailed statements, each of those bulleted statements would be considered a “ratable” statement. Through this process, researchers identified a total of 428 statements from the 57 submissions.

This deconstruction of the SLOs allowed analysts to consider the DOK level and content match (i.e., with ICAS and IMPAC) for each distinct statement and then rate each statement. However, because the individual statements were not necessarily comparable across colleges in number, level of detail, or organization, analysts based their final determinations of content ratings on the complete set of statements for each college. In other words, to provide an overall rating for each college’s SLOs, they aggregated the ratings of individual SLO statements back to the college level.

REL West researchers created an Excel rating sheet listing each SLO statement in its own row, with column headings for general content area (Reading, Writing, Resources/Research), DOK, IMPAC objectives, and ICAS competencies. Researchers engaged in a multistage calibration process to ensure interrater reliability.

Stage I: Training and calibration
- Each of four analysts individually rated the SLOs for three colleges, then met as a group to discuss and reach consensus about the ratings.

Stage II: Ongoing calibration
- The same four analysts repeated the individual ratings process looking at the SLOs from a larger number of colleges, then met again as a group to discuss and reach consensus about their ratings.

Stage III: Individual rating with two-step consensus
- The four analysts individually rated a larger number of colleges.
- Teams of two analysts reached consensus on their ratings for a subset of these colleges.
- The two teams reached consensus on the full set of colleges.

Rating Process
- Researchers rated each statement for general content area (Reading, Writing, Resources/Research, Other).
- Researchers rated each statement for DOK level (1, 2, 3, or 4).
- Each ICAS competency and each IMPAC objective has multiple subcomponents. For example, Making the Reading/Writing Connection (i.e., MAKI) states that students will read texts of complexity without instruction and guidance, summarize information, relate prior knowledge and experience to new information, make connections to related topics or
information, synthesize information in discussion and written assignments, synthesize information from reading and incorporate it into a writing assignment, argue with the text, anticipate where an argument or narrative is heading, and suspend information while searching for answers to self-generated questions. The researchers’ decision rule for rating SLOs against ICAS and IMPAC statements was this: To be considered a match, an SLO need not align with all subcomponents of an ICAS competency or IMPAC objective, but must address at least one.

- Researchers rated each statement as a Strong or Partial match for up to six IMPAC objectives and up to six ICAS competencies. However, researchers subsequently determined that the Strong and Partial ratings were too subjective; therefore, they decided not to report those findings.

- After determining ratings for individual SLO statements, researchers aggregated each college’s set of matches to IMPAC objectives and ICAS competencies in order to report on its set of SLOs as a whole.

A more detailed explanation of the rating process follows, using a hypothetical College X, which has two ratable SLO statements: Each analyst individually rated each of the two College X SLO statements for general content area, DOK, and match to ICAS competencies and IMPAC objectives. The DOK rating was based on the analysts’ expert judgments of the cognitive complexity of the knowledge and skills described in each SLO statement, as defined by the Webb DOK definitions (see appendix A). The IMPAC and ICAS ratings were based on the analysts’ expert judgments regarding the amount of overlap in knowledge and skills between each SLO statement and each ICAS competency and IMPAC objective (see appendices B and C, respectively).

The analysts then came together into two work teams, each with two analysts. In each work team, the two compared and discussed their respective assessments of the general content area and DOK rating for each statement and then reached consensus about a final rating for each. They then went through the same process for their initial IMPAC and ICAS ratings, reaching agreement about the content in Statement 1 of the SLOs they were examining. In this hypothetical example, they decided that Statement 1 matched IMPAC objectives A and E and ICAS competencies COMP, ARRA, and TASK. Each set of analysts then went through the same process for Statement 2. One of the analysts had rated Statement 2 for IMPAC objective E, but since they had already agreed that this objective was a match for another SLO in the set, they did not need to discuss the rating further. One of the analysts had rated Statement 2 for IMPAC objective H; the two analysts agreed that H matches the content for Statement 2. They also agreed that Statement 2 does not match any additional ICAS competencies beyond what were found for Statement 1. After reaching agreement about final ratings within their two-person teams, analysts from both teams met and repeated the consensus-development work, discussing the final ratings of both teams to achieve the final SLO ratings, which follow:

» Statement 1: R, W, DOK 3
» Statement 2: W, DOK 3
» Overall SLO: IMPAC objectives A, E, and H ICAS competencies COMP, ARRA, and TASK.

Limitations of this Study

The purpose of the study was to investigate the comparability of English 1A course content across California Community Colleges. However, since the Academic Senate could not compel all colleges in the state to submit their final or draft SLOs, the study was limited to the 57 (out of 110) colleges that voluntarily submitted their SLOs to the Academic Senate. Thus, the findings are not generalizable to the community college system as a whole. Rather, they provide a picture of the range of content and cognitive complexity in the English 1A SLOs for a set of colleges that were willing to share their SLOs and that, as a group, vary along several dimensions (see Data Sources and Methodology). Additionally, since development and revision of SLOs at the community colleges is ongoing, the findings of this study compare the conceptualization of English 1A content as represented in SLOs at one point in time across a variety of colleges.
Consideration of Learning Objectives vs. SLOs as Category of Comparison

After reviewing results of initial data analyses for the SLOs, the Academic Senate representatives wished to see how results might differ (if at all) if researchers rated course objectives rather than SLO statements. As an exploratory pilot study, three REL West analysts recoded the SLOs from six of the original colleges, using course objectives as the unit of analysis, with the following results:

Changes in Ratings as a Result of Coding Objectives Instead of SLOs

<table>
<thead>
<tr>
<th>Noted Change</th>
<th>Number of Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOK increased from 3 to 4</td>
<td>4</td>
</tr>
<tr>
<td>Added new ICAS statements</td>
<td>6</td>
</tr>
<tr>
<td>Added new IMPAC statements</td>
<td>1</td>
</tr>
</tbody>
</table>

Given the small number of colleges recoded, it is not possible to generalize these data beyond the six colleges.

Questions Arising from the Study

» What do California’s community colleges want students and the public to know about SLOs?

» Would an analysis of course objectives instead of SLOs reveal better information on the comparability of English 1A courses?
  – Who should receive the objective-level information and who should receive the SLO-level information?
  – Would students benefit from receiving objective-level information?

» Which of the skills listed in the IMPAC objectives and the ICAS competencies are essential to English 1A?
Appendix A: Depth-of-Knowledge Level Descriptors for Reading and Writing

Reading

**Level 1:** Level 1 requires students to receive or recite facts or to use simple skills or abilities. Oral reading that does not include analysis of the text as well as basic comprehension of a text is included. Items require only a shallow understanding of text presented and often consist of verbatim recall from text or simple understanding of a single word or phrase. Some examples that represent but do not constitute all of Level 1 performance are:

- Support ideas by reference to details in the text.
- Use a dictionary to find the meaning of words.
- Identify figurative language in a reading passage.

**Level 2:** Level 2 includes the engagement of some mental processing beyond recalling or reproducing a response; it requires both comprehension and subsequent processing of text or portions of text. Intersentence analysis of inference is required. Some important concepts are covered but not in a complex way. Standards and items at this level may include words such as summarize, interpret, infer, classify, organize, collect, display, compare, and determine whether fact or opinion. Literal main ideas are stressed. A Level 2 assessment item may require students to apply some of the skills and concepts that are covered in Level 1. Some examples that represent but do not constitute all of Level 2 performance are:

- Use context cues to identify the meaning of unfamiliar words.
- Predict a logical outcome based on information in a reading selection.
- Identify and summarize the major events in a narrative.

**Level 3:** Deep knowledge becomes more of a focus at Level 3. Students are encouraged to go beyond the text; however, they are still required to show understanding of the ideas in the text. Students may be encouraged to explain, generalize, or connect ideas. Standards and items at Level 3 involve reasoning and planning. Students must be able to support their thinking. Items may involve abstract theme identification, inference across an entire passage, or students’ application of prior knowledge. Items may also involve more superficial connections between texts. Some examples that represent but do not constitute all of Level 3 performance are:

- Determine the author’s purpose and describe how it affects the interpretation of a reading selection.
- Summarize information from multiple sources to address a specific topic.
- Analyze and describe the characteristics of various types of literature.

**Level 4:** Higher-order thinking is central and knowledge is deep at Level 4. The standard or assessment item at this level will probably be an extended activity, with extended time provided. The extended time period is not a distinguishing factor if the required work is only repetitive and does not require applying significant conceptual understanding and higher-order thinking. Students take information from at least one passage and are asked to apply this information to a new task. They may also be asked to develop hypotheses and perform complex analyses of the connections among texts. Some examples that represent but do not constitute all of Level 4 performance are:

- Analyze and synthesize information from multiple sources.
- Examine and explain alternative perspectives across a variety of sources.
- Describe and illustrate how common themes are found across texts from different cultures.

Writing

**Level 1:** Level 1 requires the student to write or recite simple facts. This writing or recitation does not include complex synthesis or analysis but basic ideas. The students are engaged in listing ideas or words as in a brainstorming activity prior to written composition, are engaged in a simple spelling or vocabulary assessment or are asked to write simple sentences. Students are expected to write and speak using Standard English conventions. This includes using appropriate grammar, punctuation, capitalization, and spelling. Some examples that represent but do not constitute all of Level 1 performance are:

- Use punctuation marks correctly.
- Identify Standard English grammatical structures and refer to resources for correction.

**Level 2:** Level 2 requires some mental processing. At this level students are engaged in first draft writing or brief extemporaneous speaking for a limited number of purposes and audiences. Students are beginning to connect ideas using a simple organizational structure. For example, students may be engaged in note-taking, outlining, or simple summaries. Text may be limited to one paragraph. Students demonstrate a basic understanding and appropriate use of such reference materials as a dictionary, thesaurus, or web site. Some examples that represent but do not constitute all of Level 2 performance are:

- Construct compound sentences.
- Use simple organizational strategies to structure written work.
- Write summaries that contain the main idea of the reading selection and pertinent details.
**Level 3:** Level 3 requires some higher level mental processing. Students are engaged in developing compositions that include multiple paragraphs. These compositions may include complex sentence structure and may demonstrate some synthesis and analysis. Students show awareness of their audience and purpose through focus, organization, and the use of appropriate compositional elements. The use of appropriate compositional elements includes such things as addressing chronological order in a narrative or including supporting facts and details in an informational report. At this stage students are engaged in editing and revising to improve the quality of the composition. Some examples that represent but do not constitute all of Level 3 performance are:

» Support ideas with details and examples.
» Use voice appropriate to the purpose and audience.
» Edit writing to produce a logical progression of ideas.

**Level 4:** Higher-level thinking is central to Level 4. The standard at this level is a multi-paragraph composition that demonstrates synthesis and analysis of complex ideas or themes. There is evidence of a deep awareness of purpose and audience. For example, informational papers include hypotheses and supporting evidence. Students are expected to create compositions that demonstrate a distinct voice and that stimulate the reader or listener to consider new perspectives on the addressed ideas and themes. An example that represents but does not constitute all of Level 4 performance is:

» Write an analysis of two selections, identifying the common theme and generating a purpose that is appropriate for both.
Appendix B: ICAS Statements of Competencies for Academic Literacy

2002 ICAS COMPETENCY STATEMENT

Fostering Habits of Mind Essential for Success: Academic Literacy and Critical Thinking

Students entering colleges and universities will be expected to:

» sustain and express intellectual curiosity
» experiment with new ideas
» generate hypothesis
» synthesize multiple ideas into a theory
» identify and use rhetorics of argumentation and interrogation in different disciplines, for different purposes, and for diverse audiences
» read skeptically
» prepare and ask provocative questions
» challenge their own beliefs
» engage in intellectual discussions
» manifest interest in and exhibit respect for others’ diverse views
» postpone judgment and tolerate ambiguity
» respect principles as well as observations and experiences
» respect facts and information in situations where feelings and intuitions often prevail
» compare and contrast own ideas with others’
» interrogate own beliefs
» sustain and support arguments with evidence
» embrace the value of research to explore new ideas through reading and writing
» enjoy the exchange of ideas
» work collaboratively on reading and writing
» meet deadlines for assignments
» demonstrate initiative and develop ownership of their education
» exercise the stamina and persistence to pursue difficult subjects and tasks
» work collaboratively with others
» gain attention appropriately
» be attentive in class
» exercise civility
» engage in self-advocacy

Making the Reading/Writing Connection

Students entering colleges and universities are expected to:

» read texts of complexity without instruction and guidance
» summarize information
» relate prior knowledge and experience to new information
» make connections to related topics or information
» synthesize information in discussion and written assignments
» synthesize information from reading and incorporate it into a writing assignment
» argue with the text
» anticipate where an argument or narrative is heading
» suspend information while searching for answers to self-generated questions

From Academic Literacy: A Statement of Competencies Expected of Students Entering California’s Public Colleges and Universities, Intersegmental Committee of the Academic Senates (ICAS), Spring 2002.
Reading Competencies

Students entering colleges and universities will be expected to:

» read a variety of texts, including news articles, textbooks, essays, research of others, Internet resources
» read texts of complexity without instruction and guidance
» use vocabulary appropriate to college level work and the discipline

Students entering colleges and universities will be expected to demonstrate these features of reading:

**Comprehension and Retention**

» summarize information
» summarize reading
» analyze information and argument
» retain information read
» identify the main idea of a text
» determine major and subordinate ideas in passages
» synthesize information from assigned reading
» synthesize information from reading and incorporate it into a writing assignment
» identify appeals made to reader
» use the title of the article/essay/text as an indication of what will come
» predict the intention of the author from extratextual cues
» understand “rules” of various genres
» retain versatility in reading various forms of organization—both essay and paragraph
» read texts of complexity without instruction or guidance
» decipher the meaning of vocabulary from the context
» have strategies for reading convoluted sentences
» reread (either parts or whole) for clarity

**Depth of Understanding**

» identify the evidence which supports, confutes, or contradicts a thesis
» argue with the text
» retain information while seeking answers to self-generated questions
» understand separate ideas and then be able to see how these ideas form a whole

**Depth of Analysis and Interaction with the Text**

» read with awareness of self and others
» anticipate the direction of an argument or narrative
» suspend information while searching for answers to self-generated questions
» relate prior knowledge and experience to new information
» make connections to related topics or information
» identify appeals made to the reader [pathos, logos, ethos]
» have patience

Writing Competencies

Students entering colleges and universities will be expected to demonstrate these features of writing:

**Invention**

» generate ideas for writing by using texts in addition to past experience or observations
» duly consider audience, purpose
» participate in recursive prewriting process
» develop main point or thesis
**Writing Competencies (continued)**

**Arrangement**
- develop thesis convincingly with well-chosen examples, reasons, and logic
- organize information
- structure writing so that it is clearly organized, logically developed, and coherent
- structure writing so that it moves beyond formulaic patterns that discourage critical examination of the topic and issues
- use revision techniques to improve focus, support, and organization

**Style/Expression**
- vary sentence structures and word choice as appropriate for audience and purpose
- edit or proofread to eliminate errors in grammar, mechanics, and spelling, using Standard English

Students will be assigned writing tasks that require them to do the following:
- write to discover and learn new ideas
- critically analyze or evaluate the ideas or arguments of others
- summarize ideas and/or information contained in a text
- write well-organized, well-developed essays
- synthesize ideas from several sources
- provide factual descriptions
- report facts or narrate events
- prepare lab reports using conventions of the discipline
- produce informal writing in and out of the class (e.g., journal "quick-writes")
- provide short answer responses or essays
- conduct college-level research to develop and support their own opinions and conclusions
- use the library catalog and the internet to locate relevant sources
- critically assess the authority and value of research materials that have been located
- correctly document research materials to avoid plagiarism
Appendix C: IMPAC Course Descriptor for English 1A
Proposed Objectives to Add to Course Descriptor

Upon completion of the course, successful students will be able to:

A. Critically read, analyze, and evaluate a variety of primarily non-fiction texts for their rhetorical and technical merit, with consideration of the principles of unity, coherence, tone, persona, purpose, methods, and the effects on a target audience.

B. Write an analytical or argumentative essay, consisting of introduction, body, and conclusion, with an arguable thesis and persuasive support.

C. Write a unified, well-developed, well-organized, and clearly written essay of at least 1,000 words.

D. Use sentences of varying structure and type in order to emphasize meaning, relationship, and importance of ideas.

E. Organize paragraphs into a logical sequence, developing the central idea of the essay to a logical conclusion.

F. Find, analyze, interpret, and evaluate outside sources, including online information. Incorporate sources as appropriate, using MLA or APA documentation format.

G. Integrate the ideas of others through paraphrase, summary, and quotation into a paper that expresses the writer’s own voice, position, or analysis.

H. Use a variety of rhetorical strategies, which may include textual analysis, comparison/contrast, causal analysis, and argument.

I. Revise, proofread, and edit their essays for public presentation so they exhibit no gross errors in English grammar, usage, or punctuation.