



Defining Postsecondary Expectations for Reading and Writing in Indiana

As recommended in the American Diploma Project (ADP) legal research, the ADP asked members of the postsecondary community in Indiana to define their expectations of high school graduates (related to admissions and placement decisions), to comment on what is now expected of high school students for graduation in the state, and to identify gaps that may exist between those different sets of expectations. The ADP's gap-analysis work consists of two parts. **Part one** focused on an analysis of the content of high school exit and college entrance/placement assessments; **part two** focused on defining postsecondary expectations and determining the degree to which current ADP state standards and assessments reflect those expectations.

In **part one**, the Education Trust assembled English Language Arts (ELA) and mathematics faculty members from K-12 systems and from two- and four-year colleges in the five ADP partner states (Indiana, Kentucky, Massachusetts, Nevada and Texas). At these meetings the faculty members examined the content of partner state high school graduation assessments, national college admissions and placement tests (i.e., SAT, ACT, COMPASS, Accuplacer), a sampling of postsecondary institutional placement tests and the GED.

The results from part one comprise Education Trust's five state reports, reflecting the feedback received from faculty members to the aforementioned assessments, as well as The Education Trust's analytical "cross-state" report. These reports discuss the relative strengths and weaknesses of the assessments and how well each assessment might serve postsecondary institutions in making admissions and placement decisions. By examining individual test items, the faculty members were able to examine the breadth and depth of content coverage, as well as the types and quality of test items.

The first part of the gap-analysis work revealed that Indiana's current Core 40 Assessments might serve the colleges and universities well for the purposes of admissions and/or placement, but a closer look at their alignment of the Core 40 Assessments to Indiana's Academic Standards and to postsecondary faculty expectations was warranted.¹

¹ The Education Trust gap-analysis reports were circulated in 2002 and are available on the ADP website <<http://www.americandiplomaproject.org/>>.

In **part two**, Achieve and ADP staff, using the assessment-to-standards alignment protocol developed by Achieve², conducted an alignment study of the Core 40 Assessments in English Language Arts and Mathematics (i.e., Grade 11 ELA, Algebra I, Geometry, and Algebra II) and the corresponding sets of Indiana's Academic Standards. With both the assessment-content analysis and the alignment studies complete, Achieve and ADP staff met with faculty members from two- and four-year colleges in Indiana, representing a broad range of content areas (organized into the "ELA" and "Math" Teams) to:

1. define their expectations for incoming students,
2. prioritize their expectations for students, as may be contained in Indiana's Academic Standards,
3. determine the degree to which the current standards and assessments together reflect those expectations, and
4. identify any gaps (missing content) in the standards and assessments.

In this round of discussion, it was particularly helpful to have had a cross-section of faculty from the humanities, sciences and social sciences, since reading, writing and mathematics skills are necessary for success in all credit-bearing courses throughout college, not just English and mathematics.

² For a complete description of the protocol, see "Benchmarking and Alignment of Standards and Testing, CSE Technical Report," available on the ADP website <<http://www.americandiplomaproject.org/>>.

*Part One Findings:
Assessment Content Analysis*

1. Core 40 ELA Assessments (Grades 11 and 12) compare favorably to the college admissions and placement tests.

- Against the COMPASS (ACT online, diagnostic), the Core 40 items were deemed more rigorous, in terms of cognitive challenge. The reading passages were also classified at a higher grade level and showed a broader range of genre and topic than COMPASS – and broader than the SAT I. Still, the ELA Team felt they would like to see an even broader range of disciplines represented, including those from history, sociology, psychology, and science, as the ACT does.
- While the Core 40 ELA Grade 11 reading passages were judged to be a mixture of lower high school and middle school (lower than the rigor found on the SAT I), the ELA Team felt that the complexity of the items raised the level of rigor in the test. The cognitive challenge of the Core 40 ELA Grade 12 reading passages were mostly “moderately complex” to “complex;” items emphasized higher level thinking, including inference, interpretation or analysis.
- Indiana college faculty members expressed interest in conducting a study on the predictive validity of the Core 40 assessments for college success. This corresponds to a recommendation in the ADP legal study, suggesting that in order to ensure the validity of using one assessment for multiple purposes, states should track student performance beyond high school, relative to their standards-based assessment scores. Such a study would attempt to find a correlation among different student scores on the state tests, scores on other placement tests and performance in various college courses. Such a study would give colleges the information they need about just how to use results from the Core 40s for admissions or placement. College personnel have been using SAT I, SAT II, ACT, and other placement tests for years, despite their limitations. Although they may not deem the national admissions and placement tests perfect, college faculty members are in some cases more familiar with their ostensible predictive validity than they are with the Core 40 Assessments.

2. Reviewers were less enthusiastic about the writing section of the test.

- The Indiana educators would like to see the state create prompts from the reading passages in the comprehension section of the exam and base prompts on multiple texts.

*Part Two Findings (Reading and Writing):
Definition of Postsecondary Expectations and Examination of Alignment
among Standards, Assessments and Expectations*

Part two of the postsecondary-expectations analysis began by Achieve, Inc. and ADP staff conducting an assessment-to-standards alignment study of the Core 40 Assessment of English Language Arts (Grade 11) and the Indiana's Grade 11 ELA Academic Standards. The alignment protocol used was designed by Achieve to determine the extent to which standards-based assessments actually assess the content standards that a state has defined for students. Following is a brief description of the Achieve protocol.³

The protocol considers four dimensions in its analysis of the degree of alignment between an assessment and a set of standards.

- **Content centrality:** This criterion provides a deeper analysis of the match between the content of each examination question and the content of the related standard by examining the degree or quality of the match. Reviewers assign each item to one of four categories based on the degree of alignment: “2” = clearly consistent; “1a” = not specific enough; “1b” = somewhat consistent; “0” = inconsistent.
- **Performance centrality:** This criterion focuses on the degree of the match between the type of performance (cognitive demand) presented by each examination item and the type of performance described by the related standard. Each item makes a certain type of cognitive demand on a student (e.g., the item requires a certain performance such as “select,” “identify,” “compare,” or “analyze”). Reviewers assign each item to one of four categories based on the degree of alignment: “2” = clearly consistent; “1a” = not specific enough; “1b” = somewhat consistent; “0” = inconsistent.
- **Challenge:** This criterion is applied to a set of items to determine whether doing well on these items requires students to master challenging subject matter. Reviewers consider two factors in evaluating sets of examination items against the challenge criterion: *source* of challenge and *level* of challenge.
 - **Source of challenge** attempts to uncover whether the individual examination items in a set are difficult because of the knowledge and skills they target, or because of other reasons not related to the subject matter, such as relying unfairly on students’ background knowledge. Reviewers rate each item as having an appropriate (1) or inappropriate (0) source of challenge.

³ For a complete description of the protocol, see “Benchmarking and Alignment of Standards and Testing, CSE Technical Report,” available on the ADP website <<http://www.americandiplomaproject.org/>>.

- **Level of challenge** compares the emphasis of performance required by a set of items to the emphasis of performance described by the related standard. In addition to evaluating alignment, reviewers also judge whether the set of examination items has a span of difficulty appropriate for students at a given grade level based on the standards, the assessment and supporting materials. Reviewers assign each item to one of four categories indicating its type of cognitive demand: “4” = analysis; “3” = interpretation; “2” = inference; “1” = basic comprehension.
- **Balance and range**: No one assessment can measure the full range of knowledge and skills described in the state standards. Evaluating balance and range provides both qualitative and quantitative descriptive information about the choices states or test developers have made.
 - **Balance** compares the emphasis of content supplied by an item set to the emphasis of content described by the standards. In addition to evaluating alignment, reviewers also judge whether the set of items emphasizes the more important content at the grade level. Reviewers write a succinct summary of the balance of each item set.
 - **Range** is a measure of coverage or breadth (the numerical proportion of all content addressed).

With the alignment study complete (*see appendices following for summary data for each of the above categories*), Achieve and ADP staff met with faculty members from two- and four-year colleges in Indiana, representing a range of content areas, for the following discussion.

Step One: Define Expectations for Incoming Students

Thinking more about what is really needed, rather than bowing to the current state of student reading and writing expertise, what follows is a list of minimum skills and concepts articulated by postsecondary personnel in Indiana as necessary to do credit-bearing work at state colleges and universities:

1. Use correct grammar, logic, usage, punctuation and mechanics.
2. Identify, construct and analyze, evaluate the effectiveness of, and rebut an oral or written argument.
3. Identify logical structures and logical fallacies.
4. Identify (false or emotional) assumptions.
5. Recognize and use rhetorical devices (and understand their effect).
6. Make inferences.
7. Marshall evidence in support of an argument.
8. Develop a thesis statement.
9. Write paragraphs with thesis statements and supporting sentences.
10. Summarize information and distinguish between summary and critique.
11. Outline texts.

12. Recognize a thesis and extract essential information when reading and listening.
13. Read several sources (more than 2-3 pages at a time!) and negotiate among several texts (e.g., compare and contrast themes and the ways in which authors address them, why effects are different because of genres).
14. Engage in sustained reading (and listening), demonstrating an ability to focus/pay attention.
15. Deal effectively with the “media culture” by: analyzing visual text as argument; identifying biases and propaganda; recognizing rhetorical devices and manipulation.
16. Have a well-developed vocabulary for reading and writing.
17. Recognize the difference between connotation and denotation.
18. Know the differences (and different purposes) among various kinds of sources (e.g., primary v. secondary).
19. Evaluate the credibility and usefulness of print and non-print resources
20. Properly cite sources (plagiarism issue).
21. Use the dictionary and other reference materials effectively.
22. Analyze informational text structures (professional journals, etc.).
23. Work successfully in small group: listening and working collaboratively with civility is especially important in upper level classes; at entry level, listening, focus and ability to extract essential information are the essentials.

Step Two: Prioritize expectations for students, as reflected in the state standards

Question One: Are the competencies required in college in a broad range of disciplines represented in the Indiana ELA Academic Standards and Examples?

Answer: Yes, in general the reviewers felt that the Indiana ELA Academic Standards were strong and contained much of the content that represents college readiness, although they identified a few gaps and some ways to improve the documents.⁴

Following are some specific recommendations made by the ELA Team for improving the relevance of the reading and writing standards to postsecondary institutions:

Reading:

- Some examples (where there are none now) and *better examples* in some cases would improve the standards and provide helpful guidance to teachers about the level of cognitive demand required by the standards, especially with regard to informational text.
- Consider blurring distinctions between literary and informational text on occasion. For example, it is essential to understand the power of literary devices in an effective speech, or the importance of a narrative structure to aid understanding

⁴ The American Diploma Project tracked feedback from the ELA Team on individual objectives and examples; it can make this feedback available as requested.

in a nonfiction prose piece. At grade 11, students could develop a facility across types of text, both in reading and in writing.

Writing:

- The ELA Team noted the problems of spell check and compared them to the problems associated with calculator use. Perhaps a statement could be added to the standards regarding the danger for student over-reliance on spell check (i.e., they won't understand and apply spelling rules themselves).
- The ELA Team pointed out the need to specify audience and purpose in a writing assignment/prompt so that students will concentrate less on "writing for the teacher/for the grade."

Missing Content:

- One important gap is a standard or set of objectives that addresses "inquiry" (i.e., formulating a research question, revising it, and/or paying attention to a methodology for "solving a problem.") *This is similar to a recommendation that surfaced in the ADP workplace study.*

Step Three: Determine the degree to which current standards and assessments reflect postsecondary expectations

Question Two: How do the prioritization of the objectives on the assessment compare to the prioritization that the ELA Team places on the knowledge and skills needed to begin college-level work?

Answer: They are closely aligned, although some minor shifts would be welcomed, including:

1. Assessing some objectives that the ELA Team felt were of critical importance.⁵ Many have to do with understanding, constructing and evaluating arguments. They include:
 - (11.1.3) Analyze the meaning of analogies encountered, analyzing specific comparisons as well as relationships and inferences.
 - (11.7.13) Identify logical fallacies used in oral addresses including *ad hominem*, appealing to the audience's feeling or prejudices.
 - (11.7.14) Analyze the four basic types of persuasive speech (propositions of fact, value, problem, and policy) and understand the similarities and

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differences in their patterns of organization and the use of persuasive language, reasoning and proof.

- (11.7.15) Analyze the techniques used in media messages for a particular audience and evaluate their effectiveness.
2. The ELA Team noted that they would like to see less of a prioritization on literary response (of the “personal reflection” variety) and more of a prioritization on literary *analysis*.
 3. The ELA Team also noted that they would ideally like to see some prioritization placed on some objectives that are understandably not currently tested in the large-scale, on-demand format of the Core 40s (e.g., some listening and speaking skills).
 4. The following objectives are those that the ELA Team identified as possible-to-test in current Core 40, but are not sampled, according to the alignment study:
 - (11.2.4) Make reasonable assertions about an author’s arguments by using elements of the text to defend and clarify interpretations.
 - (11.2.6) Critique the power, validity, and truthfulness of arguments set forth in public documents: their appeal to both friendly and hostile audiences and the extent to which the arguments anticipate and address reader concerns and counterclaims.
 - (11.3.5) Analyze recognized works of American literature representing a variety of genres and traditions (could add some constructed response items).
 - (11.3.6) Analyze the way in which authors have used archetypes (models or patterns) drawn from myth and tradition in literature, film, political speeches, and religious writings.
 - (11.3.17) Analyze the clarity and consistency of political assumptions in a selection of literary works or essays on a topic.

Question Three: Can the Core 40 Reading and Writing assessment be used in its current form for use in postsecondary admissions and/or placement?

Answer: Yes, with the exception of the writing anchors, the ELA Team thought the English 11 Core 40 Assessment could be used in its current form for college admission or placement purposes. The “Proficient” anchor paper (score 4) was at an extremely low level, and the ELA Team found that neither of the “Advanced” anchors (scores 5 and 6) showed that the student was ready to place out of freshmen composition.

The Achieve alignment study revealed that the **English 11 Core 40 Assessments strongly align to the Indiana English Language Arts Standards**, with 90 percent of test items receiving “2s” for content centrality and 79 percent of items receiving “2s” for performance centrality (see *TABLE ELA1*).⁶ Because the Indiana ELA Team felt that there was a strong correlation between what is expected of students in the standards and what students need to do credit-bearing work, the strong alignment indicates that the standards and assessments, in general, are consistent with postsecondary expectations.

TABLE ELA1: Content & Performance Centrality

Centrality	# of Items	2 (clearly consistent)	1a (standard not specific enough)	1b (item assesses only a part of the standard)	0 (inconsistent)
Content	39 (100% of test)	90% of all items received a 2	10% of all items received a 1a	no items received a 1b	no items received a 0
Performance	39 (100% of test)	79% of all items received a 2	no items received a 1a	21% of all items received a 1b	no items received a 0

A proper balance exists in terms of assessing particular standards, except that it is too heavy on literary analysis, and too light on writing (see *TABLE ELA2*).

TABLE ELA2: **Grade 11 ELA Standards Emphasis/Balance**

Standards	ELA Team: Range	ELA Grade 11 Assessment
STANDARD 1. READING: Word Recognition, Fluency, and Vocabulary Development	10-25%	5.6%
STANDARD 2. READING: Reading Comprehension. Focus on Informational Materials	20-30%	30.6%
STANDARD 3. READING: Literary Response and Analysis.	5-15%	27.8%
STANDARD 4. WRITING: Writing Process	20-25%	1 Writing Sample
STANDARD 5. WRITING: Writing Applications. Different Types of Writing and Their Characteristics	20%	0 Writing Samples
STANDARD 6. WRITING: Written English Language Conventions	10-20%	33.3%
STANDARD 7. LISTENING AND SPEAKING: Listening and Speaking Skills, Strategies, and Applications	10-15%	2.8%
TOTALS	n/a	100.0%

⁶ The remaining 21% of items received 1b's, indicating that the items were sampling a portion of the content in the standard. In the aggregate, this means that the vast majority of the content in the standards that *can* be assessed in a large-scale, on-demand test is in fact assessed.

The overall level of cognitive demand is high (72% of test items were rated at a level 2 or higher, see *TABLE ELA3*) relatively higher than many other state tests and yet the material is appropriate and aligned to the standards.

TABLE ELA3: Level of Cognitive Demand

Demand (39 items on test plus writing sample)	# of Items	4 (analysis)	3 (interpretation)	2 (inference)	1 (basic comprehension)
	39	no items received a 4	18% of all items received a 3	54% of all items received a 2	28% of all items received a 1

- The range of genres of reading passages was impressive; the Indiana Reading list has a good variety of genres and content areas represented.
- The reading passages are pitched at the right levels.
- The open-response reading items (even though they are not scored for writing) were intriguing.
- The writing prompt identified an audience and a purpose, adding clarity to the task.

Question Four: What suggestions do you have for improving the assessment beyond any shift in emphasis?

The ELA Team made the following additional suggestions for improving the tests in reading:

- One question had a “source of challenge” problem: #11. There is no correct answer among the choices.
- There is a problem associated with “Fire Codes” passage (the lottery passage) and questions and suggested it be deleted from test. With that said, the ELA Team did note that the item was good because it asks students to compare effective and ineffective arguments and cite evidence for both.

The ELA Team made the following additional suggestions for improving the tests in writing:

- The prewriting piece of the writing prompt was unnecessary and might be misleading to students, especially given the constraints of the timed test.
- There is some concern that students were being asked to write something that was intended to be delivered as a speech. It isn’t clear from the anchor

set whether or not students might have chosen deliberately to use colloquial language (b/c of peer audience). Would these papers be scored in the same way as more formal essays? The question is, "What does the state really want to assess here?"

- The rubric is vague and the ELA Team agreed that a more prompt-specific rubric might be helpful.

Question Five: Do the passing cut scores on the Core 40 signal competency needed for college?

Answer: Not in Writing. *Perhaps the most important feedback for the state emerged in the discussion about the anchor papers:* The proficient paper (the "4") was thought to be at an extremely low level (6th – 8th grade) effort. Similarly, neither the 5 nor 6 papers (advanced) were deemed acceptable to the ELA Team in order for a student to place out of freshmen composition.

APPENDICES

The following tables represent the results from the Achieve alignment study for the Indiana Core 40 Grade 11 ELA Assessment and Indiana’s ELA Academic Standards

Assessment

Indiana Core 40 Assessment:
English Language Arts, Grade 11, 2002

Standards

Indiana’s English Language Arts Academic Standards
Adopted Summer 2000

Test Design

32 Multiple-Choice Items: 20 reading, 12 editing
7 Constructed-Response Reading Items
1 Extended Writing Item
39 items scored

APPENDIX 1: Item Number & Point Distribution

APPENDIX 2: Content Centrality

APPENDIX 3: Performance Centrality

APPENDIX 4: Source of Challenge

APPENDIX 5: Level of Cognitive Demand

APPENDIX 6: Level of Challenge

APPENDIX 7: Balance

APPENDIX 8: Range

APPENDIX 1: Item Number & Point Distribution

Item Type	Number of Items	Number of Points
Multiple-Choice Items: Reading	20	20
Open-Ended: Reading	7	14
Multiple-Choice Items: Writing Correctly	12	12
Extended Writing: development	1	6
Extended Writing: language use		4
Total Items	40	56

APPENDIX 2: Content Centrality

Note: Ratings for Content Centrality are “2” = clearly consistent; “1a” = not specific enough; “1b” = somewhat consistent; “0” = inconsistent.

Standard	# of items	2	1a	1b	0
Standards 1, 2, 3: Reading	26 (67%)	24	2	0	0
Standards 5 & 6: Writing	Writing Sample	--	--	--	--
Standard 6: Conventions	12 (31%)	10	2	0	0
Standard 7: Listening & Speaking	1 (2%)	1	0	0	0
Totals for Exam without Writing Sample	39 (100%)	35 (90%)	4 (10%)	0	0

APPENDIX 3: Performance Centrality

Note: Ratings for Performance Centrality are “2” = clearly consistent; “1a” = not specific enough; “1b” = somewhat consistent; “0” = inconsistent.

Standard	# of items	2	1a	1b	0
Standards 1, 2, 3: Reading	26 (67%)	18	0	8	0
Standards 5 & 6: Writing	Writing Sample	--	--	--	--
Standard 6: Conventions	12 (31%)	12	0	0	0
Standard 7: Listening & Speaking	1 (2%)	1	0	0	0
Totals for Exam without Writing Sample	39 (100%)	31 (79%)	0	8 (21%)	0

APPENDIX 4: Source of Challenge

Note: Ratings for Source of Challenge are "1" = appropriate, "0" = inappropriate.

Standard	# of items	1	0
Standards 1, 2, 3: Reading	26 (67%)	25	1
Standards 5 & 6: Writing	Writing Sample	--	--
Standard 6: Conventions	12 (31%)	12	0
Standard 7: Listening & Speaking	1 (2%)	1	0
Totals for Exam without Writing Sample	39 (100%)	38 (97%)	1 (3%)

APPENDIX 5: Level of Cognitive Demand

Note: Ratings for Level of Cognitive Demand are "4" = analysis; "3" = interpretation; "2" = inference; "1" = basic comprehension.

Standard	# of items	4	3	2	1
Standards 1, 2, 3: Reading	26 (67%)	0	6	20	0
Standards 5 & 6: Writing	Writing Sample	--	--	--	--
Standard 6: Conventions	12 (31%)	0	0	1	11
Standard 7: Listening & Speaking	1 (2%)	0	1	0	0
Totals for Exam without Writing Sample	39 (100%)	0	7 (18%)	21 (54%)	11 (28%)

APPENDIX 6: Level of Challenge

Note: Ratings for Level of Challenge are either Appropriate or Low.

Standard	Level of Challenge of Item Set	Comments
Standards 1, 2, 3: Reading	Appropriate	Level 3=6 Level 2=20
Standards 5 & 6: Writing	Appropriate	Anchors set at an appropriate level of expectation for the grade
Standard 6: Conventions	Appropriate	Level 2=1 Level 1=11
Standard 7: Listening & Speaking	Appropriate	Level 3=1

APPENDIX 7: Balance

Note: Ratings for Balance are either Fair or Poor.

Standard	Number of Items	Balance of Item Set
Standards 1, 2, 3: Reading	26 (67%)	Good
Standards 5 & 6: Writing	Writing Sample	Good
Standard 6: Conventions	12 (31%)	Good
Standard 7: Listening & Speaking	1 (2%)	Good

APPENDIX 8: Range

Note: Ratings for Range are either Good, Acceptable, or Poor.

Standard	Number of Items	Balance of Item Set
Standards 1, 2, 3: Reading	44/15 or 0.34	Fair
Standards 5 & 6: Writing	Not applicable	Not applicable
Standard 6: Conventions	9/3 or 0.33	Good
Standard 7: Listening & Speaking	39/1 or 0.26	Acceptable given the nature of the skills described