The Research-Driven Solution to Raise the Quality of High School Core



Guidelines for Developing an Instructional Unit



ACT endorses the *Code of Fair Testing Practices in Education* and the *Code of Professional Responsibilities in Educational Measurement,* guides to the conduct of those involved in educational testing. ACT is committed to ensuring that each of its testing programs upholds the guidelines in each *Code*. A copy of each *Code* may be obtained free of charge from ACT Customer Services (68), P.O. Box 1008, lowa City, IA 52243-1008, 319/337-1429.

CONFIDENTIAL. This document is the confidential and proprietary property of ACT, Inc. No part of it may be reproduced or transmitted in any form or by any means without the express written permission of ACT, Inc.

© 2011 by ACT, Inc. All rights reserved.

Introduction

This booklet contains a set of guidelines for developing an instructional unit. The guidelines are divided into 15 sections that correspond to a unit's organizational structure. Use the following definitions and questions, which address criteria important to the unit's success, to assist you in your work. Some questions include additional descriptors, questions identified with bullets, to clarify and expand the criteria.

Questions that appear as boldfaced text address primary criteria and are **required** elements of the unit. Questions that are **NOT** boldfaced are criteria that would provide supplementary information for teachers and are not considered crucial.

Unit Development

Review each section of this document as you develop a unit and its accompanying assessments. By answering each of the questions and providing written comments regarding your decisions, you will ensure that each criterion has been adequately addressed.

Unit Sections

- The *Unit Number* and *Title* allow readers to identify at a glance the unit's place in the curriculum and its primary focus.
- The *Purpose* statement identifies the specific knowledge and skills taught in the unit.
- The *Time Frame* states the number and length of class periods needed for the instructional unit.
- The *Overview* describes the unit's primary focus, summarizes the unit, and explains how the knowledge and skills listed in the purpose statement will be taught. It serves as a general introduction to the unit.
- The Guiding Principles section consists of one or more quotations about instruction, assessment, thinking skills, student learning, and other educationally relevant topics to encourage conversation and reflection among teachers.

- The *Prerequisites* section lists specific knowledge or skills students need to have learned or been introduced to before engaging in the unit.
- The Selected ACT Course Standards section identifies the specific knowledge and skills the unit will focus on.
- The Research-Based Strategies section lists instructional practices recommended for use in the unit; those that hold strong promise for teachers to enhance achievement for all students.
- The Essential Questions section clearly and IX. precisely communicates the pivotal points in the curriculum and helps avoid a random assortment of well-intended activities with no structure. When the curriculum is formed around questions, the clear message to students is that the teacher is probing significant ideas with them. There are two types of essential questions: topical questions, which are specific and lead to particular understandings of a unit; overarching questions, which point toward larger, transferable ideas. Essential questions cannot be answered with a simple "yes" or "no"; they must be composed to encourage higher-order thinking and to promote indepth investigation.
- The Suggestions for Assessment section offers ideas for documenting and recording student learning. This section describes three types of assessments: preassessments, embedded assessments, and unit assessments.

Preassessments are typically completed before a unit is begun and provide information about students' level of understanding or skill. They also are an opportunity to identify students' perceptions or misconceptions and to preview the information to be learned. The information obtained from the assessment should be used to adjust the instruction to better meet students' needs.

Embedded assessments inform teachers of where students are in the learning process. An embedded assessment is a formative

assessment that is primarily teacherdeveloped and is integral to the instructional process—at times the instruction and assessment may be indistinguishable.

The third type of assessment is a unit assessment, which provides a description of the knowledge and skills that students should master by the end of the unit and the criteria by which they will be assessed.

XI.

The next section, *Unit Description*, is divided into three related parts: "Introduction," which presents the unit's pedagogy and themes; "Materials & Resources," which lists all of the materials recommended to teach the unit successfully; and "Suggested Teaching Strategies/Procedures," which describes teaching practices that teachers may use to teach content and skills to students.

"Suggested Teaching Strategies/Procedures" is the most involved part of the unit description. Employing precise descriptions, using concrete examples, and citing authoritative research, it describes at length exemplary classroom instruction. To that end it suggests various ways to engage students, describes topics and tasks relevant to the unit's goals and to students' lives, addresses a range of ACT Course Standards and modes of instruction, and explains the purposes of the teaching strategies the unit employs. Because it is the lengthiest part of the unit description, this part is often organized chronologically by dividing the unit's time frame into manageable sections.

As a whole, the unit description emphasizes reasoning and making connections, using community resources and real-life learning, and encouraging students both to ask questions leading to analysis, reflection, and further study and to construct individual meanings and interpretations.



The *Tips for Teachers* section includes extension ideas and suggestions to help activities succeed in the classroom.



The Enhancing Student Learning section provides additional assistance to students. The selected ACT Course Standards may duplicate Section VII or may include new Course Standards. The section provides a brief description of ways to extend and reteach the skills or content previously taught.



Each unit concludes with *Reflecting on Classroom Practice*. Given the complex nature of instruction, it is important for teachers and students to continually renew themselves by reviewing their work and reflecting on how best to promote learning. To that end, this set of questions is included to inspire the reflection process.



The *Appendix* consists of all activities, handouts, readings, transparencies, worksheets, and other documents that correspond to the unit instruction.

Jnit Title:	Date:
Developed by:	

Guidelines for Developing an Instructional Unit

ne title engaging, informative, and		
cise?		
urpose	Y/N	Comments
ne purpose statement clear and concise?		
es the purpose statement identify the wledge and skills taught?		
ime Frame	Y/N	Comments
es the time frame state the number and gth of class periods needed to complete instructional unit?		
Overview	Y/N	Comments
ne overview clear and concise?		
es the overview identify and describe the mary focus of the unit (i.e., what students know and be able to do at the unit's aclusion)?		
es the overview summarize how the unit's wledge and skills will be taught?		
es the overview identify the unit's primary distinctive techniques (e.g., math nipulatives, using literature in science) do the techniques conform to the nciples of Universal Design (i.e., are they igned for easy and equitable use by all chers and students)?		
Guiding Principles	Y/N	Comments
the guiding principles relevant to the ic or focus of the unit?		
the principles encourage discussion, ection, or further learning among chers?		
rerequisites	Y/N	Comments
the expectations reasonable with respect he knowledge and skills that students d to have learned or been introduced to ore engaging in this unit?		
elected ACT Course Standards	Y/N	Comments
the Course Standards correspond to the wledge and skills summarized in the pose and overview?		
the skills and concepts relate to larger mes in the course; the curriculum; the s of students?		
	the purpose statement clear and concise? The purpose statement identify the wledge and skills taught? Time Frame The sthe time frame state the number and of the class periods needed to complete instructional unit? The overview The overview clear and concise? The the overview identify and describe the mary focus of the unit (i.e., what students know and be able to do at the unit's clusion)? The sthe overview summarize how the unit's wledge and skills will be taught? The sthe overview identify the unit's primary distinctive techniques (e.g., math nipulatives, using literature in science) and the techniques conform to the ciples of Universal Design (i.e., are they igned for easy and equitable use by all chers and students)? The guiding Principles The guiding principles relevant to the ciple of the unit? The principles encourage discussion, ection, or further learning among chers? The expectations reasonable with respect the knowledge and skills that students do have learned or been introduced to one engaging in this unit? The clear ACT Course Standards The Course Standards correspond to the wledge and skills summarized in the pose and overview? The skills and concepts relate to larger mes in the course; the curriculum; the	the purpose statement clear and concise? The purpose statement identify the whedge and skills taught? The purpose statement identify the whedge and skills taught? The purpose statement identify the whedge and skills taught? The purpose statement identify the whedge and skills taught? The purpose statement identify the whole and good instructional unit? The purpose statement identify and describe the many focus of the unit (i.e., what students know and be able to do at the unit's clusion)? The sthe overview identify and describe the many focus of the unit (i.e., what students know and be able to do at the unit's whedge and skills will be taught? The overview identify the unit's primary distinctive techniques (e.g., math inpulatives, using literature in science) and the techniques conform to the inciples of Universal Design (i.e., are they igned for easy and equitable use by all chers and students)? The guiding Principles The guiding Principles The principles encourage discussion, ection, or further learning among chers? The expectations reasonable with respect the knowledge and skills that students do have learned or been introduced to ore engaging in this unit? The Course Standards correspond to the whedge and skills summarized in the pose and overview? The skills and concepts relate to larger mes in the course; the curriculum; the

VIII. Research-Based Strategies	Y/N	Comments
14. Are the research-based teaching strategies used in the unit named and referenced with the page numbers where each strategy can be found?		
IX. Essential Questions	Y/N	Comments
15. Are the conceptual priorities of the instructional unit organized around essential questions?		
 Is there at least one overarching essential question? 		
 Are the questions clearly worded for students? 		
 Do the questions invite connections between different concepts, skills, or ideas? 		
 Are the questions relevant to students' lives? 		
 Given the time frame for the unit, is the number of questions realistic? (There should be approximately 2–5 questions for a unit that ranges from 3–5 weeks.) 		
X. Suggestions for Assessment	Y/N	Comments
16. Are the preassessments, embedded assessments, and unit assessments labeled, identified, and summarized?		
17. Are the documents (handouts, worksheets, etc.) that are used with the assessment named?		
18. Have the assessments been examined for rigor and relevance? ¹		
XI. Unit Description	Y/N	Comments
Introduction		
19. Is the list chronologically organized?		
20. Does the introduction suggest ways to pique students' interests and motivate students to learn?		
 Is there an effective preactivity (e.g., video clip, skit, or hook)? 		
 Are references made to high-interest topics or social issues that are typically relevant to students' lives? 		
21. Does the introduction reveal how the knowledge and skills to be learned in the unit build upon previous learning or preview future learning?		
 Does the introduction review or introduce key vocabulary to be learned? 		
22. Does the introduction briefly describe a preassessment?		

¹ Refer to ACT's booklet *Template to Examine Assignments for Rigor and Relevance* for definitions of both rigor and relevance.

XI. Unit Description (continued)	Y/N Comments
Materials & Resources	
23. Is the list of materials and resources required for the unit complete?	
 Does the list include appropriate and varied reading selections below, at, and above grade level? 	
 Does the list include the necessary equipment (e.g., lab supplies, books)? 	
 Does the list include handouts and worksheets (e.g., sample lab reports, graphic organizers, homework assignments)? 	
 Does the list suggest other useful resources (e.g., supplementary texts, reference materials)? 	
 Do the needed materials and resources include technology equipment or audiovisual tools (e.g. computers, specific software, Internet access, video)? 	
Suggested Teaching Strategies/Procedures	
Writing	
24. Is the unit logically organized and sequenced to facilitate use by educators?	
25. Does each day or series of days begin with a brief summary of that section's instruction, assessments, and goals?	
26. Is there text overtly addressing daily warm-up and wrap-up activities?	
27. Does the text provide clear, descriptive details to guide teachers' replication of the strategies and procedures in the classroom?	
 Do appropriate examples help to clarify difficult concepts? 	
 Is detail or description necessary in other areas? 	
28. Is every step in the process of the unit adequately defined and described?	
Content	
29. Is the unit's content accurate?	
30. Are the unit's activities rigorous and relevant?	
31. Is the content relevant to students' lives (e.g., connected to real-world situations or the world of work)?	
32. Does the unit suggest links between disciplines (e.g., to history, mathematics, or English)?	
33. Does the unit adequately address the primary ACT Course Standards?	

XI	Unit Description (continued)	Y/N	Comments
	Assessments		
34.	Do the preassessment(s) assess students' prior knowledge or current understanding of a skill or concept?		
	Do embedded (formative) assessment(s) represent multiple and varied opportunities for assessment (e.g., graphic organizers, quizzes, questionnaires, works-in-progress, anecdotal notes)?		
36.	Do embedded assessments inform the teacher where students currently are in the learning process?		
37.	Do embedded assessments require students to answer questions or perform tasks that are meaningful and purposeful?		
38.	Do the embedded assessments reflect skills and understandings that are important for students to learn? Are they tied to the ACT Course Standards?		
39.	Do the students have opportunities to correct or clarify their performance as needed based on observed results?		
40.	Does the unit assessment provide evidence that yields information teachers can use to make valid inferences about students' learning?		
41.	Does the unit assessment include criteria that are clearly stated and understood by students?		
42.	Do assessments include directions that are clearly stated and unambiguous, not easily misunderstood by students?		
43.	Do the assessments that include a scoring rubric explain how to score the assessment and provide values for each score point?		
44.	Do assessments intended to provide students with qualitative feedback suggest ways for teachers to provide that feedback?		
45.	Do assessments include answer keys and/or scoring criteria?		
	Teaching and Learning Styles		
46.	Are the essential questions asked and explored in the unit?		
47.	Does the unit take into consideration students' varied learning styles?		
	 Are there varied avenues for investigation (e.g., by posing problems or discussing issues) and instruction? 		
	 Does the unit utilize a variety of media (e.g., music, paint, papier-mâché, video, film) to help students learn skills or content? 		
	 Are extensions, adaptations, or interventions for students (e.g., special needs or advanced) suggested? 		

XI	. Unit Description (continued)	Y/N	Comments
48.	Are the teaching strategies or techniques (e.g., note taking, using wait-time, skimming, scanning, collaborative discourse, making predictions) effective and efficient for teaching the skills and/or concepts to be learned?		
49.	Does the unit develop a range of thinking skills (e.g., making inferences, drawing conclusions, making generalizations, looking for bias, analyzing the accuracy of data)?		
50.	Is each research-based teaching strategy described with sufficient detail for teachers to understand or learn more about it?		
51.	Do teachers model learning for students?		
52.	Are alternatives to unit activities based on time, cost, resource constraints, or the unique needs of a given student population suggested?		
	Student Engagement		
53.	Does the unit engage students in thoughtful processes of inquiry (e.g., research, experimentation, background reading, problem-based learning)?		
54.	Does the unit encourage students to find answers to their own questions?		
55.	Do the instruction and student requirements, such as in-class assignments or homework, ask students to demonstrate proficiency using the following types of tasks/evidence?		
	 Are students asked to apply the content and skills learned to new contexts or situations? 		
	 Do students distill and analyze information to solve or propose plausible solutions to problems? 		
	 Do students adapt (i.e., modify, stretch, transfer) knowledge and skills in order to create innovative solutions to complex problems or to develop creative products? 		
	 Are students asked to understand and recall knowledge of specific content? 		
56.	Does the unit engage students in both independent and collaborative learning?		
	 Does the unit suggest collaborative work with teachers or students from other schools? 		
58.	Is feedback from students about what they have learned or their reactions to the unit solicited?		

XI. Unit Description (continued)	Y/N	Comments
References		
59. Are the sources used to develop the unit and resources properly cited?		
60. Are all cited materials readily available?		
61. Is the bibliography complete and every citation in APA (American Psychological Association) style?		
XII. Tips for Teachers	Y/N	Comments
62. Are tips included in the unit description?		
63. Do the tips provide useful suggestions to teachers or information from students?		
XIII. Enhancing Student Learning	Y/N	Comments
Selected ACT Course Standards		
64. Do the Standards adequately represent the primary focus of the suggested activities?		
Suggested Teaching Strategies/Procedures		
65. Do the activities suggest how to extend students' learning or how to reteach the knowledge and skills previously learned?		
Unit Extension		
66. Do the activities extend the learning in the unit?		
Reteaching		
67. Do the activities reteach important ACT Course Standards from the unit?		
XIV. Reflecting on Classroom Practice	Y/N	Comments
68. Are the questions listed appropriate and relevant to this unit?		
69. Do the questions encourage teachers to evaluate their teaching and students' levels of engagement and academic learning?		
XV. Appendix	Y/N	Comments
70. Do all materials (handouts, worksheets, homework, and in-class activities) include directions sufficient for students to understand the task?		
71. If readings are required, are source documents included?		
 Is complete and correct bibliographic information provided for each source? 		
72. Are the materials rigorous and relevant?		
 Have questions been tested (i.e., math problems worked, experiments practiced, questions about literary or other texts answered)? 		
73. Are keys provided?		
74. Are document types (e.g., transparency, handout, worksheet) labeled?		