Establishing Performance Level Standards for the ACT in Wisconsin

September 2015



Wisconsin Department of Public Instruction
Tony Evers, State Superintendent
Madison, Wisconsin

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Introduction

Beginning in the 2014-15 school year, the ACT® Plus Writing assessment was administered to almost all 11th graders in Wisconsin. This statewide administration provides important insight into the academic preparedness of students in Wisconsin, particularly related to readiness for postsecondary education. ACT provides college readiness benchmarks for the overall score and certain content areas of the ACT assessment, but Wisconsin needs to set ACT performance level cut scores for public reporting. This document provides an overview of the standard setting process and a detailed account of the meetings that were held to arrive at recommendations related to these standards.

Overview

The ACT® Plus Writing

- The tests include: Reading, Math, English, Science, and Writing.
- The ACT® Plus Writing is a paper and pencil test that was administered to all Wisconsin 11th grade students on either March 3 or March 17, 2015.
- Results from the ACT® Plus Writing can help students understand what they need to learn next so they can build rigorous high school course plans and identify career areas that align with their interests.
- Wisconsin high schools have been certified as ACT® state testing sites. Scores from the
 administration of The ACT® Plus Writing (if taken with ACT Standard Time or ACT-approved
 accommodations) can be used by students for a variety of purposes including college admission,
 scholarships, course placement, and NCAA eligibility.

What are Performance Level Cut Scores?

Performance level setting, also known as standard setting, is the process for establishing one or more threshold scores (cut scores) on an assessment, making it possible to create categories of performance. In Wisconsin, four distinct performance levels have been traditionally used for the summative tests. The current performance levels are:

Performance Level	Description		
Advanced	Student demonstrates thorough understanding of and ability to apply the knowledge and skills for their grade level that are associated with college		
	content-readiness.		
Proficient Student demonstrates adequate understanding of and ability to apply the knowledge and skills for their grade level that are associated with college content-readiness.			
Basic	Student demonstrates partial understanding of and ability to apply the knowledge and skills for their grade level that are associated with college content-readiness.		
Below Basic	Student demonstrates minimal understanding of and ability to apply the knowledge and skills for their grade level that are associated with college content-readiness		

What is the Purpose for Setting Performance Levels?

ACT performance levels need to be established for at least the following reasons:

- To satisfy federal requirements, which specify four performance levels for assessment reporting;
 and
- To support understanding of student performance and progress by providing consistency in reporting of assessment results across grade levels and assessments.

The ACT assessment is widely regarded as a reliable indicator of college readiness. It is important that Wisconsin's performance levels not only reflect this understanding of assessment results, but also greater stakeholder expectations for the use of the assessment.

Which content areas need performance level cut scores?

Performance level cut score decisions are needed for mathematics, science, and for English language arts. The overall score for English language arts will be composed of three ACT subject areas: reading, English, and writing. The reading and English scores are on a 36-point scale while the writing score is on a 12-point scale. In order to create a combined scale score, the writing score was multiplied by 3 and then averaged with the English and reading scores.

What are the ACT College and Career Readiness Benchmarks?

ACT defines college and career readiness as the acquisition of the knowledge and skills a student needs to enroll and succeed in credit-bearing first-year courses at a postsecondary institution (such as a 2- or 4-year college, trade school, or technical school) without the need for remediation. Empirically derived, the ACT College Readiness Benchmarks are the minimum scores needed on the ACT subject area tests to indicate a 50% chance of obtaining a grade of a B or higher or about a 75% chance of obtaining a C or higher in corresponding credit-bearing first-year college courses. ¹

ACT Subject-Area Test	The ACT® Benchmark
English	18
Reading	22
Mathematics	22
Science	23

In 2013, 64% of Wisconsin high school graduates who took the ACT met the ACT benchmark for English, 44% met the ACT benchmark for Reading, 44% met the benchmark for Mathematics, and 36% met the benchmark for science.

¹ ACT Inc., The Condition of College and Career Readiness 2013, http://www.act.org/research/policymakers/cccr13/pdf/CCCR13-NationalReadinessRpt.pdf

What steps do we take to establish performance level cut scores for Wisconsin?

Performance level cut scores are typically set by convening a committee of subject matter experts to review the content and impact data associated with the examination of interest and make recommendations for the score necessary to be deemed basic, proficient, and advanced. In the case of the ACT, the Department invited educators and other stakeholders from across the state to make recommendations to the State Superintendent of Public Instruction.

The process for setting ACT cut scores was based on discussions of ACT college and career readiness data along with analysis of the implications of different cut points. DPI staff reviewed cut scores in other states and developed alternatives to share with the workgroup. The process of establishing ACT performance level cut scores did not include examination of item-level responses.

The final work product from the group are recommendations and considerations for the State Superintendant related to the required scores necessary to be considered advanced, proficient, and basic in English language arts (English, reading, writing), mathematics, and science on the ACT.

August 21, 2015 Meeting

The first meeting was scheduled for August 21, 2015, at the Department headquarters in Madison. Meeting participants (Appendix A) represent a broad coalition of education practitioners, assessment experts and business community partners from across the state.

The meeting (see agenda - Appendix B and PowerPoint Presentation – Appendix C) started with a welcome and introduction of participants and then moved on to a discussion of the overview of the purpose and goals of the meeting. Participants were informed that the primary goal of the meetings was to make a cut score recommendation to the State Superintendent and his Cabinet for final decision. In addition, participants were informed that an additional goal of the meetings was to provide guidance around the issues that led to the recommendation.

After discussion of the goals and purpose of the meetings, participants entered into a discussion of college and career readiness and academic proficiency. Specific topics included a discussion of standard setting, why Wisconsin needs standards to be set for the ACT assessment and a review of the Wisconsin performance level descriptors (Appendix D). After reviewing the performance level descriptors, participants were asked to break into small groups to discuss the descriptors and to indicate what the descriptors mean to them and what their thoughts are in relation to setting performance level standards.

The meeting continued with a discussion of the assessment (Wisconsin Knowledge and Concepts Exam – WKCE) that was being used prior to the ACT, the performance standards that were established for the WKCE and the proficiency rates for each subject area. Discussion then moved on to the definition of college and career readiness that is in place in Wisconsin. Wisconsin's definition of college and career readiness includes a comprehensive picture of academic and social-emotional development, including

habits and skills that are essential for long-term success. Following this group discussion, participants were asked to break into small groups and discuss college and career readiness in terms of their own readiness. This was followed by small group discussions related to perceptions of the ACT, existing performance level descriptors, and Wisconsin's definition of college and career readiness. Participants were asked to specifically discuss how these issues relate to the idea of proficiency on the ACT.

The next meeting topic was to discuss the ACT College Ready Benchmarks and how ACT defines college and career readiness as the acquisition of the knowledge and skills a student needs to enroll and succeed in credit-bearing first-year courses at a postsecondary institution without the need for remediation. The ACT College Readiness Benchmarks were reviewed and participants were able to view graphs indicating the relationship between a content area score on the ACT and postsecondary outcomes (likelihood of a B or C in a corresponding credit bearing course in college).

Wisconsin impact data based on the ACT College Readiness Benchmarks were reviewed by the meeting participants (Appendix C – PowerPoint Presentation). This was followed by a lengthy discussion of whether the ACT College Readiness Benchmarks are appropriate and whether Wisconsin should adopt the benchmarks at the proficient cut point.

August 27, 2015 Meeting

The second meeting was scheduled for August 27, 2015 at the Department headquarters in Madison. Meeting participants (Appendix E) from across the state, who represent a broad coalition of education practitioners, assessment experts, and business community partners were in attendance.

The meeting (see agenda - Appendix F and PowerPoint Presentation – Appendix G) started with a welcome of participants and then moved on to a review of the previous meeting.

Recommendations

The workgroup participants provided a number of recommendations regarding the ACT and the ACT Aspire assessments. These recommendations will be presented to the State Superintendent and his Cabinet for further discussion and adoption of cut scores for the ACT for the state of Wisconsin.

ACT Recommendations:

Recommendation #1:

For the English Language Arts combined section of the ACT, Wisconsin should equally weight the English, reading, and writing scores in order to create a combined score.

Recommendation #2:

Wisconsin should adopt the ACT College and Career Readiness Benchmarks and utilize these benchmarks for setting the proficient cut score for the ACT for math, science and the combined English Language Arts sections of the assessment.

Recommendation #3:

When establishing the Basic and Advanced cut scores for the ACT, the preferred methodology for establishing these scores should be the probability model. Preferred probabilities are 75% probability of a B or higher in a college level credit bearing course to achieve the Advanced cut point and 25% probability of a B or higher in a college level credit bearing course to achieve the Basic cut point.

ACT Aspire Recommendations:

Recommendation #1:

The participants recommend that Wisconsin not establish Advanced, Proficient, and Basic cut points for the ACT Aspire at this time. Wisconsin is not required by statute or rule to establish proficiency level cut points for this examination.

Appendix A - August 21, 2015 Meeting Participants

Jon Bales (Wisconsin Association of School District Administrators)

Troy Couillard (Director, Office of Student Assessment, WI Department of Public Instruction)

Claudia Felske (Wisconsin Education Association Council representative, East Troy High School English teacher, former teacher of the year)

Tammy Gibbons (Association of Wisconsin School Administrators)

Dr. Patricia Hoben (Head of Schools, Carmen Schools of Science and Technology)

Kim Kaukl (Wisconsin Rural Schools Alliance, former principal)

Dr. Gary Kiltz (Curriculum and Learning, Menomonee Falls, Wisconsin ASCD)

Gary Myrah (Wisconsin Council of Administrators of Special Services)

Dan Rossmiller (Wisconsin Association of School Boards)

Dr. Lynette Russell (Assistant State Superintendent, WI Department of Public Instruction)

Karen Showers (Wisconsin Technical College System)

Dr. Melanie Stewart (Milwaukee Public Schools)

Carole Trone (Wisconsin Association of Independent Colleges and Universities)

Zachary Verriden (Educational Enterprises, representing School Choice Wisconsin)

Mary Watson Burke (representing Wisconsin Catholic Conference)

Dr. Jim Wollack (University of Wisconsin Madison)

Lead Facilitator:

Laura Pinsonneault, Director, Office of Educational Accountability, WI Department of Public Instruction

Co-Facilitators:

Duane Dorn, Education Consultant, Office of Student Assessment, WI Department of Public Instruction Jason Engle, Education Consultant, Office of Educational Accountability, WI Department of Public Instruction

Appendix B - August 21, 2015 Meeting Agenda

Setting ACT Cut Scores

August 21, 2015 9:00 am - 12:00 pm

Department of Public Instruction – Room P41 125 S. Webster Street Madison, WI

Agenda

1.	Welcome & Introductions	9:00-9:15
2.	Meeting purpose and goals	9:15-9:30
3.	Meeting expectations, norms	9:30-9:45
4.	Discussion: Setting college and career readiness expectations *History of Wisconsin cut scores *Wisconsin's definition of college and career ready *Information about the ACT assessment	9:45-10:45
5.	Look at impact data *ACT college-ready benchmarks *Discussion of Wisconsin data	10:45-11:45
6.	Wrap-up and prepare for next meeting	11:45-12:00

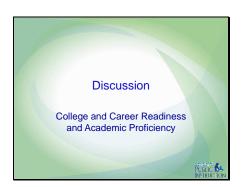
Next Meeting: August 27, 2015

Appendix C - August 21, 2015 PowerPoint Presentation

Slide 1		
	Setting ACT Performance Level	
	Cut Scores for Wisconsin August 21, 2015	
	FORE & INTROCES	
Slide 2	Meeting Agenda	
	Welcome and Introductions Meeting Purpose and Goals	
	Meeting Expectations Discussion: Setting College and Career Readiness Expectations	
	Review Impact Data Wrap-Up	
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Slide 3		
	Meeting Purpose and Goals	



Slide 5



Slide 6

What is Standard Setting?

- Also known as performance level setting
- Process for establishing one or more threshold scores (cut scores) on an assessment
- These cut scores distinguish different performance levels

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Why are we setting ACT performance levels?

- ACT performance levels need to be established for at least the following reasons:
 - To satisfy federal requirements, which specify four performance levels for assessment reporting
 - To support understanding of results by providing consistency in reporting of assessment results across grade levels/assessments

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Performance Level Descriptors Performance Level Description Advanced Student demonstrates thorough understanding of and ability to apply the knowledge and skills for their grade level that are associated with college content-readiness. Proficient Student demonstrates adequate understanding of and ability to apply the knowledge and skills for their grade level that are associated with college content-readiness. Basic Student demonstrates partial understanding of and ability to apply the knowledge and skills for their grade level that are associated with college content-readiness. Below Basic Student demonstrates minimal understanding of and ability to apply the knowledge and skills for their grade level that are associated with college content-readiness.

Slide 9

Turn & Talk (5 min)

What do the performance levels and/or descriptors mean to you?

What comes to mind given your anticipation of today's meeting?

Setting College and Career Readiness Expectations: Context

- · History of Wisconsin cut scores
- · Wisconsin contextual data
- Wisconsin's definition of College and Career Ready
- Information about the ACT assessment

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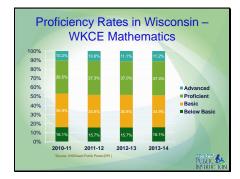
Proficiency cut scores: WI Context

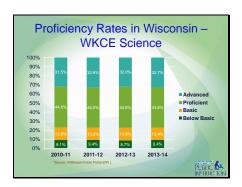
- Wisconsin Knowledge and Concept Exam
 - Initial cut scores set via a standard setting process in 2003
 - Equating process in 2006
- Wisconsin traditionally ranked poorly in national reports on assessment standards
- 2011-12: NAEP-izing cut scores
- Equate proficiencies to national NAEP performance
- Anticipating the shift to more rigorous academic standards

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Slide 15

Defining College and Career Readiness

- Every Child a Graduate, College and Career Ready
- Clarifying college and career readiness in Wisconsin
 - A comprehensive picture of academic and social-emotional development, including habits and skills that are essential for longterm success
- How can our assessment system reflect this expectation of readiness?

Slide 16 Small Group Discussion (5 min) When you think of this definition of college and career readiness, what comes to mind of your own readiness for college and career? Slide 17 Small Group Discussion (5 min) We've talked about perceptions of the ACT, existing performance level descriptors, and Wisconsin's definition of college and career readiness. As you think about proficiency on the ACT, how do these things come into play?

Slide 18

ACT Information

- ACT, Inc. has long-standing College Readiness Benchmarks.
- These are not cut scores, but may inform a discussion about proficiency.
- So, what are these benchmarks and what exactly do they mean?

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What are the ACT College and Career Readiness Benchmarks?

 ACT defines college and career readiness as the acquisition of the knowledge and skills a student needs to enroll and succeed in credit-bearing first-year courses at a postsecondary institution without the need for remediation.

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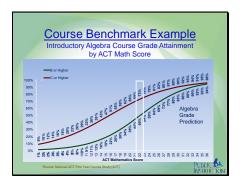
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What are the ACT College and Career Readiness Benchmarks?

 The ACT College Readiness Benchmarks are the minimum scores needed on the ACT subject area tests to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in corresponding credit-bearing first-year college courses.

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What outcomes have we seen based on ACT College and Career Readiness Benchmarks?

- Based on the most recent ACT scores of 2013 graduates
 - 64% met the ACT benchmark for English
 - 44% met the ACT benchmark for Reading
 - 44% met the benchmark for Mathematics
 - 36% met the benchmark for Science
- Note that this is graduates data, not the same as the statewide administration.

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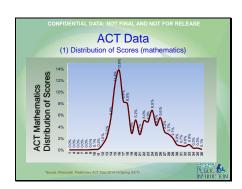
Which content areas need performance level cut scores?

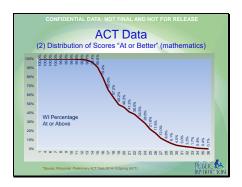
- Mathematics
- Science
- English Language Arts
 - Reading (33%)
 - English (33%)
 - Writing (33%)

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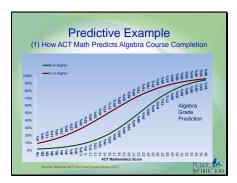
Review Impact Data • Starting point: ACT college-ready benchmarks • Discussion of Wisconsin data

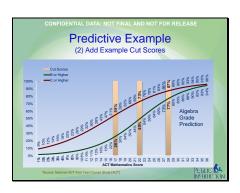
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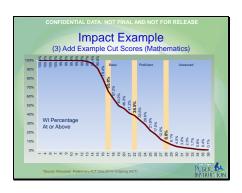


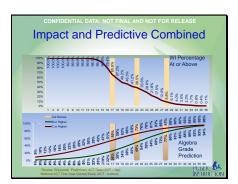


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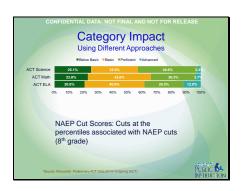


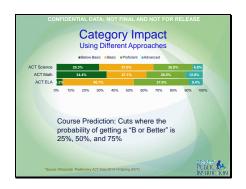


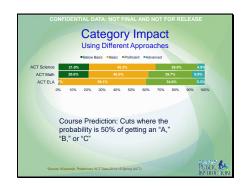




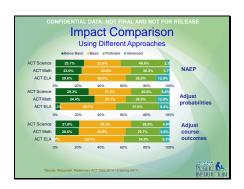
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Appendix D – Wisconsin Performance Level Descriptors

Performance Level	Description
Advanced	Student demonstrates thorough understanding of and ability to apply the knowledge and skills for their grade level that are associated with college content-readiness.
Proficient	Student demonstrates adequate understanding of and ability to apply the knowledge and skills for their grade level that are associated with college content-readiness.
Basic	Student demonstrates partial understanding of and ability to apply the knowledge and skills for their grade level that are associated with college content-readiness.
Below Basic	Student demonstrates minimal understanding of and ability to apply the knowledge and skills for their grade level that are associated with college content-readiness

Appendix E - August 27, 2015 Meeting Participants

Appendix F - August 27, 2015 Meeting Agenda

Setting ACT Cut Scores

August 27, 2015 9:00 am - 12:00 pm

Department of Public Instruction – Room P41 125 S. Webster Street Madison, WI

Agenda

1.	Welcome & Meeting #1 Recap	9:00-9:15
2.	ACT Benchmark and Wisconsin Proficiency *Review of supplemental data	9:15-9:45
3.	Advanced and Basic Cut Points	9:45-10:30
4.	Discussion: Relationship of ACT cut scores and Aspire *Aspire background *Aspire data	10:30-11:15
5.	Discussion: Key considerations for reporting *WISEdash *Considerations for graduate (not 11 th grade) results reporting	11:15-11:45
6.	Meeting summary, next steps	11:45-12:00

Next Step: Review of Meeting Summary Document

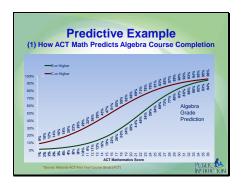
Appendix G - August 27, 2015 PowerPoint Presentation

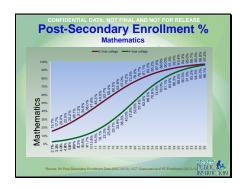
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Setting ACT Performance Level	
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Cut Scores for Wisconsin	
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Meeting Agenda	
Welcome and Meeting #1 recap	
ACT Benchmarks and WI proficiency	
Discussion: What do we mean by "basic"	
and "advanced" performance?	
ACT Aspire	
Discussion: key considerations for	
reporting	
Meeting summary and next steps	
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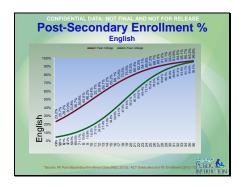
What are the ACT College and Career Readiness Benchmarks?

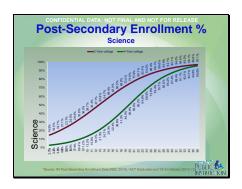
- ACT defines college and career readiness as the acquisition of the knowledge and skills a student needs to enroll and succeed in credit-bearing first-year courses at a postsecondary institution without the need for remediation.
- The ACT College Readiness Benchmarks are the minimum scores needed on the ACT subject area tests to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in corresponding creditbearing first-year college courses.



















Turn & Talk (2 min) If we confirm the ACT Benchmark as proficiency cut scores for the 11th grade ACT, what positive and negative reactions do you foresee?

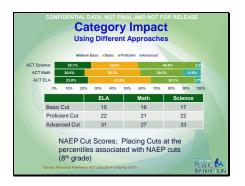
Advanced and Basic Performance

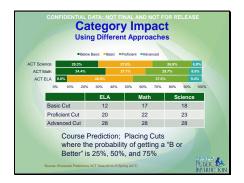
- There are different ways to characterize "advanced" and "basic" performance.
- Reference: performance level descriptors
- · Some options:
 - Advanced = the highest performance (i.e., very difficult to obtain)
 - Basic = close to proficient (within a certain margin)

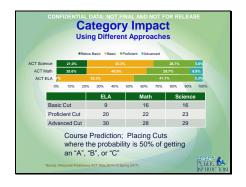
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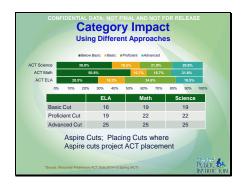


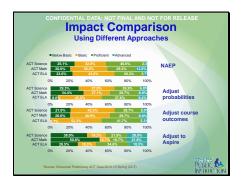












Decision Points: ACT cut scores

- Which methodology does the group recommend for setting Advanced and Basic cut scores?
- Are there any other considerations should DPI take into account when making the final decision on cut scores?

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ACT Aspire

- Decision Points:
 - Use existing benchmarks?
 - Consider the relationship between existing benchmarks and ACT results

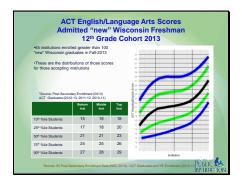
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Considerations for Reporting • Decision points: - Apply cut scores to 11th grade file only or also graduates file? - How will districts use the proficiency rate data? - Should the WI cut scores impact student-level reporting? How?

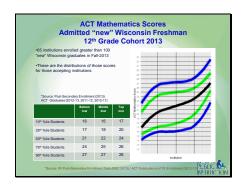


Wrap-Up • Summary of discussion Next Steps: Meeting Summary Document Review Recommendations to State Superintendent Evers and Cabinet

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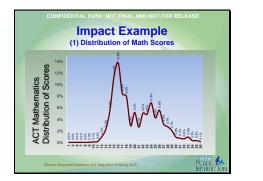
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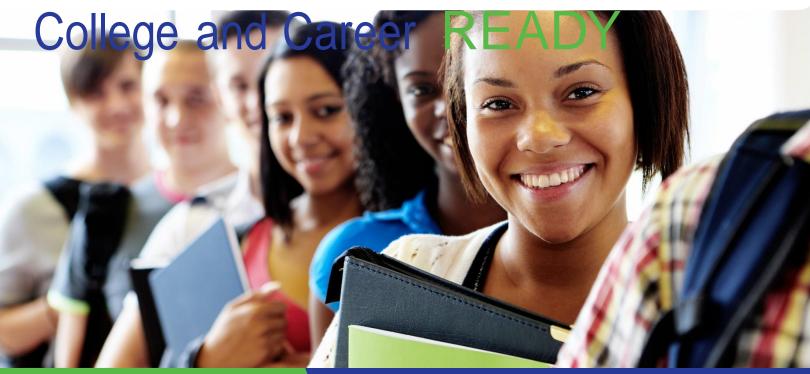






Appendix H - College and Career Readiness Definition Handout

Wisconsin Graduates are



ALL STUDENTS IN
WISCONSIN GRADUATE
FROM HIGH SCHOOL
ACADEMICALLY PREPARED
AND SOCIALLY AND
EMOTIONALLY COMPETENT
BY POSSESSING AND
DEMONSTRATING...

Knowledge

Proficiency in academic content

Skills

Application of knowledge through skills such as critical thinking, communication, collaboration, and creativity

Habits

Behaviors such as perseverance, responsibility, adaptability, and leadership

These proficiencies and attributes come from rigorous, rich, and well-rounded public school experiences.

