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# Report of Results: UWGB General Education Assessment Program



2009-10

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Report of Results:


UWGB  
General Education  
Assessment Program

2009-10 Academic Year

[with extended data analysis]

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The UWGB General Education Assessment Program is in its 19<sup>th</sup> year. Since spring 1991, over sixteen thousand students ( $n = 16,712$ ) have completed the program. The purpose of the program is to provide students and UWGB with feedback regarding how well students have developed specific academic skills through their sophomore year.

The achievement test is the College BASE (College Basic Academic Subjects Examination), a commercially published, criterion-referenced test battery that measures twenty-two specific skills in English, mathematics, science and social studies.

The entire test includes 180 multiple-choice items. It provides 39 scores including a measure of proficiency in English, mathematics, science and social studies; nine sub scores, called cluster scores, which represent proficiency in specific areas within each curricular area; and 22 skill scores distributed throughout the subject areas. (See Part II of the Appendix for a complete description of the skills.)

Beginning in 2009-2010, the General Education Assessment Program was modified in response to institutional concerns regarding the validity of the results and the length of time required by students to complete the test. Changes included:

- Reducing the student testing requirement from four tests to two tests which reduced the total administration time from nearly four hours to two. [Note: Students were required to spend at least 60 minutes completing the test.]
- Reintroducing optional Orientation and Feedback Sessions which were offered online.
- Modifying the requirements for receiving an elective credit for participation in the Assessment Program.

The Program now has three components:

- **Orientation Session** (*optional*). 15-20 minute online tutorial. During this orientation, the purpose of the General Education Assessment Program and participation requirement are explained. Students also complete a survey consisting of a series of questions about the exam and other research information.
- **Testing Session** (*required*). Up to 2 hours. During this session, students take the College BASE exam which assesses general education knowledge and skills. Students were randomly assigned to complete two of the four subject area tests - Mathematics, Science, English, or Social Studies.
- **Feedback Session** (*optional*). 15-20 minute online tutorial. The feedback session provides information about what the scores mean and how students can improve their general education knowledge and skills. Students also complete a survey that includes questions relating to their performance on the test.

In addition to receiving a score report following completion of the test, students may receive:

- One elective credit if they participate in all three sessions (Orientation, Testing, & Feedback), and receive total subtest scores on both subtests that are at or above the 25<sup>th</sup> percentile rank including one total subtest score that is at or above the 50<sup>th</sup> percentile rank.
- A letter of commendation from the Provost if students receive a total score at or above the 90<sup>th</sup> percentile in both subject areas.

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## Interpretation of Scores

As a criterion-referenced examination, the items comprising the College BASE assess specific, clearly delineated content and skills. The criteria and proficiency levels for the skills are based on what a panel of experts agreed should be expected of students who have completed at least two years of college.

The College BASE provides two types of test results: *numeric scores* that range from 40 to 560 points with a mean of 300, and *ratings* that can be either High, Medium or Low. Numeric scores represent examinees' familiarity with traditional subject matter (e.g., mathematics) or how well they performed on a group of closely related skills (e.g., reading critically). Numeric scores that fall between 258 and 332 represent an adequate level of skill development and knowledge base. Scores above 332 represent highly developed skills and an extensive knowledge base. Scores below 257 suggest that skills are not well developed and/or that the subject matter knowledge is weak.

The proficiency level of UWGB students on each of the 22 curricular skills is rated using a three-point scale. A "High" rating suggests that a student has thoroughly mastered a particular area or skill; students with adequate proficiency receive a "Medium" rating; and a "Low" rating suggests that proficiency levels are not adequate for students in the second half of their college careers.

Since the students will no longer complete all four of the subject areas on the College BASE, we cannot provide an overall Composite Score. The same is true for the three reasoning competencies for Interpretive, Strategic, and Adaptive skills. When fewer than four subjects are taken, these two areas cannot be calculated. These two areas of data will be excluded from the report from this point forward.

The following results show the overall performance of UWGB students in important areas of general education skill development. However, because the College BASE provides “criterion-referenced” scores, results are best interpreted at the individual student level. By design, the BASE test does not provide “norm-referenced” scores that would allow a comparison of student performance at UWGB with other institutions. Results shown are for the 2009-10 academic year. These results are then placed in the context of longitudinal results, beginning with the 1991-92 academic year.

During the 2009-10 academic year, 868 of UWGB’s matriculated students who had earned between 54 and 72 credits completed the College BASE test. Twenty-five percent earned the minimum score needed to earn a free credit. Overall, results suggest that UWGB students have well developed general education skills by the end of their sophomore year. It is interesting to note the dramatic increase in scores for the 2009-10 academic year. Do students perform better in a testing environment where they are required to sit for 60 minutes instead of 70 minutes and have a total test time of 90 minutes versus 3 hours? The scores tend to support this.

### **Overall Performance on the College BASE**

UWGB students performed adequately on the College BASE in 2009-10. Students performed best on the mathematics portion of the test (mean = 323) followed by social studies (mean = 297), English (mean = 289), and science (mean = 286). These scores reflect anywhere from a fifteen to a thirty point increase from the 2008-09 academic year.

### **English**

#### *Reading Skills*

BASE results show that 78 percent of 2009-10 UWGB College BASE test takers can read college level material critically and analytically. The test results also indicated that 20 percent had difficulty recognizing assumptions and implications, and evaluating ideas. In addition, 24 percent of the students had problems seeing relationships between form and content when reading a literary text.

#### *Understanding Literature*

Over the past ten years, this skill area has been one of the lowest areas of performance for UWGB students. Twenty- nine percent, down 11% from last year, of the students received a “Low” rating for their understanding of literature including different literary forms and historical contexts. Just over half (53%) received a “Medium” rating and another 18% received a “High” rating.

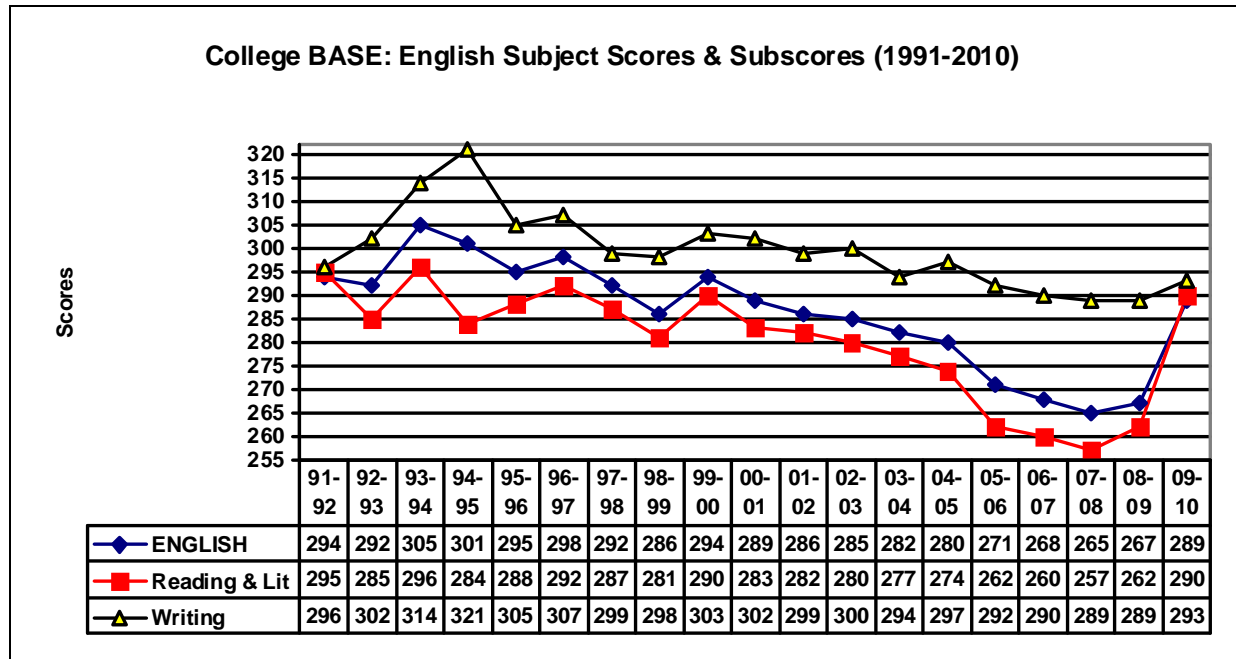
## English Skill Ratings

Cluster	Skill Area	% Receiving Ratings		
		High	Med	Low
Reading and Literature	1. Reading Critically	23%	57%	20%
	2. Reading Analytically	19%	57%	24%
	3. Understanding Literature	18%	53%	29%
Writing	4. Writing as a Process	26%	50%	24%
	5. Conventions of Written English	12%	72%	16%

### Longitudinal Data

Since 1991-92, UWGB students have typically achieved average scores on the English section of the College BASE with a sudden decline in 2005-06. As Chart 2 shows, the overall English score and the scores on the reading and literature portion of the exam had been declining steadily over recent years, but this year showed a large increase in scores. Could the decrease in subjects and testing time have contributed to the increase in scores?

Chart 2



## Mathematics

### *General Mathematics*

In the general mathematics cluster, 87 percent of the students that took the exam this year could use mathematical techniques in the solution of real life problems; 87 percent could effectively use the language, notation, and deductive nature of mathematics to express quantitative ideas with precision; and 90 percent could use the techniques of statistical reasoning and recognize common misuses of statistics.

### *Algebra*

On the algebra portion of the test, more than eight of 10 students could evaluate algebraic and numerical expressions (32% received a “High” rating, 57% a “Medium” rating) and solve equations and inequalities (26% received a “High” rating, 64% a “Medium” rating, up 6% from last year).

### *Geometry*

Since most students have not taken a geometry class since high school (four or more years earlier), the results tend to be lower. But that does not seem to be the case this year. Only twenty-eight percent received a “High” rating for their ability to recognize two- and three-dimensional figures and their properties. Twenty-five percent of the students received a “High” rating for their ability to use the properties of two- and three-dimensional figures to perform geometrical calculations.

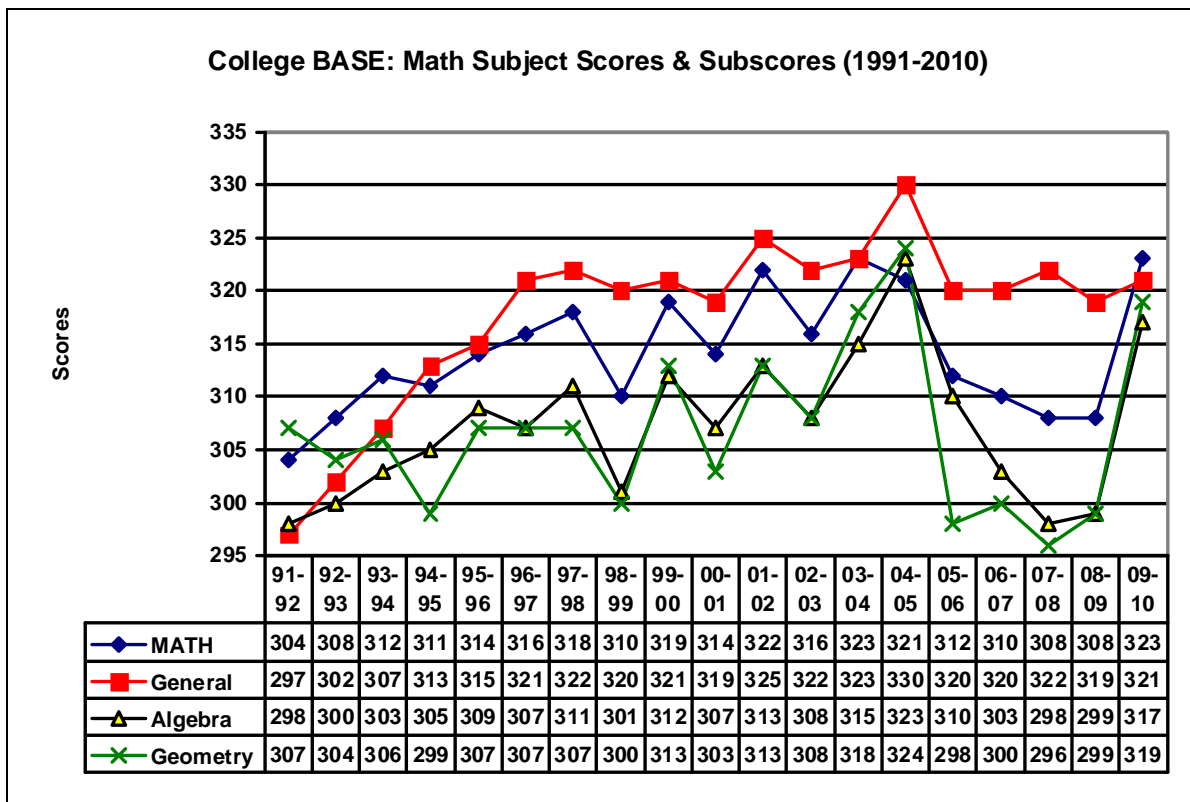
## Mathematics Skill Ratings

Cluster	Skill Area	% Receiving Ratings		
		High	Med	Low
<i>General Mathematics</i>	6. Practical Applications	41%	46%	13%
	7. Properties and Notations	34%	53%	13%
	8. Using Statistics	37%	53%	10%
<i>Algebra</i>	9. Evaluating Expressions	32%	57%	10%
	10. Equations and Inequalities	26%	64%	10%
<i>Geometry</i>	11. 2 and 3 Dimensional Figures	28%	61%	11%
	12. Geometrical Calculations	25%	65%	10%

### *Longitudinal Data*

Since 1991-92, UWGB students have achieved above average scores on the mathematics section of the College BASE, with a large increase this year. As Chart 3 shows, mathematics scores for UWGB students had been falling, but not this year. General mathematics shows the lowest increase while geometry went up 20 points. Mathematics is consistently the highest scoring area on the College BASE.

Chart 3



## Science

### *Laboratory & Field Work*

Sixty-six percent of the students tested had a good understanding of how observation and experimentation relate to the development of scientific theories; 84 percent could recognize appropriate procedures for gathering scientific information; and 80 percent were able to interpret and express the results of observation and experimentation.

### *Fundamental Concepts*

The percentage was almost even for the students who had a very good understanding of the fundamental concepts, principles, and theories of the life sciences (23%) and physical sciences (25%). However, a higher percentage of each group received a “Low” rating in these areas, but not as high as in past years (28% and 26% respectively). Performance in this area seems to be on the incline.

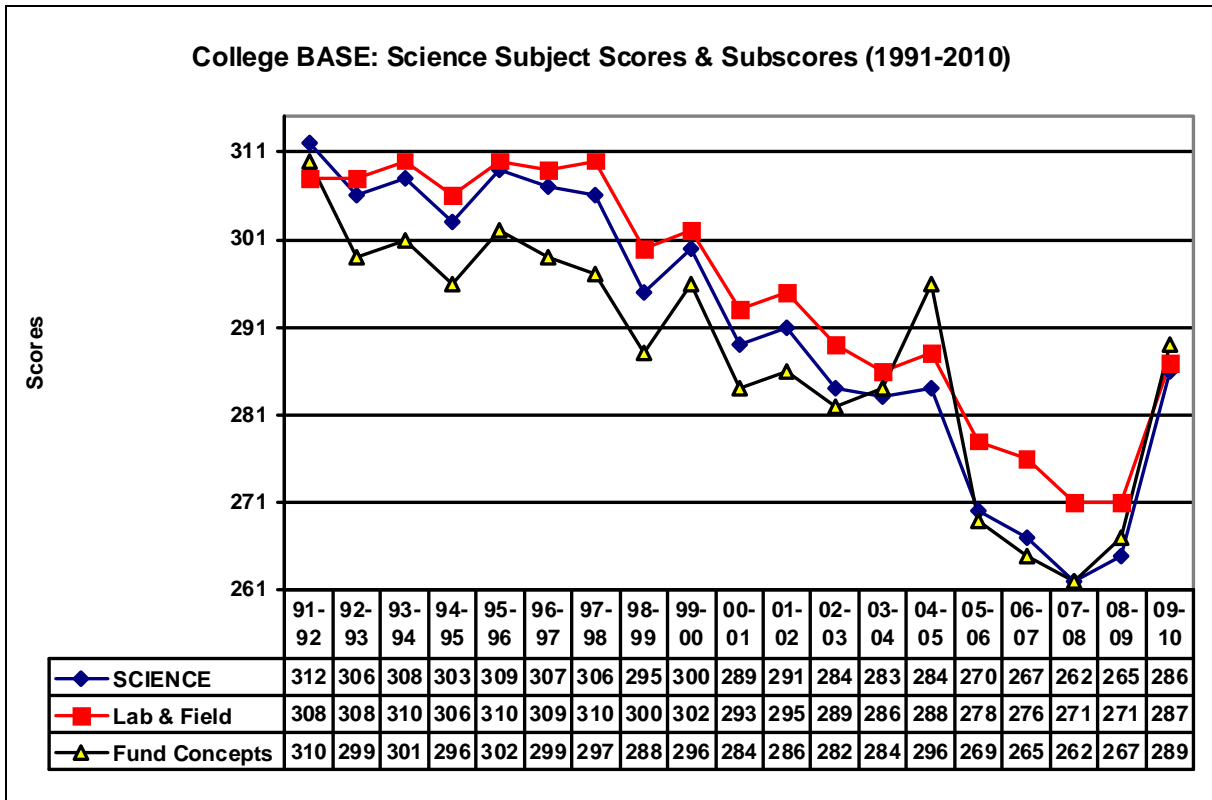
## Science Skill Ratings

Cluster	Skill Area	% Receiving Ratings		
		High	Med	Low
<i>Laboratory &amp; Field Work</i>	13. Observation/Experimental Design	21%	45%	34%
	14. Lab/Field techniques	18%	66%	16%
	15. Interpreting Results	17%	63%	20%
<i>Fundamental Concepts</i>	16. Life Sciences	23%	48%	28%
	17. Physical Sciences	25%	49%	26%

### *Longitudinal Data*

Science scores for UWGB students have declined – in general – since 1991-92, with laboratory and field work scores exceeding fundamental concept scores (see Chart 4). But since the 2008-2009 school year, the scores have increased. Still, the scores show that our students are performing 11-14 points below the average.

Chart 4



## Social Studies

### *History*

Results for 2009-10 show that of the students tested, 80 percent have “Medium” to “High” levels of knowledge about the significance of U.S. and 87 percent have “Medium” or “High” levels of knowledge about world events. Overall, students performed better on the questions relating to world events than on the questions relating to U.S. events.

### *Social Sciences*

Eighty-five percent of students received a “Medium” or “High” rating in their ability to recognize basic features and concepts of world geography. Nineteen percent received a “Low” rating in the area assessing recognition of basic features and concepts of the world’s political and economic structures. Sixteen percent received a “Low” rating in the area of recognition of appropriate investigative and interpretive procedures in the social sciences. This was almost a twenty point decrease in the “Low” category from last year. Students are continuing to perform better.

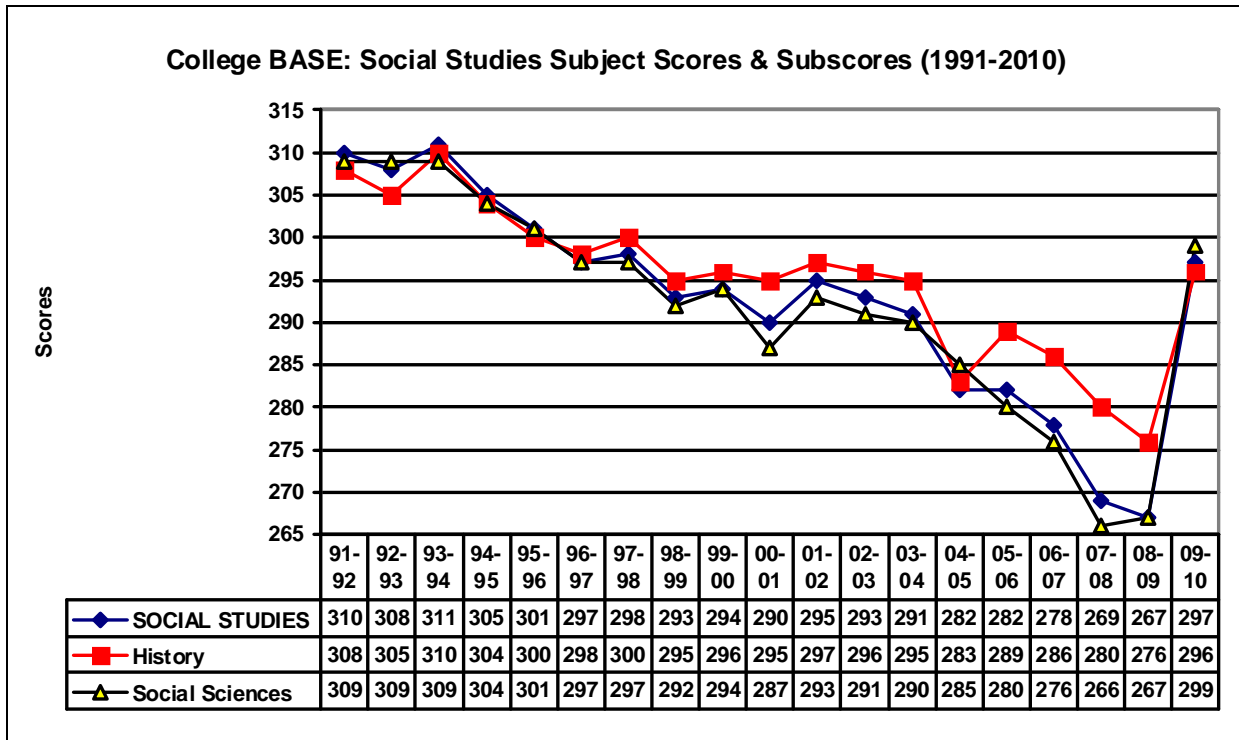
### Social Studies Skill Ratings

Cluster	Skill Area	% Receiving Ratings		
		High	Med	Low
<i>History</i>	18. Significance of World Events	17%	70%	13%
	19. Significance of U. S. Events	13%	67%	19%
<i>Social Sciences</i>	20. Geography	24%	61%	15%
	21. Political & Economic Structures	32%	49%	19%
	22. Social Science Procedures	21%	63%	16%

### *Longitudinal Data*

Since 1991-92, UWGB students have achieved average to below average scores on the social studies section of the College BASE, but showed a large increase this year. Chart 5 shows how social studies scores have been declining since the 1994-95 academic year. Students’ scores on the subject’s two clusters, history and social science, were nearly indistinguishable in the first part of the last decade. In the latter part, history scores have been somewhat more stable than the social sciences scores. The social sciences saw a 32 point increase this year!

Chart 5



### Student Performance by Type of Major

As a group, students that took the College BASE in 2009-10 showed a dramatic increase over previous years. Since students cannot receive a Composite score, it is hard to categorize based on that. Table 8 on page 21 ranks the type of major based on test subject.

### Factors Affecting Test Performance

Students are given 90 minutes to complete the College BASE exam. Thirty-four percent of students used 76 to 90 minutes to work on the exam (the minimum required time being 60 minutes). Twenty-two percent spent at least 66-75 minutes on the exam, and forty-three percent spent the minimum 60-65 minutes on the exam. Generally, the more time students spent on the test, the higher their scores.

### Student Perceptions of the Experience

Students who took the College BASE during the 2009-10 academic year completed a brief “post-test” survey in which they self-reported on two aspects of the testing experience. One question asked students to identify the extent to which they agreed with the statement, “When taking the College BASE, I put forth my best effort.” On a scale of 1-5, where 1 = strongly agree, 34% of the students responding (278 of 818) gave a score indicating that they strongly agreed. Forty percent (323 of 818) indicated that they agreed, while 8% either disagreed or strongly disagreed.

Another question stated, “These test results should adequately reflect what I know or have learned about the subject areas.” On the same scale as above, thirty-seven percent (303 of 818) either strongly agreed or agreed with the statement. Thirty-three percent (269 of 818) were neutral and 30% either disagreed or strongly disagreed.

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## Dissemination and Use of Results



Individual students and the institution use information obtained through the UWGB General Education Assessment Program in several ways. First, students receive feedback regarding their performance from an individual score report which includes thirty-nine (39) different pieces of information. Since students now only take two of the four subject areas, there will not be 39 and the number will vary depending on the test subjects taken. All students, through a brochure, are encouraged to study their results carefully, consult with their faculty advisors, and take some constructive steps to shore-up areas that may need improvement.

Second, because the test publisher provides information about student performance individually and in the aggregate at several different levels, the results are available for diagnostic use by the institution as a whole and by individual academic units. A copy of this report is sent to the Provost and Vice Chancellor, academic deans, chairs of the General Education Council and Academic Affairs Council and the director of Institutional Research. Finally, individual test scores are included in the institutional database to allow for additional analysis of the information by various factors such as major, grade point average, courses completed, and the like.

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## Additional Results



The balance of this report consists of a two-part Appendix. Part I consists of several tables that provide a detailed summary of test results. A complete listing of tables can be found on the first page of the Appendix. Part II of the Appendix is a detailed description of the proficiencies measured by the College BASE.

**Part I: Tabular Summary of Results**

- Table 1: Background Characteristics of Students Completing College BASE
- Table 2: Students Completing College BASE by Major Category
- Table 3: Major Field of Study - Students Completing College BASE
- Table 4: College BASE Subject and Cluster Scores
- Table 5: College BASE Skill and Reasoning Competency Scores
- Table 6: College BASE Subject Scores by Major
- Table 7: College BASE Subject Scores for Majors with 17+ Students Completing CBASE
- Table 8: College BASE Subject Scores: Mean Scores & Rank for Five Groups of Majors
- Table 9: Time Spent on Multiple-Choice Portion of College BASE
- Table 10: College BASE Subject and Cluster Scores by Test Completion Time
- Table 11: College BASE Subject and Cluster Scores by Transfer Status

**Part II: Proficiencies Measured by the College BASE**

**Appendix**  
**Part I: Tabular Summary of Results**

Table 1: Background Characteristics of Students Completing College BASE  
(Percentage Distribution)  
Fall 2009 and Spring 2010 Combined

Category	<i>n</i>	%	Category	<i>n</i>	%
<b>Sex</b>			<b>Transfer Student</b>		
Male	322	37%	UW College	207	24%
Female	<u>546</u>	<u>63%</u>	Other College	105	12%
	868	100%	Re-entry	19	2%
<b>Age</b>			Did Not Transfer	<u>536</u>	<u>62%</u>
Up to 21	609	71%		867	100%
22 to 25	158	18%	<b>Year</b>		
26 to 29	53	6%	Freshman	3	<1%
30 to 40	28	3%	Sophomore	320	37%
41+	<u>13</u>	<u>2%</u>	Junior	540	62%
	861	100%	Senior	<u>4</u>	<u>1%</u>
<b>Ethnicity</b>				867	100%
White	744	86%			
Minority	<u>121</u>	<u>14%</u>			
	865	100%			

Table 2: Students Completing College BASE by Major Category  
(Percentage Distribution)  
Fall 2009 and Spring 2010 Combined

Category	<i>n</i>	Percent
Social Sciences	217	30%
Professional Studies	130	18%
Natural Sciences	171	24%
Humanities	74	10%
Fine Arts	59	8%
Pre-majors/Undeclared	<u>74</u>	<u>10%</u>
	725	100%

Table 3: Major Field of Study - Students Completing College BASE  
(Percentage Distribution)  
Fall 2009 and Spring 2010 Combined

Area	Major	<i>n</i>	Percent
(P)	Accounting	24	3%
(F)	Art	18	2%
(F)	Arts Management	4	<1%
(N)	Biology	18	2%
(P)	Business Administration	73	10%
(N)	Chemistry	6	<1%
(F)	Communication and the Arts	5	<1%
(S)	Communication	49	7%
(N)	Computer Science	14	2%
(F)	Design Arts	12	2%
(N)	Earth Science	2	<1%
(S)	Economics	6	<1%
(P)	Education	12	2%
(H)	English	24	3%
(S)	Environmental Policy & Planning	15	2%
(N)	Environmental Sciences	29	4%
(H)	French	2	<1%
(H)	German	2	<1%
(H)	History	22	3%
(N)	Human Biology	80	11%
(S)	Human Development	25	3%
(H)	Humanistic Studies	11	2%
(N)	Information Sciences	9	1%
(N)	Mathematics	13	2%
(F)	Music	11	2%
(H)	Philosophy	3	<1%
(S)	Political Science	13	2%
(S)	Psychology	76	10%
(S)	Public Administration	14	2%
(S)	Social Change & Development	12	2%
(P)	Social Work	21	3%
(H)	Spanish	10	1%
(F)	Theatre	9	1%
(S)	Urban & Regional Studies	7	<1%
(O)	Undecided, Other	74	10%
	<b>TOTAL</b>	<b>725</b>	<b>100%</b>

F=Fine Arts; H=Humanities; N=Natural Sciences; P=Professional Studies; S=Social Sciences; O=Other

Table 4: College BASE Subject and Cluster Scores  
 (Means, Standard Deviations and Range)  
 Fall 2009 and Spring 2010 Combined

<b>Subject/Cluster</b>	<b>n</b>	<b>mean</b>	<b>SD</b>	<b>Range</b>
<b>English Subject</b>	440	289	54	143-436
Reading and Literature	440	290	55	150-432
Writing	440	293	45	184-387
<b>Mathematics Subject</b>	428	323	63	178-482
General Mathematics	428	321	58	186-433
Algebra	428	317	61	158-418
Geometry	428	319	58	150-428
<b>Science Subject</b>	430	286	69	119-470
Laboratory and Field Work	430	287	65	146-442
Fundamental Concepts	430	289	64	113-411
<b>Social Studies Subject</b>	439	297	59	126-463
History	439	296	53	128-420
Social Sciences	439	299	56	154-426

Table 5: College BASE Skill and Reasoning Competency Scores  
 (Percentage Distribution)  
 Highest to Lowest Percentage of “High” Ratings  
 Fall 2009 and Spring 2010 Combined  
 (n=868)

# *	Description	Subject	% High	% Medium	% Low	% High + Medium
6	Practical Applications	Math	41%	46%	13%	87%
8	Using Statistics	Math	37%	53%	10%	90%
10	Equations & Inequalities	Math	26%	64%	10%	90%
9	Evaluating Expressions	Math	32%	57%	10%	89%
5	Conventions of Written English	English	12%	72%	16%	84%
7	Properties & Notations	Math	34%	53%	13%	87%
4	Writing as a Process	English	26%	50%	24%	76%
20	Geography	Soc St	24%	61%	15%	85%
14	Lab/Field Techniques	Science	18%	66%	16%	84%
18	Significance of World Events	Soc St	17%	70%	13%	87%
11	2 & 3 Dimensional Figures	Math	28%	61%	11%	89%
12	Geometrical Calculations	Math	25%	65%	10%	90%
19	Significance of U.S. Events	Soc St	13%	67%	19%	80%
15	Interpreting Results	Science	17%	63%	20%	80%
17	Physical Sciences	Science	25%	49%	26%	74%
21	Political/Economic Structures	Soc St	32%	49%	19%	81%
3	Understanding Literature	English	18%	53%	29%	71%
22	Social Science Procedures	Soc St	21%	63%	16%	84%
2	Reading Analytically	English	19%	57%	24%	76%
16	Life Sciences	Science	23%	48%	28%	71%
13	Observation/Experimental Design	Science	21%	45%	34%	66%
1	Reading Critically	English	23%	57%	20%	80%
	<b>Average Percentage</b>		<b>22%</b>	<b>58%</b>	<b>18%</b>	<b>82%</b>

\* These numbers correspond to the BASE competencies described in Part II of the Appendix.

Table 6: College BASE Subject Scores by Major  
 (Mean Scores & # of students completing each subject area)  
 Fall 2009 and Spring 2010 Combined

Major	<i>n</i>	# complete Math & Sci	# complete Eng & Soc Stud	English	Math	Science	Soc Studies
		Mean	Mean	Mean	Mean	Mean	Mean
Accounting	24	12	12	307	355	323	332
Art	18	11	7	266	312	268	293
Arts Management	4	3	1	301	287	203	272
Biology	18	7	11	287	357	341	291
Business Administration	73	36	37	267	335	279	280
Chemistry	6	2	4	320	380	358	357
Communication and the Arts	5	4	1	261	280	259	342
Communication	49	23	26	291	280	265	292
Computer Science	14	8	6	291	365	306	322
Design Arts	12	6	6	279	329	276	270
Earth Science	2	1	1	314	336	309	375
Economics	6	3	3	235	399	304	273
Education	12	9	3	271	364	309	275
English	24	16	8	316	331	327	319
Environmental Policy & Planning	15	6	9	284	335	303	306
Environmental Sciences	29	12	17	287	318	297	323
French	2	1	1	385	266	352	374
German	2	1	1	383	311	223	348
History	22	11	11	289	312	320	340
Human Biology	80	40	40	292	344	325	295
Human Development	25	13	12	252	275	255	249
Humanistic Studies	11	4	7	343	332	265	357
Information Sciences	9	5	4	286	280	249	325
Mathematics	13	8	5	283	403	291	283
Music	11	8	3	314	315	282	339
Philosophy	3	2	1	315	392	292	325
Political Science	13	8	5	307	296	275	356
Psychology	76	38	38	297	293	265	283
Public Administration	14	4	10	300	271	230	309
Social Change & Development	12	6	6	318	303	246	344
Social Work	21	6	15	296	292	248	272
Spanish	10	4	6	284	330	299	262
Theatre	9	7	2	294	344	266	361
Urban & Regional Studies	7	3	4	280	367	294	288
Undecided, Other	74	35	39	289	329	289	296

Table 7: College BASE Subject Scores for Majors with 17+ Students Completing College BASE  
(Mean Scores and Rank\*)  
Fall 2009 and Spring 2010 Combined

Major	n	English		Math		Science		Soc Studies	
		Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
Accounting	24	307	2	355	2	323	4	332	2
Art	18	266	11	312	7	268	8	293	6
Biology	18	287	8	357	1	341	1	291	8
Business Administration	73	267	10	335	4	279	7	280	10
Communication	49	291	6	280	11	265	9	292	7
English	24	316	1	331	5	327	2	319	4
Environmental Sciences	29	287	9	318	6	297	6	323	3
History	22	289	7	312	8	320	5	340	1
Human Biology	80	292	5	344	3	325	3	295	5
Human Development	25	252	12	275	12	255	11	249	12
Psychology	76	297	3	293	9	265	10	283	9
Social Work	21	296	4	292	10	248	12	272	11

\* Ranks are based on the majors that had 17+ students completing the College BASE during the 2009-10 academic year.

Table 8: College BASE Subject Scores: Mean Scores & Rank for Five Groups of Majors  
Fall 2009 and Spring 2010 Combined

Majors	English	Rank	Math	Rank	Science	Rank	Social Studies	Rank
Fine Arts	286	3	311	5	259	5	313	3
Humanities	331	1	325	3	297	2	332	1
Natural Sciences	295	2	348	1	310	1	321	2
Professional Studies	285	4	337	2	290	3	290	5
Social Sciences	285	5	313	4	271	4	300	4

\* Represents the number of students with a declared major in each category.

Table 9: Time Spent on Multiple-Choice Portion of College BASE\*  
 (Percentage Distribution)  
 Fall 2009 and Spring 2010 Combined

Time Used	n	Percent
60-65 minutes	370	43%
66-75 minutes	192	22%
76-90 minutes	<u>295</u>	<u>34%</u>
Total	857	100 %

\* Students must spend at least 60 but not more than 90 minutes on the exam.

Table 10: College BASE Subject and Cluster Scores by Test Completion Time\*  
 (Mean Scores)  
 Fall 2009 and Spring 2010 Combined

Subject/Cluster Areas	60-65	66-75	76-90	Difference in score from min to max time
<b>English</b>	286	289	299	13 points
Reading & Lit	289	287	299	10 points
Writing	291	295	300	9 points
<b>Mathematics</b>	294	319	338	44 points
General Math	300	320	332	32 points
Algebra	285	316	334	49 points
Geometry	298	314	331	33 points
<b>Science</b>	257	291	298	41 points
Lab & Field Work	257	292	299	42 points
Fund. Concepts	271	291	297	26 points
<b>Social Studies</b>	301	289	296	-5 points
History	298	290	296	-2 points
Social Sciences	303	292	296	-7 points
<i>Number of Students</i>	370	192	295	

\* Students must spend at least 60 but not more than 90 minutes on the multiple-choice portion.

Table 11: College BASE Subject and Cluster Scores by Transfer Status  
(Mean Scores)  
Fall 2009 and Spring 2010 Combined  
(*n*= 867)

Subject/Cluster Areas	Transfer Status			
	UW Colleges	Other College	Re-Entry	No Transfer
<b>English</b>	286	293	306	269
Reading & Literature	289	291	311	277
Writing	292	291	289	275
<b>Mathematics</b>	319	292	287	334
General Mathematics	315	312	296	351
Algebra	318	275	284	311
Geometry	317	294	288	328
<b>Science</b>	280	273	242	331
Laboratory & Field Work	279	276	248	336
Fundamental Concepts	290	277	254	312
<b>Social Studies</b>	295	283	349	310
History	299	286	333	313
Social Sciences	293	285	344	307
<i>Number of Students</i>	207	105	19	536

## Part II: Proficiencies Measured by the College BASE

The College BASE measures proficiencies in English, mathematics, science, social studies and three cognitive competencies: interpretive reasoning, strategic reasoning and adaptive reasoning. The specific skills and factual knowledge in the four curricular areas are defined by twenty-two proficiency statements. The twenty-two proficiencies assessed are as follows:

### *English*

1. Read accurately and critically by asking pertinent questions about a text, by recognizing assumptions and implications, and by evaluating ideas.
2. Read a literary text analytically, seeing relationships between form and content.
3. Understand a range of literature, rich in quality and representative of different literary forms and historical contexts.
4. Understand the various elements of the writing process, including collecting information regarding formulation of ideas, determining relationships, arranging sentences and paragraphs, establishing transitions, and revising what has been written.

5. Use the conventions of standard written English.

### ***Mathematics***

6. Use mathematical techniques in the solution of real-life problems.
7. Use the language, notation, and deductive nature of mathematics to express quantitative ideas with precision.
8. Use the techniques of statistical reasoning and recognize common misuses of statistics.
9. Evaluate algebraic and numerical expressions.
10. Solve equations and inequalities.
11. Recognize two- and three-dimensional figures and their properties.
12. Use the properties of two- and three-dimensional figures to perform geometrical calculations.

### ***Science***

13. Recognize the role of observation and experimentation in the development of scientific theories.
14. Recognize appropriate procedures for gathering scientific information through laboratory and field work.
15. Interpret and express the results of observation and experimentation.
16. Understand the fundamental concepts, principles, and theories of the life sciences.
17. Understand the fundamental concepts, principles, and the theories of the physical sciences.

### ***Social Studies***

18. Recognize the chronology and significance of major events and movements in world history.
19. Recognize the chronology and significance of major events and movements in United States history.
20. Recognize basic features and concepts of world geography.
21. Recognize basic features and concepts of the world's political and economic structures.
22. Recognize appropriate investigative and interpretive procedures in the social sciences.

### ***Reasoning Competencies (not calculated when less than 4 subject areas are completed)***

23. *Interpretive Reasoning* is a cognitive process by which we translate information, either remembered or immediately observed, into meaningful terms. Typically, this is accomplished by such activities as paraphrasing, summarizing, or explaining the meaning of particular information.
24. *Strategic Reasoning* establishes boundaries for information through definition, comparison, classification, and analysis. These boundaries lead to inferences or deductions and reveal relationships lying beneath the surface meaning.
25. *Adaptive Reasoning* involves the ability to synthesize new rules or theories, to hypothesize a means of testing a proposition, to predict the outcome of causal relationships, or express judgments of value, merit or worth.