
WABASH NATIONAL STUDY OF
Liberal Arts Education

North Carolina Agricultural and
Technical State University
Incoming Student Data
Fall 2007

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Purpose of the Wabash National Study

- To learn what teaching practices, programs, and institutional structures support liberal arts education
- To develop methods of assessing liberal arts education

Study Details

- Nineteen institutions joined the study in fall 2006, with 4,501 first-year students participating. 3,081 of these students returned in the spring for follow-up assessments.
- Eight more institutions joined the study in fall 2007, with 3,371 first-year students participating.
- Twenty-seven additional institutions have joined the study and will begin assessments in fall 2008.
- Longitudinal
 - Follows one class for at least four years, perhaps longer
 - Look at where students start and gauge how much they change
 - What do they experience that promotes or inhibits change?
 - Takes into account what students bring with them
 - SAT/ACT performance
 - Institutional selectivity
 - College attended first choice?
 - Age, sex, ethnicity, parental education and income
 - High school grades and activities
 - Considers the individual as the unit of analysis, not the institution

Outcomes

- Our study focuses on understanding the conditions and practices that promote the development of seven liberal arts outcomes:
 - Effective reasoning and problem solving
 - Inclination to inquire and lifelong learning
 - Integration of learning
 - Intercultural effectiveness
 - Leadership
 - Moral reasoning
 - Well-being

Participating Institutions (2006)

- Small colleges
 - Alma College
 - Bard College
 - Coe College
 - Columbia College (SC)
 - Connecticut College
 - Gustavus Adolphus College
 - Hamilton College
 - Hampshire College
 - Hope College
 - Wabash College
 - Whittier College
- Community colleges
 - Ivy Tech Community College, Lafayette
 - Kirkwood Community College
- Universities
 - Butler University
 - San José State University
 - University of Kentucky
 - University of Michigan
 - University of North Carolina Wilmington
 - University of Notre Dame

Participating Institutions (2007)

- Small colleges
 - Allegheny College
 - Franklin College
 - Vassar College
 - Wabash College
- Universities
 - Delaware State University
 - Fairfield University
 - North Carolina Agricultural and Technical State University
 - University of Rhode Island

Quantitative Data Collection

We are collecting demographic information, reports of precollege and collegiate experiences, and measurements of liberal arts outcomes from students. Students are tested a total of three times—in the fall and spring of their first year and again in the spring of their fourth year.

Student Surveys

- Entering student survey of high school experiences and background (given at beginning of entering year)
- College experiences surveys (given at end of first year and end of fourth year)
 - Wabash National Study Student Experiences Survey
 - National Survey of Student Engagement
- Research question
 - Do students' responses on these surveys predict changes in the outcome measures?
- Outcome Measures

All participants complete the following:

 - Need for Cognition Scale
 - Measures how much people enjoy engaging in effortful cognitive activities
 - Socially Responsible Leadership Scale
 - Measures eight aspects of leadership development
 - Ryff Scales of Psychological Well-Being
 - Measure six dimensions of psychological well-being
 - Miville-Guzman Universality-Diversity Scale (Short form)
 - Measures awareness and acceptance of similarities and differences among people

Each of the following is completed by half of the participants:

 - CAAP Critical Thinking Test
 - Measures skills in clarifying, analyzing, evaluating, and extending arguments
 - Defining Issues Test 2
 - Measures moral reasoning
- Other Scales
 - Literacy, diversity, academic motivation, political and social involvement

These Instruments and Surveys Are Imperfect

- Multiple-choice tests and surveys have limitations
- They do not fully capture our most ambitious institutional goals
- But they are useful in conjunction with course, program, and institutional evidence
 - They provide us with comparative information
 - They can be readily connected with information about individual students
 - They can provoke further inquiry on campus

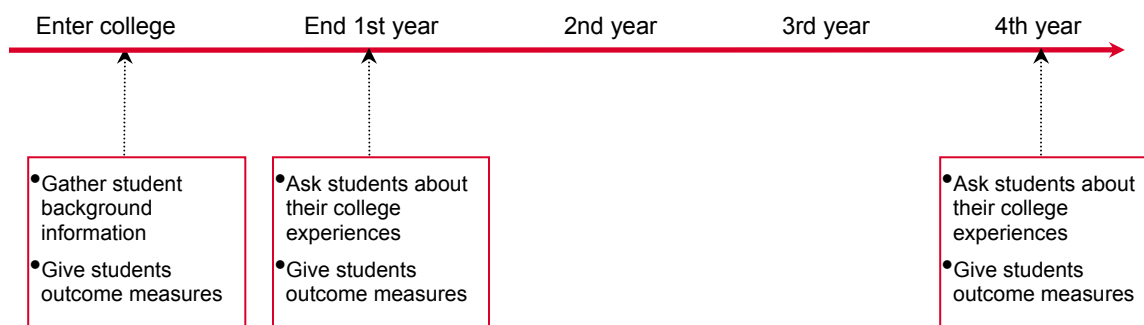
Possible Connection with Institutional Assessment

- Examples:
 - Triangulation strategy – use instruments to create hypotheses that can be “cross-checked”
 - Follow-up strategy – such as student interviews or focus groups
 - Mesh with institutional data – quantitative data can be connected with institution’s student data
 - Collaborate with other study institutions – compare impact of majors, special living units, etc.

Qualitative Component

- A subset of students from the 2006 institutions (approximately 300 students from six institutions) is also participating in annual in-depth interviews. The interviews are open-ended and last approximately 90 minutes.

Timeline



The Center of Inquiry and the Wabash National Study are generously funded through grants from the Lilly Endowment Inc. and the Teagle Foundation. The Wabash National Study is led by the Center of Inquiry, under the direction of Dr. Charles F. Blaich, and in collaboration with research teams from the University of Iowa, led by Dr. Ernest T. Pascarella; the University of Michigan, led by Dr. Patricia M. King; and Miami University (Ohio), led by Dr. Marcia Baxter Magolda. ACT, Inc., under the direction of Dr. Michael J. Valiga, is assisting with the quantitative data collection and reporting.

Fall 2007 Student Survey North Carolina A&T University

During the week of September 17–21, 2007, 720 first-year North Carolina A&T students participated in the Wabash National Study of Liberal Arts Education. This report highlights items on the Student Survey for which your students gave the highest responses. It also lists some of the ways your students' responses on survey items differed from the responses of students at other large institutions¹ in the Wabash National Study. You can find more information about A&T students' responses on this portion of the Student Survey in the ACT reports on pages 17–22 of this document.

Items for which A&T students gave the highest responses

Your students rated the following four items as most important out of all the survey items about values and goals:²

- 1) Becoming passionate about or committed to my occupation
- 2) Raising a family
- 3) Making a lot of money
- 4) Becoming successful in a business of my own

Your students agreed most strongly with the following four statements about college expectations:³

- 1) Getting the best grades I can is very important to me.
- 2) When I do well on a test, it is usually because I am well-prepared; not because the test is easy.
- 3) I enjoy talking with people who have values different from mine because it helps me better understand myself and my values.
- 4) I enjoy having discussions with people whose ideas and values are different from my own.

Compared to students at other large institutions in the Wabash National Study . . .

Entering students at North Carolina A&T are more interested in:

- Influencing the political structure
- Influencing social values
- Keeping up to date with political affairs
- Becoming a community leader
- Becoming accomplished in the performing arts
- Writing original works

¹ Large institutions in the Wabash National Study include Butler University, Delaware State University, Fairfield University, North Carolina Agricultural and Technical State University, San Jose State University, the University of Kentucky, the University of Michigan, the University of North Carolina Wilmington, the University of Notre Dame, and the University of Rhode Island.

² For more information, see Table 8 in the related ACT reports.

³ For more information, see Table 9 in the related ACT reports.

- Creating artistic work
- Helping to promote racial understanding
- Integrating spirituality into their lives
- Working to find a cure for a disease or illness
- Becoming involved in activities that preserve and enrich the environment
- Obtaining recognition for contributions to their fields of expertise
- Becoming successful in a business of their own
- Having administrative responsibility for the work of others
- Making a lot of money
- Working in a prestigious occupation

Entering students at A&T are more likely to agree that:

- The real value of a college education lies in being introduced to different values.
- Getting the best grades they can is very important to them.
- When they do well on a test, it is usually because they are well-prepared; not because the test is easy.
- Their academic experiences will be the most important part of college.
- Their academic experiences will be the most enjoyable part of college.

And they are less likely to agree that:

- They enjoy taking courses that challenge their beliefs and values.
- They are willing to work hard in a course to learn the material even if it won't lead to a higher grade.
- In high school, they frequently did more reading in class than was required simply because it interested them.
- They enjoy the challenge of learning complicated new material.
- They enjoy reading about science.
- They enjoy reading about history.
- If they have something good to read, they're never bored.

Fall 2007 Outcome Measures North Carolina A&T University

This summary lists the outcome measures for which North Carolina A&T students' scores were significantly different from students' scores at other large institutions¹ in the Wabash National Study. You can find more information on our outcome measures in the *Guide to Outcome Measures* on page 33 of this document. You can also find information about A&T students' scores on all the outcome measures in Tables 12–16 of the ACT reports included with these materials (see pages 26–30). All differences mentioned below are statistically significant at or below the 0.05 level.

Compared to students at other large institutions in the Wabash National Study . . .

A&T students scored significantly higher on the following outcome measures:

- **Defining Issues Test** – measures the development of students' moral reasoning
 - **Personal Interest score** – the degree to which students consider personal advantages, fairness, maintaining friendships, and approval when reasoning through moral dilemmas
 - **Maintain Norms score** – the degree to which students emphasize maintaining the existing legal system, roles, and formal organizational structures when considering moral dilemmas
 - **Number of Cannot Decide Choices** – the degree to which students are making the transition from simple to more sophisticated reasoning in considering moral dilemmas
- **Ryff Scales of Psychological Well-Being** – measure how students score on six aspects of positive psychological functioning
 - **Self-Acceptance** – the extent to which students have a positive attitude about themselves
 - **Autonomy** – the extent to which students view themselves as being independent and able to resist social pressures
 - **Environmental Mastery** – the extent to which students feel in control of and able to act in the environment
 - **Purpose in Life** – the extent to which students hold beliefs that give life meaning
- **Socially Responsible Leadership Scale** – measures students' attitudes on eight dimensions of leadership
 - **Consciousness of Self** – the extent to which students are aware of the values, emotions, attitudes, and beliefs that motivate them to action
 - **Collaboration** – the extent to which students value working with others in a common effort
 - **Change** – the extent to which students believe in the potential of change as a positive force for groups

¹ Large institutions in the Wabash National Study include Butler University, Delaware State University, Fairfield University, North Carolina Agricultural and Technical State University, San Jose State University, the University of Kentucky, the University of Michigan, the University of North Carolina Wilmington, the University of Notre Dame, and the University of Rhode Island.

- **Life Goals Scales**

- **Contribution to the Arts** – the importance students place on making a contribution to the arts and humanities
- **Contribution to the Sciences** – the importance students place on making a contribution to medicine or science
- **Political and Social Involvement** – the importance students place on volunteering, promoting racial understanding, and influencing political structures
- **Professional Success** – the importance students place on entering a prestigious, high-status, well-paying occupation

A&T students scored significantly lower on the following outcome measures:

- **CAAP Critical Thinking Test** – measures students’ skills in clarifying, analyzing, evaluating, and extending arguments
- **Need for Cognition Scale** – measures the extent to which students enjoy engaging in effortful cognitive activities
- **Defining Issues Test** – measures the development of students’ moral reasoning
 - **N2 score** – the degree to which students use ideals and principles when thinking through moral dilemmas
 - **Utilizer score** – the consistency between students’ asserted values and actions when faced with moral dilemmas
- **Orientation Toward Learning Scales**
 - **Positive Attitude Toward Literacy** – students’ enjoyment of reading and writing

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Table 1
Fall 2007 Registration Form
N Counts and Percents for Demographic Items
North Carolina A&T

1. Age on September 1, 2007	17 & under	18	19	20	21 to 25	26 to 30	31 & over	Blank
	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>
North Carolina A&T	4.7 / 34	88.5 / 637	5.3 / 38	0.6 / 4	0.4 / 3	0.3 / 2	0.1 / 1	0.1 / 1
Other 9 Large Institutions	9.5 / 305	81.9 / 2,632	7.8 / 249	0.3 / 9	0.4 / 14	0.0 / 0	0.1 / 2	0.0 / 1
All Other Institutions	7.0 / 499	78.6 / 5,621	11.9 / 853	0.9 / 64	1.0 / 68	0.3 / 19	0.4 / 29	0.0 / 2

2. What is your gender?	Male	Female	Blank
	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>
North Carolina A&T	49.7 / 358	50.1 / 361	0.1 / 1
Other 9 Large Institutions	36.2 / 1,162	62.7 / 2,013	1.2 / 37
All Other Institutions	40.2 / 2,878	58.9 / 4,211	0.9 / 66

3. What is your race/ethnicity?	American							Blank
	Nonresident alien	Black, non-Hispanic	Indian/Alaska Native	Asian/Pacific Islander	Hispanic	White, non-Hispanic	Race/ethnicity unknown	
	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>
North Carolina A&T	0.4 / 3	91.4 / 658	0.8 / 6	0.6 / 4	1.9 / 14	2.8 / 20	1.0 / 7	1.1 / 8
Other 9 Large Institutions	0.2 / 8	18.5 / 595	0.2 / 8	6.9 / 223	5.0 / 162	66.6 / 2,138	1.0 / 33	1.4 / 45
All Other Institutions	0.6 / 40	11.1 / 796	0.3 / 25	5.8 / 413	5.2 / 372	74.5 / 5,330	1.1 / 81	1.4 / 98

4. How many brothers and/or sisters do you have?	0	1	2	3	4 or more	Blank
	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>
North Carolina A&T	11.9 / 86	31.3 / 225	27.5 / 198	13.2 / 95	16.0 / 115	0.1 / 1
Other 9 Large Institutions	7.8 / 252	40.0 / 1,284	28.9 / 927	12.1 / 388	10.3 / 331	0.9 / 30
All Other Institutions	9.1 / 653	41.0 / 2,937	28.2 / 2,018	11.6 / 829	9.4 / 670	0.7 / 48

5. How many children under age 21 are dependent on you?	0	1	2	3	4 or more	Blank
	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>
North Carolina A&T	94.2 / 678	2.9 / 21	0.7 / 5	0.3 / 2	0.8 / 6	1.1 / 8
Other 9 Large Institutions	95.6 / 3,071	1.2 / 37	0.8 / 25	0.2 / 6	0.4 / 12	1.9 / 61
All Other Institutions	96.1 / 6,877	1.1 / 82	0.7 / 51	0.3 / 25	0.3 / 20	1.4 / 100

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

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Table 1
Fall 2007 Registration Form
N Counts and Percents for Demographic Items
North Carolina A&T

7. Is English your native language?	Yes % / n	No % / n	Blank % / n				
North Carolina A&T	98.1 / 706	1.5 / 11	0.4 / 3				
Other 9 Large Institutions	88.4 / 2,841	6.5 / 208	5.1 / 163				
All Other Institutions	90.4 / 6,466	6.0 / 430	3.6 / 259				

10. Which of the following best describes your overall grade range in high school?	A- to A+ % / n	B- to B+ % / n	C- to C+ % / n	D- to D+ % / n	Below D- % / n	I did not have a high school GPA. % / n	Blank % / n
North Carolina A&T	18.3 / 132	57.9 / 417	23.1 / 166	0.0 / 0	0.0 / 0	0.0 / 0	0.7 / 5
Other 9 Large Institutions	53.8 / 1,727	38.0 / 1,220	6.8 / 218	0.2 / 5	0.0 / 1	0.2 / 6	1.1 / 35
All Other Institutions	56.4 / 4,034	36.7 / 2,629	5.4 / 387	0.2 / 12	0.0 / 2	0.4 / 27	0.9 / 64

12. How would you describe the racial composition of the high school you last attended?	Almost all white students % / n	Mostly white students % / n	Roughly half white students and half students of color % / n	Mostly students of color % / n	Almost all students of color % / n	Blank % / n
North Carolina A&T	4.7 / 34	19.6 / 141	36.0 / 259	21.1 / 152	18.3 / 132	0.3 / 2
Other 9 Large Institutions	30.3 / 974	33.4 / 1,072	20.5 / 660	7.9 / 255	6.7 / 214	1.2 / 37
All Other Institutions	35.5 / 2,541	33.7 / 2,414	18.7 / 1,335	5.8 / 415	5.1 / 362	1.2 / 88

13. What is the highest academic degree you intend to earn in your lifetime?	Vocational/technical certificate or diploma % / n	Associate degree (A.A., A.S., or equivalent) % / n	Bachelor's degree (B.A., B.S., etc.) % / n	Master's degree (M.A., M.S., M.B.A., etc.) % / n	Law (J.D.) % / n	Doctorate (Ph.D., Ed.D., M.D.) % / n	Blank % / n
North Carolina A&T	4.0 / 29	1.5 / 11	20.7 / 149	48.3 / 348	3.5 / 25	20.7 / 149	1.3 / 9
Other 9 Large Institutions	2.3 / 75	0.2 / 8	17.0 / 546	44.7 / 1,437	5.1 / 165	28.4 / 913	2.1 / 68
All Other Institutions	1.7 / 124	1.1 / 81	18.3 / 1,312	42.5 / 3,041	6.0 / 426	27.9 / 1,995	2.5 / 176

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Table 1
Fall 2007 Registration Form
N Counts and Percents for Demographic Items
North Carolina A&T

15. Was this college your...	First choice? % / n	Second choice? % / n	Third choice? % / n	Other % / n	Blank % / n
North Carolina A&T	56.3 / 405	30.7 / 221	7.5 / 54	5.3 / 38	0.3 / 2
Other 9 Large Institutions	59.3 / 1,904	24.3 / 780	8.1 / 259	7.4 / 238	1.0 / 31
All Other Institutions	62.7 / 4,485	22.3 / 1,592	6.8 / 488	7.4 / 527	0.9 / 63

16. How many credits did you transfer from another college/university to this college/university?	0 credits % / n	1-15 credits % / n	16-30 credits % / n	31-45 credits % / n	46-60 credits % / n	61-80 credits % / n	More than 80 credits % / n	Blank % / n
North Carolina A&T	79.7 / 574	7.2 / 52	1.1 / 8	0.4 / 3	0.0 / 0	0.0 / 0	0.0 / 0	11.5 / 83
Other 9 Large Institutions	80.7 / 2,593	12.4 / 399	1.4 / 46	0.3 / 11	0.0 / 1	0.0 / 0	0.0 / 1	5.0 / 161
All Other Institutions	81.8 / 5,852	12.0 / 860	1.4 / 102	0.4 / 28	0.1 / 5	0.1 / 5	0.0 / 2	4.2 / 301

17. Were your transfer credits primarily from...	a 2 year institution? % / n	a 4 year institution? % / n	both 2 and 4 year institutions? % / n	I did not transfer any credits. % / n	Blank % / n
North Carolina A&T	4.3 / 31	2.6 / 19	0.7 / 5	80.6 / 580	11.8 / 85
Other 9 Large Institutions	4.7 / 152	7.8 / 252	0.7 / 23	79.7 / 2,560	7.0 / 225
All Other Institutions	5.1 / 363	7.5 / 536	0.9 / 67	80.4 / 5,750	6.1 / 439

20. What is your citizenship status?	U.S. citizen % / n	U.S. resident % / n	International student % / n	Other % / n	Blank % / n
North Carolina A&T	97.5 / 702	0.6 / 4	0.1 / 1	0.0 / 0	1.8 / 13
Other 9 Large Institutions	95.4 / 3,063	1.9 / 61	0.8 / 26	0.1 / 2	1.9 / 60
All Other Institutions	94.6 / 6,768	1.5 / 110	2.1 / 147	0.2 / 12	1.6 / 118

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Table 2
Fall 2007 Registration Form
N Counts and Percents for Demographic Items
North Carolina A&T

	North Carolina A&T	Other 9 Large Institutions	All Other Institutions
	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>
6. Mark ALL of the following diagnosed disabilities that apply to you.			
I do not have a diagnosed disability.	89.9 / 647	87.5 / 2,809	86.6 / 6,199
Hearing impairment (deaf or hard of hearing).	0.8 / 6	0.6 / 18	0.6 / 45
Blind or visual impairment that cannot be corrected by glasses.	0.8 / 6	0.2 / 8	0.4 / 31
Speech or language impairment.	0.6 / 4	0.1 / 4	0.2 / 16
Mobility/orthopedic disability.	0.6 / 4	0.2 / 8	0.4 / 30
Learning/cognitive disability.	0.6 / 4	2.0 / 64	2.9 / 205
Other	1.4 / 10	1.4 / 46	2.1 / 150

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

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Table 3
Fall 2007 Registration Form
N Counts and Percents for Demographic Items
North Carolina A&T

	North Carolina A&T	Other 9 Large Institutions	All Other Institutions
	% / n	% / n	% / n
8. What is the highest level of education each of your parents/guardians completed?			
<i>Mother/Guardian</i>			
Did not finish high school	2.9 / 21	3.1 / 99	2.9 / 210
High school graduate/GED	20.3 / 146	13.9 / 445	15.2 / 1,089
Attended college but did not receive a degree	18.9 / 136	12.8 / 412	11.8 / 844
Vocational/technical certificate or diploma	6.9 / 50	3.0 / 97	3.5 / 250
Associate or other 2-year degree	16.7 / 120	11.1 / 356	10.0 / 716
Bachelor's or other 4-year degree	22.4 / 161	34.0 / 1,091	32.1 / 2,298
Master's degree (M.A., M.S., M.B.A.)	10.3 / 74	16.7 / 536	17.8 / 1,271
Law (J.D.)	0.3 / 2	1.0 / 32	1.6 / 112
Doctorate (Ph.D., Ed.D., M.D.)	0.3 / 2	2.9 / 92	3.8 / 273
Blank	1.1 / 8	1.6 / 52	1.3 / 92
<i>Father/Guardian</i>			
Did not finish high school	4.3 / 31	4.5 / 143	4.1 / 290
High school graduate/GED	32.9 / 237	15.7 / 504	16.3 / 1,165
Attended college but did not receive a degree	12.8 / 92	10.8 / 348	10.5 / 750
Vocational/technical certificate or diploma	6.1 / 44	4.2 / 134	4.2 / 300
Associate or other 2-year degree	9.0 / 65	6.6 / 212	6.1 / 438
Bachelor's or other 4-year degree	16.4 / 118	28.2 / 905	27.2 / 1,949
Master's degree (M.A., M.S., M.B.A.)	7.5 / 54	15.1 / 485	16.0 / 1,148
Law (J.D.)	0.1 / 1	3.2 / 104	3.7 / 264
Doctorate (Ph.D., Ed.D., M.D.)	1.4 / 10	8.0 / 257	9.0 / 641
Blank	9.4 / 68	3.7 / 120	2.9 / 210

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

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Table 4
Fall 2007 Registration Form
N Counts and Percents for Demographic Items
North Carolina A&T

	North Carolina A&T	Other 9 Large Institutions	All Other Institutions
	% / n	% / n	% / n
9. What is your best estimate of your parents' total income and your total annual income?			
<i>Parents' Annual Income</i>			
Less than \$14,999	4.6 / 33	3.0 / 96	3.7 / 266
\$15,000 - \$24,999	6.9 / 50	3.3 / 105	4.0 / 286
\$25,000 - \$34,999	11.8 / 85	4.5 / 144	5.8 / 414
\$35,000 - \$49,999	15.0 / 108	6.7 / 214	8.2 / 585
\$50,000 - \$74,999	15.3 / 110	14.8 / 476	16.0 / 1,143
\$75,000 - \$99,999	10.4 / 75	15.1 / 485	14.6 / 1,044
\$100,000 - \$199,999	7.8 / 56	22.7 / 730	21.7 / 1,556
\$200,000 - \$299,999	2.8 / 20	5.2 / 168	5.4 / 385
\$300,000 or more	1.5 / 11	5.0 / 159	5.1 / 364
Not applicable	14.9 / 107	10.5 / 336	7.7 / 551
Blank	9.0 / 65	9.3 / 299	7.8 / 561
<i>Your Annual Income</i>			
Less than \$14,999	47.4 / 341	65.4 / 2,101	69.1 / 4,945
\$15,000 - \$24,999	1.3 / 9	0.9 / 30	1.4 / 98
\$25,000 - \$34,999	0.1 / 1	0.2 / 7	0.3 / 24
\$35,000 - \$49,999	0.4 / 3	0.1 / 2	0.2 / 12
\$50,000 - \$74,999	0.1 / 1	0.2 / 8	0.2 / 14
\$75,000 - \$99,999	0.3 / 2	0.2 / 5	0.1 / 6
\$100,000 - \$199,999	0.6 / 4	0.1 / 3	0.1 / 9
\$200,000 - \$299,999	0.1 / 1	0.1 / 4	0.1 / 5
\$300,000 or more	0.0 / 0	0.2 / 6	0.3 / 19
Not applicable	35.3 / 254	23.7 / 761	20.3 / 1,451
Blank	14.4 / 104	8.9 / 285	8.0 / 572

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

WABASH NATIONAL STUDY OF
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Table 5
Fall 2007 Registration Form
Assessment Scores
North Carolina A&T

	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
11. What were your SAT scores and/or ACT score?	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
SAT Verbal (self-reported)	484.8 / 78.8 166	594.2 / 101.8 1,803	618.3 / 101.3 3,802	-109.4 ***	-133.5 ***	9 of 10	25 of 26
SAT Math (self-reported)	503.3 / 83.0 175	606.2 / 105.5 1,821	616.8 / 97.9 3,834	-102.8 ***	-113.5 ***	9 of 10	25 of 26
ACT Composite (self-reported)	19.8 / 3.6 97	27.2 / 4.5 1,237	26.4 / 4.5 3,001	-7.4 ***	-6.6 ***	9 of 10	25 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

Differences computed directly from this table may vary from listing due to rounding.

* Difference statistically significant at the .05 level.

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*** Difference statistically significant at the .00001 level.

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Table 6
Fall 2007 Registration Form
N Counts and Percents for Demographic Items
North Carolina A&T

	North Carolina A&T	Other 9 Large Institutions	All Other Institutions
	<i>% / n</i>	<i>% / n</i>	<i>% / n</i>
14. Which of the following best describes your intended college major?			
Allied Health	5.8 / 42	12.9 / 415	9.5 / 679
Business	30.1 / 217	19.1 / 614	14.0 / 1,005
Education	1.9 / 14	5.7 / 184	6.4 / 458
Engineering	25.4 / 183	5.7 / 184	3.6 / 257
Fine Arts, Humanities, and Languages	5.8 / 42	9.5 / 304	13.9 / 995
Mathematics/Statistics	0.8 / 6	1.3 / 43	1.7 / 125
Natural Sciences	4.4 / 32	10.6 / 341	11.5 / 826
Social Sciences	4.9 / 35	8.6 / 275	11.4 / 815
Other	16.4 / 118	13.0 / 418	10.8 / 770
Undecided	3.6 / 26	11.8 / 380	15.7 / 1,120
Blank	0.7 / 5	1.7 / 54	1.5 / 105

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Table 7
Fall 2007 Registration Form
High School Experiences
North Carolina A&T

18. During your last year in high school, how often did you engage in each of the following activities?	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
A. Studying/doing homework by yourself	3.89 / 1.00 712	4.07 / 0.99 3,151	4.06 / 1.01 7,044	-0.18 ***	-0.17 **	8 of 10	19 of 27
B. Studying/doing homework with friends	2.59 / 1.07 707	2.76 / 0.98 3,144	2.72 / 0.99 7,032	-0.17 **	-0.13 **	9 of 10	20 of 27
C. Socializing with friends	4.54 / 0.73 706	4.47 / 0.74 3,149	4.43 / 0.75 7,039	0.07 *	0.11 **	5 of 10	6 of 27
D. Talking with teachers outside of class	3.33 / 1.08 705	3.33 / 1.02 3,144	3.37 / 1.01 7,031	-0.01	-0.05	5 of 10	16 of 27
E. Working for pay	3.64 / 1.45 706	3.33 / 1.39 3,144	3.17 / 1.40 7,030	0.31 ***	0.47 ***	4 of 10	6 of 27
F. Community service/volunteer work	2.81 / 1.20 705	3.15 / 1.11 3,143	3.08 / 1.11 7,028	-0.34 ***	-0.26 ***	10 of 10	24 of 27
G. Exercising/sports	3.81 / 1.25 707	3.94 / 1.15 3,144	3.84 / 1.18 7,030	-0.13 *	-0.03	8 of 10	18 of 27
H. Participating in extracurricular activities (student government, student clubs, etc.)	3.67 / 1.35 704	3.71 / 1.25 3,145	3.69 / 1.25 7,030	-0.04	-0.02	7 of 10	14 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

Averages are based on the following response codings: Very Often = 5, Often = 4, Occasionally = 3, Rarely = 2, Never = 1.

Differences computed directly from this table may vary from listing due to rounding.

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WABASH NATIONAL STUDY OF
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Table 7
Fall 2007 Registration Form
High School Experiences
North Carolina A&T

	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
18. During your last year in high school, how often did you engage in each of the following activities?	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
I. Using the Internet for research or homework	4.13 / 0.98 708	4.28 / 0.86 3,147	4.23 / 0.91 7,036	-0.14 **	-0.09 *	9 of 10	20 of 27
J. Reading for pleasure	2.65 / 1.22 706	3.01 / 1.20 3,148	3.14 / 1.22 7,035	-0.36 ***	-0.49 ***	10 of 10	27 of 27
K. Using a library for research or homework	2.85 / 1.19 705	2.79 / 1.10 3,139	2.84 / 1.08 7,012	0.06	0.01	4 of 10	13 of 27
L. Using a computer for recreational purposes (communicating with friends, games, surfing the Internet, etc.)	4.37 / 0.92 708	4.38 / 0.88 3,148	4.33 / 0.93 7,029	-0.02	0.04	7 of 10	12 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

Averages are based on the following response codings: Very Often = 5, Often = 4, Occasionally = 3, Rarely = 2, Never = 1.

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WABASH NATIONAL STUDY OF
Liberal Arts Education

Table 8
Fall 2007 Student Survey
Section I
North Carolina A&T

How important to you personally is each of the following?	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
A. Becoming accomplished in one of the performing arts (acting, dancing, singing, etc.)	1.91 / 1.00 720	1.76 / 0.95 3,177	1.83 / 0.99 7,116	0.15 **	0.08 *	2 of 10	7 of 27
B. Obtaining recognition from my colleagues for contributions to my field of expertise	2.99 / 0.84 715	2.86 / 0.80 3,174	2.81 / 0.80 7,108	0.13 **	0.18 ***	1 of 10	2 of 27
C. Influencing the political structure	2.24 / 0.82 717	2.00 / 0.86 3,173	2.03 / 0.87 7,107	0.24 ***	0.21 ***	1 of 10	3 of 27
D. Influencing social values	2.86 / 0.81 720	2.68 / 0.83 3,171	2.68 / 0.84 7,106	0.18 ***	0.18 ***	1 of 10	3 of 27
E. Raising a family	3.50 / 0.79 718	3.45 / 0.84 3,177	3.33 / 0.91 7,110	0.05	0.17 ***	6 of 10	8 of 27
F. Having administrative responsibility for the work of others	2.54 / 0.84 712	2.46 / 0.89 3,155	2.32 / 0.90 7,081	0.08 *	0.23 ***	3 of 10	4 of 27
G. Helping others who are in difficulty	3.17 / 0.72 715	3.22 / 0.75 3,171	3.19 / 0.76 7,108	-0.04	-0.02	7 of 10	14 of 27
H. Making a theoretical contribution to science	1.80 / 0.84 718	1.81 / 0.91 3,172	1.77 / 0.91 7,105	-0.01	0.03	4 of 10	8 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

Averages are based on the following response codings: Essential = 4, Very Important = 3, Somewhat important = 2, Not important = 1.

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WABASH NATIONAL STUDY OF
Liberal Arts Education

Table 8
Fall 2007 Student Survey
Section I
North Carolina A&T

How important to you personally is each of the following?	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
I. Writing original works (poems, novels, short stories, etc.)	1.95 / 1.01 718	1.78 / 0.95 3,174	1.90 / 1.02 7,108	0.17 **	0.05	2 of 10	9 of 27
J. Creating artistic work (painting, sculpture, film, etc.)	1.89 / 1.02 718	1.78 / 0.97 3,174	1.88 / 1.02 7,109	0.10 *	0.01	2 of 10	9 of 27
K. Becoming successful in a business of my own	3.38 / 0.86 717	2.64 / 1.08 3,171	2.48 / 1.08 7,104	0.74 ***	0.90 ***	1 of 10	1 of 27
L. Becoming involved in activities that preserve and enrich the environment	2.62 / 0.89 718	2.50 / 0.89 3,175	2.55 / 0.91 7,112	0.12 *	0.07 *	2 of 10	9 of 27
M. Developing a meaningful philosophy of life	2.98 / 0.94 720	2.95 / 0.96 3,174	3.01 / 0.95 7,109	0.03	-0.04	4 of 10	15 of 27
N. Volunteering in my community	2.87 / 0.80 720	2.84 / 0.84 3,174	2.81 / 0.85 7,111	0.03	0.07 *	5 of 10	10 of 27
O. Helping to promote racial understanding	3.15 / 0.83 719	2.61 / 0.90 3,174	2.59 / 0.90 7,109	0.55 ***	0.56 ***	1 of 10	1 of 27
P. Keeping up to date with political affairs	2.56 / 0.88 720	2.44 / 0.89 3,177	2.49 / 0.92 7,113	0.12 **	0.07 *	2 of 10	10 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

Averages are based on the following response codings: Essential = 4, Very Important = 3, Somewhat important = 2, Not important = 1.

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WABASH NATIONAL STUDY OF
Liberal Arts Education

Table 8
Fall 2007 Student Survey
Section I

North Carolina A&T

How important to you personally is each of the following?	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
Q. Becoming a community leader	2.55 / 0.89 719	2.37 / 0.93 3,175	2.35 / 0.93 7,107	0.18 ***	0.20 ***	2 of 10	4 of 27
R. Integrating spirituality into my life	3.36 / 0.82 718	2.74 / 1.08 3,173	2.66 / 1.10 7,105	0.62 ***	0.70 ***	1 of 10	2 of 27
S. Improving my understanding of other countries and cultures	2.73 / 0.83 720	2.79 / 0.86 3,176	2.84 / 0.88 7,109	-0.07	-0.11 *	8 of 10	19 of 27
T. Working to find a cure for a disease or illness	2.47 / 1.06 718	2.25 / 1.02 3,174	2.13 / 1.01 7,102	0.22 ***	0.34 ***	1 of 10	1 of 27
U. Making a lot of money	3.49 / 0.75 719	2.85 / 0.97 3,174	2.65 / 1.00 7,109	0.64 ***	0.84 ***	2 of 10	2 of 27
V. Working in a prestigious occupation	3.11 / 0.90 718	2.76 / 0.97 3,173	2.56 / 1.01 7,099	0.35 ***	0.55 ***	2 of 10	2 of 27
W. Becoming passionate about or committed to my occupation	3.67 / 0.59 719	3.68 / 0.58 3,175	3.68 / 0.58 7,109	-0.01	-0.01	7 of 10	17 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

Averages are based on the following response codings: Essential = 4, Very Important = 3, Somewhat important = 2, Not important = 1.

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WABASH NATIONAL STUDY OF
Liberal Arts Education

Table 9
Fall 2007 Student Survey
Section II
North Carolina A&T

Level of Agreement With Each of the Following Statements	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
A. I enjoy having discussions with people whose ideas and values are different from my own.	3.97 / 0.82 717	3.95 / 0.82 3,169	4.01 / 0.82 7,096	0.02	-0.05	6 of 10	17 of 27
B. The real value of a college education lies in being introduced to different values.	3.89 / 0.82 716	3.74 / 0.85 3,166	3.78 / 0.86 7,090	0.15 **	0.12 **	2 of 10	8 of 27
C. I enjoy talking with people who have values different from mine because it helps me better understand myself and my values.	4.10 / 0.82 715	4.05 / 0.80 3,165	4.10 / 0.79 7,091	0.04	0.00	6 of 10	17 of 27
D. Learning about people from different cultures is a very important part of my college education.	3.80 / 0.94 716	3.84 / 0.95 3,170	3.91 / 0.95 7,095	-0.04	-0.11 *	7 of 10	20 of 27
E. I enjoy taking courses that challenge my beliefs and values.	3.36 / 1.03 716	3.55 / 0.97 3,164	3.65 / 0.98 7,091	-0.18 ***	-0.28 ***	10 of 10	24 of 27
F. The courses I enjoy most are those that make me think about things from a different perspective.	3.92 / 0.92 716	3.88 / 0.92 3,169	3.95 / 0.91 7,092	0.04	-0.03	5 of 10	15 of 27
G. Contact with individuals whose backgrounds (e.g., race, national origin, sexual orientation) are different from my own is an essential part of my college education.	3.74 / 0.97 714	3.73 / 0.99 3,164	3.81 / 0.99 7,090	0.01	-0.07	7 of 10	15 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

Averages are based on the following response codings: Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1.

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WABASH NATIONAL STUDY OF
Liberal Arts Education

Table 9
Fall 2007 Student Survey
Section II
North Carolina A&T

Level of Agreement With Each of the Following Statements	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
H. I am willing to work hard in a course to learn the material even if it won't lead to a higher grade.	3.53 / 1.14 715	3.68 / 1.03 3,169	3.83 / 0.98 7,097	-0.15 **	-0.30 ***	9 of 10	26 of 27
I. When I do well on a test, it is usually because I am well-prepared; not because the test is easy.	4.17 / 0.84 715	4.08 / 0.85 3,166	4.05 / 0.87 7,093	0.09 *	0.12 **	3 of 10	4 of 27
J. In high school, I frequently did more reading in a class than was required simply because it interested me.	2.44 / 1.11 714	2.71 / 1.17 3,169	2.85 / 1.19 7,095	-0.27 ***	-0.41 ***	10 of 10	27 of 27
K. In high school, I frequently talked to my teachers outside of class about ideas presented during class.	3.24 / 1.15 716	3.32 / 1.19 3,165	3.39 / 1.17 7,088	-0.09	-0.15 *	7 of 10	21 of 27
L. Getting the best grades I can is very important to me.	4.68 / 0.62 715	4.46 / 0.79 3,166	4.33 / 0.87 7,086	0.22 ***	0.35 ***	1 of 10	1 of 27
M. I enjoy the challenge of learning complicated new material.	3.53 / 1.00 715	3.68 / 0.94 3,163	3.78 / 0.92 7,082	-0.15 **	-0.25 ***	6 of 10	21 of 27
N. My academic experiences (i.e., courses, labs, studying, discussions with faculty) will be the most important part of college.	3.92 / 0.95 714	3.60 / 1.06 3,161	3.60 / 1.02 7,077	0.32 ***	0.32 ***	1 of 10	2 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

Averages are based on the following response codings: Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1.

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*** Difference statistically significant at the .00001 level.

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WABASH NATIONAL STUDY OF
Liberal Arts Education

Table 9
Fall 2007 Student Survey
Section II
North Carolina A&T

Level of Agreement With Each of the Following Statements	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
O. My academic experiences (i.e., courses, labs, studying, discussions with faculty) will be the most enjoyable part of college.	3.01 / 1.01 716	2.75 / 0.99 3,165	2.86 / 0.97 7,085	0.26 ***	0.15 **	3 of 10	10 of 27
P. I enjoy reading poetry and literature.	3.16 / 1.25 716	3.18 / 1.29 3,166	3.35 / 1.31 7,089	-0.02	-0.19 **	7 of 10	18 of 27
Q. I enjoy reading about science.	2.60 / 1.19 714	2.82 / 1.23 3,160	2.87 / 1.23 7,083	-0.22 **	-0.27 ***	9 of 10	24 of 27
R. I enjoy reading about history.	2.98 / 1.23 715	3.16 / 1.24 3,164	3.33 / 1.23 7,086	-0.18 **	-0.35 ***	9 of 10	26 of 27
S. I enjoy expressing my ideas in writing.	3.32 / 1.27 714	3.26 / 1.27 3,163	3.38 / 1.26 7,086	0.07	-0.05	4 of 10	15 of 27
T. After I write about something, I see that subject differently.	3.10 / 1.01 714	3.11 / 1.02 3,163	3.21 / 1.03 7,085	-0.01	-0.10 *	5 of 10	19 of 27
U. If I have something good to read, I'm never bored.	3.51 / 1.31 713	3.68 / 1.21 3,166	3.73 / 1.18 7,087	-0.17 *	-0.22 ***	9 of 10	25 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

Averages are based on the following response codings: Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1.

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WABASH NATIONAL STUDY OF
Liberal Arts Education

Table 10
Fall 2007 Student Survey
Section III
North Carolina A&T

Item	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
A. How would you characterize your political views?	2.78 / 0.85 700	2.87 / 0.84 3,129	2.79 / 0.89 7,024	-0.09 *	-0.01	7 of 10	17 of 27
B. Overall, how would you rate your health?	4.15 / 0.66 718	4.24 / 0.64 3,168	4.26 / 0.64 7,095	-0.09 **	-0.11 **	8 of 10	21 of 27
D. Think back to a typical week in your last year of high school. How often did you consume alcoholic beverages?	0.28 / 0.70 716	0.55 / 0.95 3,161	0.54 / 1.00 7,087	-0.27 ***	-0.26 ***	10 of 10	25 of 27
G. How often do you feel that you are “sleep deprived” (i.e., don’t get enough sleep to function effectively)?	3.15 / 1.06 718	3.23 / 0.97 3,171	3.23 / 0.95 7,099	-0.08	-0.08 *	8 of 10	21 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

Averages are based on the following response codings: Item A—Far left = 1, Liberal = 2, Middle-of-the-road = 3, Conservative = 4, Far right = 5.

Item B—Excellent = 5, Good = 4, Fair = 3, Poor = 2, Very poor = 1.

Item D—0 times = 0, 1 time per week = 1, 2 times per week = 2, 3 times per week = 3, 4 times per week = 4, 5 times per week = 5, 6 times per week = 6, 7 times per week = 7, More than 7 times per week = 8.

Item G—Almost always = 5, Frequently = 4, Occasionally = 3, Seldom = 2, Never = 1.

Differences computed directly from this table may vary from listing due to rounding.

* Difference statistically significant at the .05 level.

** Difference statistically significant at the .001 level.

*** Difference statistically significant at the .00001 level.

~ Statistical test not performed due to frequencies < 20.

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Table 11
Fall 2007 Student Survey
Section III

North Carolina A&T

A. How would you characterize your political views?	Far left % / n	Liberal % / n	Middle-of-the-road % / n	Conservative % / n	Far right % / n	Blank % / n
North Carolina A&T	4.9 / 35	32.4 / 233	40.4 / 291	18.6 / 134	1.0 / 7	2.8 / 20
Other 9 Large Institutions	3.4 / 108	30.1 / 960	41.9 / 1,334	21.3 / 678	1.5 / 49	1.8 / 57
All Other Institutions	5.4 / 388	33.5 / 2,390	37.8 / 2,697	20.1 / 1,436	1.6 / 113	1.5 / 105

B. Overall, how would you rate your health?	Excellent % / n	Good % / n	Fair % / n	Poor % / n	Very poor % / n	Blank % / n
North Carolina A&T	29.0 / 209	58.1 / 418	11.7 / 84	0.8 / 6	0.1 / 1	0.3 / 2
Other 9 Large Institutions	34.4 / 1,097	56.0 / 1,784	8.0 / 254	0.9 / 30	0.1 / 3	0.6 / 18
All Other Institutions	35.4 / 2,525	55.8 / 3,978	7.3 / 523	0.9 / 62	0.1 / 7	0.5 / 34

C. How frequently do you engage in aerobic exercise (e.g., running, walking, hiking, swimming)?	I don't exercise regularly % / n	1-2 hours per week % / n	3-4 hours per week % / n	5-6 hours per week % / n	More than 6 hours per week % / n	Blank % / n
North Carolina A&T	23.9 / 172	21.1 / 152	25.3 / 182	11.5 / 83	17.8 / 128	0.4 / 3
Other 9 Large Institutions	14.0 / 446	21.4 / 683	28.5 / 908	16.1 / 513	19.4 / 617	0.6 / 19
All Other Institutions	15.8 / 1,129	21.4 / 1,527	26.0 / 1,852	13.9 / 988	22.4 / 1,596	0.5 / 37

D. Think back to a typical week in your last year of high school. How often did you consume alcoholic beverages?	0 times % / n	1 time per week % / n	2 times per week % / n	3 times per week % / n	4 times per week % / n	5 times per week % / n	More than 5 times per week % / n	Blank % / n
North Carolina A&T	81.5 / 587	11.5 / 83	3.8 / 27	1.9 / 14	0.6 / 4	0.1 / 1	0.0 / 0	0.6 / 4
Other 9 Large Institutions	65.2 / 2,077	20.9 / 666	8.7 / 276	2.9 / 92	1.0 / 32	0.3 / 9	0.3 / 9	0.8 / 25
All Other Institutions	66.5 / 4,739	20.4 / 1,451	8.1 / 574	2.7 / 191	0.9 / 65	0.4 / 32	0.5 / 35	0.6 / 42

E. In a typical week, during your last year in high school, how many times did you have 5 or more "drinks" in one sitting? (A "drink" is a 12-ounce can of beer, a four-ounce glass of wine, 1 wine cooler, 1 shot of liquor, or 1 mixed drink.)	0 % / n	1 time % / n	2 times % / n	3-4 times % / n	5 or more times % / n	Blank % / n
North Carolina A&T	84.0 / 605	6.4 / 46	4.3 / 31	2.5 / 18	2.4 / 17	0.4 / 3
Other 9 Large Institutions	67.9 / 2,162	14.6 / 465	8.0 / 256	4.8 / 154	4.0 / 129	0.6 / 20
All Other Institutions	70.1 / 4,997	13.9 / 990	7.3 / 517	4.2 / 300	4.1 / 290	0.5 / 35

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

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Table 11
Fall 2007 Student Survey
Section III
North Carolina A&T

F. How many cigarettes do you smoke a day?	I don't smoke cigarettes	Less than 1/2 pack	1/2 to 1 pack	more than 1 pack but less than 2	2 or more packs	Blank
	% / n	% / n	% / n	% / n	% / n	% / n
North Carolina A&T	97.1 / 699	2.5 / 18	0.1 / 1	0.0 / 0	0.0 / 0	0.3 / 2
Other 9 Large Institutions	94.9 / 3,024	3.5 / 113	0.9 / 29	0.0 / 0	0.1 / 2	0.6 / 18
All Other Institutions	92.5 / 6,592	5.1 / 367	1.5 / 110	0.2 / 16	0.1 / 8	0.5 / 36

G. How often do you feel that you are "sleep deprived" (i.e., don't get enough sleep to function effectively)?	Almost always	Frequently	Occasionally	Seldom	Never	Blank
	% / n	% / n	% / n	% / n	% / n	% / n
North Carolina A&T	11.7 / 84	24.9 / 179	35.1 / 253	22.9 / 165	5.1 / 37	0.3 / 2
Other 9 Large Institutions	9.8 / 313	28.6 / 912	38.9 / 1,239	19.0 / 605	3.2 / 102	0.5 / 15
All Other Institutions	9.2 / 659	28.7 / 2,044	40.3 / 2,872	18.9 / 1,345	2.5 / 179	0.4 / 30

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Table 12
Fall 2007 Outcome Measures
CAAP, NCS, and M-GUDS-S Scores
North Carolina A&T

Item	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
CAAP Critical Thinking Test							
Critical Thinking score	56.2 / 3.9 283	61.4 / 6.2 1,597	62.2 / 5.7 3,548	-5.2 ***	-6.0 ***	9 of 10	26 of 27
Need for Cognition Scale (NCS)							
Need for Cognition score	3.22 / 0.57 718	3.39 / 0.60 3,178	3.46 / 0.62 7,115	-0.17 ***	-0.24 ***	10 of 10	25 of 27
Miville-Guzman Universality-Diversity Scale–Short Form (M-GUDS-S)							
Full Scale score	4.55 / 0.63 706	4.55 / 0.65 3,082	4.59 / 0.65 6,933	0.00	-0.04	6 of 10	15 of 27
Diversity of Contact Subscale score	4.10 / 0.97 706	4.14 / 0.95 3,082	4.21 / 0.97 6,934	-0.04	-0.11 *	6 of 10	17 of 27
Relativistic Appreciation Subscale score	4.76 / 0.74 706	4.74 / 0.73 3,082	4.78 / 0.72 6,932	0.02	-0.02	5 of 10	17 of 27
Comfort with Differences Subscale score	4.79 / 0.84 706	4.76 / 0.86 3,082	4.79 / 0.84 6,933	0.03	0.00	5 of 10	14 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice–Wabash 2006 and Wabash 2007.

Differences computed directly from this table may vary from listing due to rounding.

* Difference statistically significant at the .05 level.

** Difference statistically significant at the .001 level.

*** Difference statistically significant at the .00001 level.

~ Statistical test not performed due to frequencies < 20.

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Table 13
Fall 2007 Outcome Measures
DIT-2 Scores
North Carolina A&T

Item	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
Defining Issues Test, Version 2 (DIT-2)							
P-score	22.25 / 12.98 196	32.89 / 15.95 1,519	35.18 / 16.01 3,502	-10.64 ***	-12.93 ***	9 of 10	26 of 27
N2 score	21.30 / 12.66 191	31.33 / 16.04 1,481	33.55 / 15.81 3,458	-10.03 ***	-12.25 ***	9 of 10	25 of 27
Personal Interest score ¹	34.53 / 13.47 196	28.60 / 13.03 1,519	27.35 / 12.59 3,502	5.94 ***	7.19 ***	2 of 10	2 of 27
Maintain Norms score ¹	36.64 / 14.17 196	32.24 / 12.83 1,519	31.57 / 13.12 3,502	4.40 ***	5.07 ***	1 of 10	4 of 27
Utilizer score	0.11 / 0.14 182	0.13 / 0.14 1,442	0.14 / 0.14 3,346	-0.03 *	-0.03 *	9 of 10	24 of 27
Humanitarian Liberalism score	1.77 / 1.15 199	2.09 / 1.19 1,543	2.22 / 1.23 3,534	-0.32 **	-0.45 ***	9 of 10	25 of 27
Number of cannot decide choices	1.86 / 1.48 199	1.45 / 1.40 1,543	1.34 / 1.34 3,534	0.41 **	0.53 ***	2 of 10	2 of 27
Religious Orthodoxy score	5.64 / 2.46 199	4.62 / 2.69 1,543	4.40 / 2.83 3,534	1.03 ***	1.25 ***	2 of 10	4 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

Differences computed directly from this table may vary from listing due to rounding.

¹ Higher scores on the Personal Interest and Maintain Norms components of the DIT-2 indicate less sophisticated levels of moral reasoning.

* Difference statistically significant at the .05 level.

** Difference statistically significant at the .001 level.

*** Difference statistically significant at the .00001 level.

~ Statistical test not performed due to frequencies < 20.

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Table 14
Fall 2007 Outcome Measures
Ryff Scales of Psychological Well-Being
North Carolina A&T

Item	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
Ryff Scales of Psychological Well-Being							
Self-Acceptance score	4.74 / 0.78 714	4.60 / 0.81 3,126	4.56 / 0.79 7,027	0.15 **	0.19 ***	3 of 10	3 of 27
Positive Relations With Others score	4.60 / 0.81 714	4.65 / 0.81 3,130	4.63 / 0.80 7,032	-0.05	-0.02	6 of 10	16 of 27
Autonomy score	4.52 / 0.72 713	4.33 / 0.77 3,127	4.32 / 0.75 7,031	0.19 ***	0.20 ***	1 of 10	1 of 27
Environmental Mastery score	4.48 / 0.73 713	4.39 / 0.73 3,127	4.36 / 0.72 7,031	0.09 *	0.12 **	2 of 10	3 of 27
Purpose in Life score	4.73 / 0.80 714	4.67 / 0.77 3,126	4.63 / 0.76 7,028	0.07 *	0.10 **	4 of 10	6 of 27
Personal Growth score	4.63 / 0.75 713	4.63 / 0.69 3,127	4.64 / 0.70 7,029	0.00	-0.01	6 of 10	15 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

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*** Difference statistically significant at the .00001 level.

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Table 15
Fall 2007 Outcome Measures
SRLS-R2 Scores
North Carolina A&T

Item	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
Socially Responsible Leadership Scale–Revised Version II (SRLS-R2)							
Consciousness of Self score	4.12 / 0.51 718	3.96 / 0.57 3,170	3.92 / 0.57 7,098	0.16 ***	0.20 ***	1 of 10	1 of 27
Congruence score	4.12 / 0.54 711	4.12 / 0.59 3,154	4.12 / 0.59 7,077	0.00	0.00	6 of 10	15 of 27
Commitment score	4.42 / 0.51 710	4.39 / 0.58 3,151	4.36 / 0.58 7,070	0.03	0.06 *	4 of 10	6 of 27
Collaboration score	4.07 / 0.51 711	4.02 / 0.53 3,158	4.00 / 0.53 7,082	0.05 *	0.07 **	3 of 10	5 of 27
Common Purpose score	4.00 / 0.48 712	3.97 / 0.51 3,159	3.96 / 0.51 7,084	0.03	0.03	6 of 10	10 of 27
Controversy with Civility score	3.85 / 0.46 718	3.83 / 0.49 3,178	3.85 / 0.50 7,110	0.02	-0.01	4 of 10	14 of 27
Citizenship score	3.87 / 0.58 711	3.90 / 0.62 3,159	3.91 / 0.62 7,083	-0.03	-0.04	7 of 10	20 of 27
Change score	3.91 / 0.52 712	3.74 / 0.56 3,162	3.73 / 0.56 7,087	0.17 ***	0.18 ***	1 of 10	2 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

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*** Difference statistically significant at the .00001 level.

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Table 16
Fall 2007 Outcome Measures
Life Goals and Orientation Toward Learning Scales
North Carolina A&T

Item	Averages and Frequencies			Comparisons for North Carolina A&T			
	North Carolina A&T	Other 9 Large Institutions	All Other Institutions	Institution Avg. Minus Other Large Institutions Avg.	Institution Avg. Minus All Other Institutions Avg.	Institution Avg. Rank Among All Large Institutions	Institution Avg. Rank Among All Institutions
	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>	<i>Avg/SD</i> <i>n</i>				
Life goals scales from Section I of the Student Survey							
Contribution to the arts	1.92 / 0.79 720	1.77 / 0.75 3,177	1.87 / 0.79 7,115	0.14 ***	0.05	3 of 10	9 of 27
Contribution to the sciences	2.14 / 0.80 716	2.03 / 0.84 3,167	1.95 / 0.84 7,087	0.10 *	0.18 ***	2 of 10	2 of 27
Political and social involvement	2.83 / 0.51 720	2.65 / 0.52 3,177	2.66 / 0.53 7,115	0.18 ***	0.17 ***	2 of 10	3 of 27
Professional success	3.10 / 0.49 719	2.71 / 0.67 3,179	2.56 / 0.69 7,117	0.39 ***	0.54 ***	1 of 10	1 of 27
Orientation toward learning scales from Section II of the Student Survey							
Openness to diversity and challenge	3.83 / 0.59 716	3.82 / 0.63 3,169	3.89 / 0.64 7,097	0.01	-0.06 *	7 of 10	18 of 27
Academic motivation	3.57 / 0.53 716	3.54 / 0.58 3,167	3.59 / 0.57 7,092	0.03	-0.02	5 of 10	16 of 27
Positive attitude toward literacy	3.12 / 0.75 715	3.20 / 0.76 3,166	3.31 / 0.77 7,092	-0.09 *	-0.20 ***	9 of 10	24 of 27

Comparisons are based on the 27 institutions in the first two rounds of the Wabash National Study. Wabash College is counted twice—Wabash 2006 and Wabash 2007.

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Supplemental Information on the CAAP Critical Thinking Test North Carolina A&T University

Approximately half of North Carolina A&T University students who participated in the Wabash National Study completed the CAAP Critical Thinking Test¹ in fall 2007.

The overall CAAP Critical Thinking Test scores for participants at North Carolina A&T were as follows:

Mean	Standard Deviation	N	Range of Scores
56.2	3.9	283	47–68

The CAAP Critical Thinking Test also asks students to rate their performance effort while completing the test on a range from “Tried My Best” to “Gave No Effort.” The results of this question for your students are below:

Response	Frequency of Response	Average Score
Tried My Best	81	56.7
Gave Moderate Effort	152	56.7
Gave Little Effort	36	54.2
Gave No Effort	8	53.4
No Response	6	53.0

Eighty-two percent of A&T students reported giving at least moderate effort on the CAAP Critical Thinking Test. Students who reported giving moderate or best effort had average scores slightly above the overall average for the group. Those who reported little or no effort had average scores two to three points lower than the overall average.

The CAAP Critical Thinking Test also reports the number of students who received scores at or below “chance” level, which is the score students would receive if they responded to all the test questions by guessing:

At or Below Chance Scores		
Response	Frequency	Average
Tried My Best	10	50.3
Gave Moderate Effort	13	50.8
Gave Little Effort	9	50.2
Gave No Effort	2	not available
No Response	3	not available

¹ For more information, see Table 12 in the related ACT reports

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Thirty-seven A&T students scored at or below chance levels. According to ACT, “Students who indicated that they ‘tried their best’ and had a very low score (i.e., below chance level) may in fact lack the skills or knowledge to perform adequately on the CAAP.” Overall, the information about students’ reported performance effort and the number of scores at or below chance level indicate that while most A&T students took the CAAP Critical Thinking Test seriously, a subset of students (around 13 to 15%) either did not give much effort or had difficulty answering the questions on this test.

Guide to Outcome Measures

The following is a brief description of each of the instruments used in the Wabash National Study of Liberal Arts Education, listed as they appear in the outcomes measures data tables from ACT. Each description provides background information on the instrument and explains how it is scored. For further information, see the reference list at the end of this document.

CAAP Critical Thinking Test

Outcome: Effective Reasoning and Problem Solving

The Collegiate Assessment of Academic Proficiency (CAAP) is a national, standardized assessment program developed by ACT with six independent modules that test reading, writing, math, science, and critical thinking. "The CAAP Critical Thinking Test is a 32-item instrument that measures students' skills in clarifying, analyzing, evaluating, and extending arguments." (<http://www.act.org/caap/tests/thinking.html>) The test is comprised of four passages based on topics or issues typically included in college curricula (for example, political issues that might be found in a political science class), each accompanied by a set of multiple-choice test items. The format for the four passages includes case studies, debates, dialogues, and statistical arguments, among others. Scores range from 40 (lowest) to 80 (highest).

Need for Cognition Scale

Outcome: Inclination to Inquire and Lifelong Learning

The Need for Cognition Scale is an 18-item instrument that measures how much people enjoy engaging in effortful cognitive activities. Individuals who rank high in "need for cognition" enjoy thinking, and they do it more often than individuals who rank low in this area and who only engage in careful thought when they have to. Scores range from 1 (low) to 5 (high).

Miville-Guzman Universality-Diversity Scale – Short Form (M-GUDS-S)

Outcome: Intercultural Effectiveness

The M-GUDS measures an individual's universal-diverse orientation (UDO), which is defined as "an attitude of awareness and acceptance of both similarities and differences that exist among people" (Miville et al., 1999, p. 294). The short form (M-GUDS-S) is being used in the Wabash National Study. It has 15 items and contains three subscales: Diversity of Contact (interest in and commitment to participating in diverse, intentionally focused social and cultural activities), Relativistic Appreciation (appreciation of both similarities and differences in people and the impact of these in one's self-understanding and personal growth), and Comfort with Differences (the degree of comfort with diverse individuals). Scores for the full M-GUDS-S and each of the subscales range from 1 (low) to 6 (high).

Defining Issues Test, Version 2 (DIT-2)

Outcome: Moral Reasoning

The DIT-2 is a test of moral reasoning based on Kohlberg's stages of moral development. In the DIT-2, several stories about social problems are described, such as should a starving man steal food for his family from someone who is hoarding resources. After each story, a series of 12 items representing different issues that might be raised by the problem are presented. For

example, in the scenario described above, the items include the following: "Would stealing bring about more total good for everybody concerned or wouldn't it? Shouldn't the community's laws be upheld?" In response to the scenario and items, respondents are asked to do three things:

1. make an action choice (for example, yes he should steal or no he should not steal)
2. rate the series of 12 items in terms of their importance in making a decision about the social problem on a 5-point scale from "great importance" to "no importance"
3. rank the top four most important items

The test uses the following scales:

- **P-score** – This score represents the degree to which an individual uses higher order moral reasoning. The P-score is the proportion of items selected that appeal to moral ideals and/or theoretical frameworks for resolving complex moral issues, specifically, items that appeal to
 - o consensus-building procedures,
 - o insisting on due process,
 - o safeguarding minimal basic rights,
 - o and organizing social arrangements in terms of appealing to ideals.

The P score is calculated on the basis of only the ranking data and can range from 0 to 95. An average score for senior high school students is in the 30's. For a college student, an average score is in the 40's. The same averages apply to the N2 score below (Bebeau and Thoma, 2003; Rest, Thoma, Narvaez, and Bebeau, 1997).

- **N2 score** – Like the P-score, the N2 score is based on acquiring more sophisticated moral thinking, but the N2 score also reflects the extent to which individuals reject ideas because they are simplistic or biased. The score is adjusted so that it is on the same scale as the P-score (Bebeau and Thoma, 2003).
- **Personal Interest Score** – This score represents the degree to which an individual uses the least sophisticated levels of moral reasoning. It is the proportion of an individual's selected items that appeal to
 - o the direct advantages for the actor,
 - o the fairness of simple exchanges,
 - o the good or evil intentions of the parties,
 - o the party's concern for maintaining friendships and good relationships,
 - o and maintaining approval (Bebeau and Thoma, 2003; Rest et al., 1997).
- **Maintain Norms Score** – The Maintain Norms Score measures mid-level moral reasoning. It is the proportion of selected items in which the focus is on maintaining
 - o the existing legal system,
 - o existing roles,
 - o and formal organizational structures (Bebeau and Thoma, 2003).
- **Utilizer Score** – The Utilizer Score or U-score represents the consistency between items endorsed as important and the action choice in a dilemma. The U-score is scaled on a range of -1 (low utilization) to +1 (high utilization), though the typical range from large sample estimates is -.41 to .77 (Bebeau and Thoma, 2003; Thoma, Rest, and Davison, 1991).

Experimental Indices (Bebeau and Thoma, 2003):

- **Humanitarian Liberalism Score** – This variable is a proxy for a humanitarian liberal perspective on moral dilemmas. The score is equal to the number of times a respondent's action choice matches that of the highest scoring reference group (e.g., professionals in political science and philosophy). Scores range from 0 (no matches) to 5 (all matches).
- **Number of Cannot Decide Choices** – This variable reflects the decisiveness of a respondent's action choices. A high number indicates that participants have difficulty deciding. The score can be high during developmental shifts. This variable simply counts the number of "can't decide" choices (0 to 5).
- **Religious Orthodoxy Score** – This variable represents the sum of the rates and ranks for item 10 in the cancer dilemma: "Should only God decide when a person's life should end?" which correlates very strongly with scores on religious orthodoxy measures like the Brown and Lowe Inventory of Religious Beliefs. The score is the addition of the rating given to this item and the ranking value. It ranges from 1 (rated not important and unranked) to 9 (rated most important and ranked first)

The Ryff Scales of Psychological Well-Being Outcome: Well-Being

The Ryff Scales of Psychological Well-Being measure six theoretical constructs of positive psychological functioning:

- **Self-acceptance** – The extent to which an individual "possesses a positive attitude toward the self; acknowledges and accepts multiple aspects of self including good and bad qualities; feels positive about past life."
- **Positive relations with others** – The extent to which an individual "has warm, satisfying, trusting relationships with others; is concerned about the welfare of others; capable of strong empathy, affection, and intimacy; understands give and take of human relationships."
- **Autonomy** – The extent to which an individual "is self-determining and independent; able to resist social pressures to think and act in certain ways; regulates behavior from within; evaluates self by personal standards."
- **Environmental mastery** – The extent to which an individual "has a sense of mastery and competence in managing the environment; controls complex array of external activities; makes effective use of surrounding opportunities; able to choose or create contexts suitable to personal needs and values."
- **Purpose in life** – The extent to which an individual "has goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose; has aims and objectives for living."
- **Personal growth** – The extent to which an individual "has a feeling of continued development; sees self as growing and expanding; is open to new experiences; has sense of realizing his or her potential; sees improvement in self and behavior over time; is changing in ways that reflect more self-knowledge and effectiveness." (Ryff, 1989, p. 1072)

The 54-item version of the instrument (9 items per scale) is being used in the Wabash National Study. Scores for each of the six scales range from 1 (low) to 6 (high).

Socially Responsible Leadership Scale – Revised Version II (SRLS-R2)

Outcome: Leadership

The SRLS-R2 is a 68-item survey that measures the eight dimensions of Astin et al.'s (1996) Social Change Model of leadership development. According to this model, leadership is a collaborative group process directed toward promoting positive social change in an organization or community (Tyree, 1998). A person who demonstrates strong socially responsible leadership capabilities is self-aware, acts in accordance with personal values and beliefs, invests time and energy in activities that he or she believes are important, works with diverse others to accomplish common goals, has a sense of civic and social responsibility, and desires to make the world a better place. The SRLS was developed specifically to measure leadership in college students.

The SRLS has eight scales corresponding to the eight dimensions of leadership (Astin et al., 1996; Dugan, 2006):

- **Consciousness of Self** – Being aware of the values, emotions, attitudes, and beliefs that motivate one to take action.
- **Congruence** – Thinking, feeling, and behaving with consistency, genuineness, authenticity, and honesty toward others.
- **Commitment** – Intensity and duration in relation to a person, idea, or activity. The energy and passion that propels one to act.
- **Collaboration** – Working with others in a common effort.
- **Common Purpose** – Working with others within a shared set of aims and values.
- **Controversy with Civility** – Recognizing two fundamental realities of any group effort, that (a) differences in viewpoint are inevitable and valuable, and (b) such differences must be aired openly and with respect and courtesy.
- **Citizenship** – Believing in a process whereby a person or group is responsibly connected to the environment and the community. Citizenship signifies more than membership; it implies active engagement in an effort to serve the community.
- **Change** – Adapting to continuously evolving environments and situations, while maintaining the primary functions of the group.

Respondents receive a separate score, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), for each of the eight scales in the SRLS.

Life Goals Scales from Wabash National Study Student Surveys:

These scales are not measures of the six liberal arts outcomes listed above, but are derived from items in the Student Survey and the Student Experiences Survey.

Contribution to the Arts Scale – consists of three items in which respondents identify how important (ranging from not important to essential) it is for them to contribute to the arts. Contributing to the arts includes "becoming accomplished in the performing arts," "writing original works," or "creating artistic work." Scores range from 1 (low) to 4 (high).

Contribution to the Sciences Scale – consists of two items in which respondents identify how important (ranging from not important to essential) it is for them to contribute to advances in science. Contributing to science includes "making a theoretical contribution to science" and "working to find a cure for a disease or illness." Scores range from 1 (low) to 4 (high).

Political and Social Involvement Scale – consists of 11 items in which respondents identify how important (ranging from not important to essential) it is for them be involved politically and socially in their communities. Political and social involvement ranges from "influencing the political structure" and "influencing social values" to "becoming a community leader." Scores range from 1 (low) to 4 (high).

Professional Success Scale – consists of five items in which respondents identify how important (ranging from not important to essential) it is for them be successful in a profession. Professional success includes "having administrative responsibility for the work of others" and "becoming successful in a business of my own" as well as "working in a prestigious occupation." Scores range from 1 (low) to 4 (high).

Orientation Toward Learning Scales from Wabash National Study Student Surveys:

These scales are derived from items in the Student Survey and Student Experiences Survey.

Openness to Diversity and Challenge Scale – consists of seven items in which respondents indicate the extent to which they agree or disagree (ranging from strongly agree to strongly disagree) with statements about their openness to diversity. Openness to diversity includes their openness to cultural and racial diversity as well as the extent to which they enjoy being challenged by different perspectives, values, and ideas. Scores range from 1 (low) to 5 (high).

Academic Motivation Scale – consists of eight items in which respondents indicate the extent to which they agree or disagree (ranging from strongly agree to strongly disagree) with statements about their academic motivation. Academic motivation includes their willingness to work hard to learn material even if it does not lead to a higher grade, the importance of getting good grades, reading more for a class than required because the material was interesting, their enjoyment of academic challenge, and the importance of academic experiences in college. Scores range from 1 (low) to 5 (high).

Positive Attitude Toward Literacy Scale – consists of six items in which respondents indicate the extent to which they agree or disagree (ranging from strongly agree to strongly disagree) with statements about their attitude toward reading and writing. A positive attitude toward literacy means enjoying activities such as reading poetry and literature, reading scientific and historical material, and expressing ideas in writing. Scores range from 1 (low) to 5 (high).

References:

CAAP Critical Thinking Test

Information available at ACT website: <http://www.act.org/caap/tests/thinking.html>

Need for Cognition Scale

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Miville-Guzman Universality-Diversity Scale

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Defining Issue Test (version 2)

- Bebeau, M. J. & Thoma, S. J. (2003). Guide for DIT-2. Published by the Center for the Study of Ethical Development, University of Minnesota. Can be ordered from <http://www.centerforthestudyofethicaldevelopment.net/Order%20Form.htm>.
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- Thoma, S. J., Rest, J. R., & Davison, M. L. (1991). Describing and testing a moderator of the moral judgment and action relationship. *Journal of Personality and Social Psychology*, 61, 659–669.
- More information available from the Center for the Study of Ethical Development website: <http://www.centerforthestudyofethicaldevelopment.net/>

Ryff Scales of Psychological Well-Being

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- Tyree, T. M. (1998). Designing an instrument to measure socially responsible leadership using the social change model of leadership development. *Dissertation Abstracts International*, 59(06), 1945. (UMI No. 9836493)

Orientation Toward Learning Scales from Wabash National Study Student Surveys

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