

**National Survey of Student Engagement
2003 Freshman Cohort
Executive Summary**

The National Survey of Student Engagement (NSSE) was administered to freshmen and seniors at Appalachian State University at the end of the spring 2004 semester. This report analyzed the data for the 360 freshman responses. A variable was created by the Office of Institutional Research that divided this cohort based on participation in Freshman Seminar. Of the 360 total responses, 199 enrolled in Freshman Seminar fall 2003 and 161 did not.

A univariate analysis was conducted to analyze differences based on participation in Freshman Seminar relative to each of the five NSSE scales (academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus environment). A description of the five factors is included on the following page. This analysis controlled for the effects of gender, SAT scores, and parental education.

A significant difference was found on the “Supportive Campus Environment” scale, with Freshman Seminar students reporting higher scores than those who did not enroll in Freshman Seminar (25.68 v. 24.44, $p = .027$).

Description of NSSE Factors/Scales

<u>Factor</u>	<u>Description*</u>	<u>Questions</u>	<u>Reliability</u>
Academic Challenge	"Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote high levels of student achievement by emphasizing the importance of academic effort and setting high expectations for student performance."	(1) Preparing for class; (2) Number of assigned textbooks, books, or book-length course packs; (3) Number of written papers (20+, 5-19, less than 5 pages); (4) Coursework emphasizing analysis of the basic elements of an idea, theory, or experience; (5) Coursework emphasizing synthesis and organization of ideas, information, or experiences into new, more complex interpretations and relationships; (6) Coursework emphasizing the making of judgments about the value of information, arguments, or methods; (7) Coursework emphasizing application of theories or concepts to practical problems or in new situations; (8) Working harder than you thought you could to meet an instructor's standards or expectations; (9) Campus environment emphasizing time studying and on academic work	0.7
Active & Collaborative Learning	"Students learn more when they are intensely involved in their education and asked to think about what they are learning in different settings. Collaborating with others in solving problems or mastering difficult material prepares students for the messy, unscripted problems they will encounter daily during and after college."	(1) Asked questions in class or contributed to class discussions; (2) Made a class presentation; (3) Worked with other students on projects during class; (4) Worked with classmates outside of class to prepare class assignments; (5) Tutored or taught other students; (6) Participated in a community-based project as part of a regular course; (7) Discussed ideas from your readings or classes with others outside of class	0.632
Student-Faculty Interaction	"Students learn firsthand how experts think about and solve practical problems by interacting with faculty members inside and outside the classroom. As a result, their teachers become role models, mentors, and guides for continuous, lifelong learning."	(1) Discussed grades or assignments with an instructor; (2) Talked about career plans with a faculty member or advisor; (3) Discussed ideas from your readings or classes with faculty members outside of class; (4) Worked with faculty members on activities other than coursework; (5) Received prompt feedback from faculty on your academic performance (written or oral); (6) Worked with a faculty member on a research project outside of course or program requirements	0.737

Description of NSSE Factors/Scales

Enriching Educational Experiences	"Complementary learning opportunities in and out of class augment academic programs. Diversity experiences teach students valuable things about themselves and others. Technology facilitates collaboration between peers and instructors. Internships, community service, and senior capstone courses provide opportunities to integrate and apply knowledge.	(1) Participating in co-curricular activities; (2) Practicum, internship, field experience, co-op experience, or clinical assignment; (3) Community service or volunteer work; (4) Foreign language coursework and study abroad; (5) Independent study or self-designed major; (6) Culminating senior experience; (7) Serious conversations with students of different religious beliefs, political opinions, or personal values; (8) Serious conversations with students of a different race or ethnicity; (9) Using electronic technology to discuss or complete an assignment; (10) Campus environment encouraging contact among students from different economic, social, racial or ethnic backgrounds; (11) Participate in a learning community or some other formal program where groups of students take two or more classes together	0.601
Supportive Campus Environment	"Students perform better and are more satisfied at colleges that are committed to their success and cultivate positive working and social relations among different groups on campus."	(1) Campus environment provides the support you need to help you succeed academically; (2) Campus environment helps you cope with your non-academic responsibilities; (3) Campus environment provides the support you need to thrive socially; (4) Quality of relationships with other students; (5) Quality of relationships with faculty members; (6) Quality of relationships with administrative personnel and offices	0.757

*Quoted directly from NSSE Institutional Benchmark Report

Academic Challenge Index

Descriptive Statistics

Dependent Variable: Academic Challenge Index

fs2003	Mean	Std. Deviation	N
Freshman Seminar Fall 2003	31.5351	4.88789	185
Not Freshman Seminar Fall 2003	31.7517	5.23149	145
Total	31.6303	5.03510	330

Levene's Test of Equality of Error Variances^a

Dependent Variable: Academic Challenge Index

F	df1	df2	Sig.
.008	1	328	.930

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+mothredu+fathredu+satt+sex+fs2003

Tests of Between-Subjects Effects

Dependent Variable: Academic Challenge Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	93.096 ^a	5	18.619	.731	.600	.011
Intercept	3465.153	1	3465.153	136.122	.000	.296
mothredu	.067	1	.067	.003	.959	.000
fathredu	45.680	1	45.680	1.794	.181	.006
satt	33.335	1	33.335	1.310	.253	.004
sex	8.843	1	8.843	.347	.556	.001
fs2003	9.968	1	9.968	.392	.532	.001
Error	8247.801	324	25.456			
Total	338498.000	330				
Corrected Total	8340.897	329				

a. R Squared = .011 (Adjusted R Squared = -.004)

fs2003

Dependent Variable: Academic Challenge Index

fs2003	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Freshman Seminar Fall 2003	31.475 ^a	.373	30.742	32.208
Not Freshman Seminar Fall 2003	31.829 ^a	.422	30.999	32.658

a. Covariates appearing in the model are evaluated at the following values: What is the highest level of education that your parent(s) completed? (Mark one box per column.) - Mother = 4.04, What is the highest level of education that your parent(s) completed? (Mark one box per column.) - Father = 4.26, SAT total score = 1125.52, Student reported: Your sex = 1.61.

Active & Collaborative Learning

Descriptive Statistics

Dependent Variable: Active & Collaborative Learning Index

fs2003	Mean	Std. Deviation	N
Freshman Seminar Fall 2003	15.5968	3.00698	186
Not Freshman Seminar Fall 2003	15.6164	3.10341	146
Total	15.6054	3.04513	332

Levene's Test of Equality of Error Variances^a

Dependent Variable: Active & Collaborative Learning Index

F	df1	df2	Sig.
.046	1	330	.830

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+mothredu+fathredu+satt+sex+fs2003

Tests of Between-Subjects Effects

Dependent Variable: Active & Collaborative Learning Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	27.546 ^a	5	5.509	.590	.707	.009
Intercept	749.925	1	749.925	80.373	.000	.198
mothredu	1.524	1	1.524	.163	.686	.001
fathredu	1.428	1	1.428	.153	.696	.000
satt	.735	1	.735	.079	.779	.000
sex	23.418	1	23.418	2.510	.114	.008
fs2003	.361	1	.361	.039	.844	.000
Error	3041.764	326	9.331			
Total	83921.000	332				
Corrected Total	3069.310	331				

a. R Squared = .009 (Adjusted R Squared = -.006)

fs2003

Dependent Variable: Active & Collaborative Learning Index

fs2003	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Freshman Seminar Fall 2003	15.576 ^a	.225	15.133	16.019
Not Freshman Seminar Fall 2003	15.643 ^a	.255	15.142	16.144

a. Covariates appearing in the model are evaluated at the following values: What is the highest level of education that your parent(s) completed? (Mark one box per column.) - Mother = 4.05, What is the highest level of education that your parent(s) completed? (Mark one box per column.) - Father = 4.26, SAT total score = 1125.03, Student reported: Your sex = 1.61.

Student-Faculty Interaction

Descriptive Statistics

Dependent Variable: Student-Faculty Interaction Index

fs2003	Mean	Std. Deviation	N
Freshman Seminar Fall 2003	13.1183	3.22775	186
Not Freshman Seminar Fall 2003	13.0616	3.27419	146
Total	13.0934	3.24345	332

Levene's Test of Equality of Error Variances^a

Dependent Variable: Student-Faculty Interaction Index

F	df1	df2	Sig.
.293	1	330	.589

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+mothredu+fathredu+satt+sex+fs2003

Tests of Between-Subjects Effects

Dependent Variable: Student-Faculty Interaction Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	19.070 ^a	5	3.814	.359	.876	.005
Intercept	771.645	1	771.645	72.640	.000	.182
mothredu	1.149	1	1.149	.108	.742	.000
fathredu	.015	1	.015	.001	.970	.000
satt	15.044	1	15.044	1.416	.235	.004
sex	.889	1	.889	.084	.773	.000
fs2003	.005	1	.005	.000	.983	.000
Error	3463.036	326	10.623			
Total	60399.000	332				
Corrected Total	3482.105	331				

a. R Squared = .005 (Adjusted R Squared = -.010)

fs2003

Dependent Variable: Student-Faculty Interaction Index

fs2003	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Freshman Seminar Fall 2003	13.097 ^a	.240	12.624	13.570
Not Freshman Seminar Fall 2003	13.089 ^a	.272	12.555	13.623

a. Covariates appearing in the model are evaluated at the following values: What is the highest level of education that your parent(s) completed? (Mark one box per column.) - Mother = 4.05, What is the highest level of education that your parent(s) completed? (Mark one box per column.) - Father = 4.26, SAT total score = 1125.03, Student reported: Your sex = 1.61.

Enriching Educational Experiences

Descriptive Statistics

Dependent Variable: Enriching Educational Experiences Index

fs2003	Mean	Std. Deviation	N
Freshman Seminar Fall 2003	28.3696	4.73844	184
Not Freshman Seminar Fall 2003	27.2897	5.05376	145
Total	27.8936	4.90187	329

Levene's Test of Equality of Error Variances^a

Dependent Variable: Enriching Educational Experiences Index

F	df1	df2	Sig.
.649	1	327	.421

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+mothredu+fathredu+satt+sex+fs2003

Tests of Between-Subjects Effects

Dependent Variable: Enriching Educational Experiences Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	454.016 ^a	5	90.803	3.949	.002	.058
Intercept	1438.615	1	1438.615	62.563	.000	.162
mothredu	4.701	1	4.701	.204	.651	.001
fathredu	13.694	1	13.694	.596	.441	.002
satt	21.194	1	21.194	.922	.338	.003
sex	308.063	1	308.063	13.397	.000	.040
fs2003	83.769	1	83.769	3.643	.057	.011
Error	7427.261	323	22.995			
Total	263861.000	329				
Corrected Total	7881.277	328				

a. R Squared = .058 (Adjusted R Squared = .043)

fs2003

Dependent Variable: Enriching Educational Experiences Index

fs2003	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Freshman Seminar Fall 2003	28.346 ^a	.355	27.648	29.045
Not Freshman Seminar Fall 2003	27.319 ^a	.401	26.531	28.107

a. Covariates appearing in the model are evaluated at the following values: What is the highest level of education that your parent(s) completed? (Mark one box per column.) - Mother = 4.05, What is the highest level of education that your parent(s) completed? (Mark one box per column.) - Father = 4.27, SAT total score = 1125.68, Student reported: Your sex = 1.61.

Supportive Campus Environment

Descriptive Statistics

Dependent Variable: Supportive Campus Environment Index

fs2003	Mean	Std. Deviation	N
Freshman Seminar Fall 2003	25.6865	3.95753	185
Not Freshman Seminar Fall 2003	24.4414	4.52904	145
Total	25.1394	4.25680	330

Levene's Test of Equality of Error Variances^a

Dependent Variable: Supportive Campus Environment Index

F	df1	df2	Sig.
1.368	1	328	.243

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+mothredu+fathredu+satt+sex+fs2003

Tests of Between-Subjects Effects

Dependent Variable: Supportive Campus Environment Index

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	516.084 ^a	5	103.217	6.141	.000	.087
Intercept	2378.694	1	2378.694	141.529	.000	.304
mothredu	19.759	1	19.759	1.176	.279	.004
fathredu	13.165	1	13.165	.783	.377	.002
satt	89.222	1	89.222	5.309	.022	.016
sex	232.578	1	232.578	13.838	.000	.041
fs2003	83.078	1	83.078	4.943	.027	.015
Error	5445.504	324	16.807			
Total	214518.000	330				
Corrected Total	5961.588	329				

a. R Squared = .087 (Adjusted R Squared = .072)

fs2003

Dependent Variable: Supportive Campus Environment Index

fs2003	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Freshman Seminar Fall 2003	25.588 ^a	.303	24.993	26.184
Not Freshman Seminar Fall 2003	24.567 ^a	.343	23.893	25.240

a. Covariates appearing in the model are evaluated at the following values: What is the highest level of education that your parent(s) completed? (Mark one box per column.) - Mother = 4.04, What is the highest level of education that your parent(s) completed? (Mark one box per column.) - Father = 4.26, SAT total score = 1125.52, Student reported: Your sex = 1.61.