

APPENDIX A

Methodology

Overview

This report summarizes results of the student satisfaction study conducted at Embry-Riddle Aeronautical University's residential campuses in Daytona Beach, Florida and Prescott, Arizona by the Office of Institutional Research (IR). The purpose of this study is to obtain data on students' perceptions of various aspects of their college experience. The results of the study are used to identify institutional strengths, areas in need of improvement, as well as to pinpoint more precisely the institution's effectiveness in meeting the expectations of students.

Survey Instrument

The Office of Institutional Research administered the *Student Satisfaction Inventory*™ (SSI), a questionnaire created by Noel-Levitz, INC. a consulting firm. The SSI consists of items, expressed as statements of expectation, which cover the full range of college experiences. The instrument included 10 additional questions tailored to the needs of the university. The SSI was administered to students from all class levels and degree programs. Respondents were asked to indicate, on a seven point Likert response scale, the level of importance they assign to the expectation, as well as their level of satisfaction that the expectation is being met.

Sample Selection

The SSI was administered during October and November 2002 to a sample of students at the Daytona Beach and Prescott campuses. The sample of students for both campuses was selected as follows: IR identified the total number of responses needed at each campus in order to obtain an error margin of approximately 5%. To ensure representation across all class levels and majors, Fall 2002 courses were grouped into four categories that were considered to best segregate new students, continuing lower classmen, upper classmen, and graduate students. The number of responses needed within each of these categories was assigned proportionately to the Fall 2002 enrollment distribution of students in those categories (see table below for criteria for course selection). Faculty members were asked by their department chairs to participate by volunteering class time, thus allowing the completion of the survey in class. IR made contact with teachers at both campuses and developed a schedule for the administration of the surveys. Scanning of survey instruments and initial analysis of results was performed by Noel-Levitz, INC. Final analysis of data, generation of additional statistics and final report were performed by IR.

Daytona Beach	Minimum number of responses needed	Courses
New Freshmen	170	College Success
Continuing Freshmen and Sophomores	210	Lower level HU, SS, MA, PS.
Junior and Seniors	370	Upper level, program specific courses in Aero Sci; Pro Aero; Aero Engr; Civil Engr; Aero Studies; Communication; ACET; Aviation Tech; Avionics Engr Tech; Human Factors Psych; ABA; AMM; Aviation Mgmt; MTO; Comp Engr; Comp Sci; Engr Physics.
Graduate Students	50	Graduate level, program-specific courses in MAS; MSAE; MBAA; MSHFS, MSE.
Prescott		
New Freshmen	100	College Success
Continuing Freshmen and Sophomores	150	Lower level HU, SS, MA, PS.
Junior and Seniors	240	Upper level, program specific courses in Aero Sci; Aero Engr; Comp Engr; Comp Sci; Elec Engr; Aero Studies; STG
Graduate Students	10	Any MSF courses

Response Rates

A total of 1,239 surveys were completed at both campuses (746 at Daytona Beach, and 493 at Prescott). This represents approximately 16% of the total student population in Daytona Beach and 29% of the total student population in Prescott. Data were statistically weighted where necessary to correct for disproportionate response rates, so that results are representative of all Fall 2002 ERAU students.

Possible Sources of Error

The results of any survey research are subject to sampling and/or non-sampling errors. (1) Sampling error— Because this survey is not a census, a possible sampling error is the inability to survey students because they were not present during the days the survey administration took place. (2) Non-sampling - This research is also subject to errors such as unit item non-response, where students answered only certain items. No imputation was performed for missing data items. Another type of non-sampling error is measurement error, which may exist for some of the variables due to the difficulty of defining ambiguous concepts. Lastly, differences in interpreting questions and inability or unwillingness to give correct information are two other sources of non-sampling errors.

Calculation of Percentage-Responses

Responses from this national student satisfaction study are only available in average-response form, which are calculated from a seven-point Likert scale. Although the assumption of symmetry and equal intervals in Likert scale construction is controversial, this is the only source of national data from Noel-Levitz available to make comparisons among institutions. In addition to these average responses (used in this report only to compare ERAU findings to the national comparative group), IR has generated percentage responses. Percentage responses for importance and satisfaction items presented in this report were obtained by collapsing the seven-point Likert response scale into three categories: not important, neutral, and important; and dissatisfied, neutral, and satisfied, respectively.

The Scales

Below is a description of the 11 scales used in the analysis of the SSI responses. Some items on the SSI instrument contribute to more than one scale.

Academic Advising Effectiveness assesses the comprehensiveness of the academic advising program. Academic advisors are evaluated on the basis of their knowledge, approachability, competence and personal concern for students.

Campus Climate assesses the extent to which the institution provides experiences that promote a sense of campus pride, feelings of belonging, and channels of communication for students.

Campus Life assesses campus policies and procedures, and the effectiveness of student life programs offered by the institution.

Campus Support Services assesses the quality of services such as tutoring, the adequacy of the library and computer labs, the availability of academic and career services, etc.

Concern for the Individual assesses the institution's commitment to treating each student as an individual.

Instructional Effectiveness assesses the students' academic experience, the curriculum, and the campus' overriding commitment to academic excellence. Items covered include: the effectiveness of the faculty in and out of the classroom, and the effectiveness of the adjunct faculty and graduate teaching assistants.

Recruitment and Financial Aid assesses the institution's ability to enroll students in an effective manner. Issues covered include: competence and knowledge of admissions counselors, as well as the effectiveness and availability of financial aid programs.

Registration Effectiveness assesses issues associated with registration and billing, and the ability to make this process as smooth and effective as possible.

Safety and Security assesses the institution's responsiveness to students' personal safety and security on campus.

Service Excellence assesses the perceived attitude of the staff toward students, especially front-line staff.

Student Centeredness assesses the campus' efforts to convey to students that they are important to the institution. This scale measures the extent to which students feel welcome and valued.