OREGON INSTITUTE OF TECHNOLOGY STUDENT SATISFACTION SURVEY

Summary of Survey Results

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Introduction and Background

As one part of a continuing effort to better serve the needs of undergraduates in the Oregon State System of Higher Education (OSSHE) and to assist in OSSHE's Assessment Demonstration Project, the Oregon Institute of Technology (Oregon Tech) contracted with the Oregon Survey Research Laboratory (OSRL) to conduct a representative survey of students' attitudes, experiences and opinions. This survey paralleled others conducted in Fall 1994 and Fall 1995 on University of Oregon students and another to be conducted in May 1996 on Eastern Oregon State College students. Working closely with representatives of Oregon Tech, particularly Christian Eismann and Martha Ann Dow, OSRL conducted a representative telephone survey of 409 students April 19 -23, 1996. This report summarizes the survey methodology and results.

Survey Methodology

Survey Instrument

The goals of the survey were to obtain valid and reliable information from Oregon Tech students regarding:

1. Overall impressions of and satisfaction with Oregon Tech, including strengths, weaknesses, teaching, laboratories, library, maintenance of the physical plant, integration of professors' real-world experience into the classroom, and whether a faculty member cares about them;

- 2. **How students chose Oregon Tech**, including location, size, academic reputation, financial aid, potential majors, parents, friends, teachers, guidance counselors, social atmosphere, the reputation of graduates getting good jobs, anticipation of difficulty, and other schools applied to;
- 3. **Difficulties encountered in the undergraduate career**, including course failure, incompletes, withdrawal, academic probation, remedial work, changing majors, stopping out, and problems with finances, academic ability, family, health, academic advising, and getting into needed classes;
- 4. **Participation in campus activities**, including sports, tutoring, clubs and groups, cross-cultural contact, arts, employment, demonstrations, internships, employment, research, honors, and faculty contact, as well as desire for greater involvement;
- 5. **Self-assessed gains in skills and knowledge** in facts, theories, writing, ability to gather and analyze data, public speaking, problem-solving, critical thinking, understanding cultural differences, tolerance, time management, exercising leadership, team work, independent work, and art appreciation;
- 6. **Computer skills, use, and ownership**, including classwork and internet access and satisfaction with computer laboratories;
- 7. **Background information**, including year began at Oregon Tech, year in school, out-of-state status, degree aspirations, commitment, language proficiency (parallel to the Oregon Benchmarks), age, race/ethnicity, sex, citizenship, and employment.

Most survey questions are OSRL originals, developed and tested over two years in regular discussions with OSSHE campuses and representatives to meet their assessment and information needs. Other questions were drawn from similar survey instruments implemented in national studies. The Oregon Tech survey instrument was further revised and pretested by OSRL, in consultation with representatives of that campus. The instrument underwent OSRL's standard three-pronged pretest procedure and was revised until it met the needs of the review and showed no bias

A facsimile of the survey instrument is provided in Section 2 of this documentation. All interviews were completely confidential, and human subjects approval was obtained.

Sample and Data Collection

A random sample of students was drawn by OSRL from a list of all current students enrolled Spring Term 1996 in consultation with the Oregon Tech Registrar's Office. The sample and survey instrument were programmed into OSRL's computer-aided telephone interviewing (CATI) system and further pretested.

Interviewer training was conducted on April 18, 1996. See Section 3 for interviewer instructions. Interviewing was conducted all times of the day and all days of the week April 19 - 23 (except Sunday afternoon). Altogether, OSRL interviewers made 2,658 telephone calls to complete 409 interviews. 136 telephone numbers were unusable

because the number was wrong, disconnected, non-working non-residential, or the respondent was gone the survey dates, too ill, or a student at Oregon Tech's Portland Metro campus.¹ The overall survey response rate was 55% and the refusal rate was 3% (see Section 4).

Survey sampling errors are calculated to assist data users in assessing how much confidence to place in a particular survey result. Large random samples, as in this study, reduce sampling error. Results for survey questions in which there is low variability also have less sampling error; for example, a variable with a 50/50 proportional split has wider confidence intervals than a variable with a 5/95 proportional split. For this study, the sampling error is ± 5.0 percentage points on a variable with a 50/50 proportional split (at the 95% confidence level). For a variable with a 5/95 proportional split, the sampling error is ± 2.2 percentage points.

A Demographic Portrait of the Sample

The demographic composition of the survey sample was 53% female, 50% less than 26 years old, 86% white and 4% Hispanic, and 98% U.S. citizens. Over half, 58%, are employed, and employed students average 22 hours of work per week. Nearly all, 97%, are native English speakers, but 15% of those are fluent in a language other than English. Half the students' permanent homes are within 8 miles of Oregon Tech, and just 2% paid out-of-state tuition.

Over half of respondents had majors in Engineering and Industrial Technology (55%), 33% were from Health, Arts and Science, 9% from nursing, and 3% other. The break-out of respondents by year in school is 26% freshmen, 23% sophomores, 26% juniors, 18% seniors, and 5% fifth-year seniors. Academic aspirations were for 53% of students to stop at a bachelor's degree, 34% at a master's degree, and 5% at a doctorate degree.

Survey Results

This presentation of the survey results is organized around the survey subject areas identified above. Readers with the long version of the report may refer to the banner tables in Section 5 for more detail. The banner table data include counts and percentages for each question overall and for each row and column of the cross-tabulation. In the banner tables, all questions asked in the survey were cross-tabulated with 11 key variables (sex, age, race, major, ever listed as a General Studies major, year in school, educational aspirations, employment, overall involvement on campus, desire to be more involved on campus, and overall satisfaction with education received at Oregon Tech).

¹ In the first hour of interviewing, interviewers discovered that Oregon Tech students at the Metro Portland campus had not been excluded from the sample. Since data were desired only for students on the Klamath Falls campus, a screening question was quickly added to the opening script of the survey: "Do you take classes at the Oregon Tech main campus?" This question was asked of 368 respondents. The "n" for all other questions is 409. It is possible that one or two students taking classes at the Metro Portland campus were inadvertently included in the sample.

Tables 1-104 provide results for closed-ended questions. Tables 105-109 provide banner table results for open-ended questions which have been coded into categories. Narrative responses to open-ended questions, as recorded by interviewers, are provided in Section 6. Codes developed for those responses are provided in Section 7.

Overall Impressions of and Satisfaction with Oregon Tech

Fully 78% of students in Spring 1996 had generally positive feelings toward Oregon Tech, 5% generally negative, and 17% neutral. When asked what they considered to be Oregon Tech's one greatest strength, 78% of respondents made comments related to the quality of education (faculty, staff, programs, classes), while 11% mentioned the physical or emotional environment (location, size, community), and 6% mentioned economic benefits (financial aid, job placement).

When asked if there was one thing they would like to change or improve at Oregon Tech, 23% mentioned various aspects of their academic experience (requirements, class size, selection, timing, content), 15% mentioned technical resources on campus (equipment, computers), 12% complained about financial issues (costs, financial aid, general funding), 10% referred to issues concerning the quality of teaching and advising, 9% spoke of administrative and student services (registration, bureaucratic red tape, housing, food, child care), and 10% grumbled about extracurricular activities (mostly, the lack of them).

Overall, 61% of students were "very satisfied" with the education they have received at Oregon Tech, 32% "somewhat satisfied," 5% "somewhat dissatisfied," and 1% "very dissatisfied." Satisfaction declines with year in school, such that 71% of Freshmen were "very satisfied," 66% of sophomores, 60% of juniors, 51% of seniors, and 38% of fifthyear seniors. Satisfaction increases with greater involvement in campus activities. Males are more satisfied than females, young students more than older students, and nonwhites more than whites.

Fifty-nine percent felt that Oregon Tech does a "very good job" teaching students, 35% said a "somewhat good job," 5% said "somewhat bad job," and just 1 person said a "very bad job." Nursing students are less satisfied than those in other majors. Assessment of teaching declines with year in school, but improves with increased student involvement on campus.

Sixty-one percent of students felt that faculty do a "very good job" bringing their real-world experience into the classroom, 30% "somewhat good," 7% "somewhat bad," 1% "very bad" and 1% "don't know."

Students' appreciation of the library collections and services was 53% "very good job," 32% "somewhat good," 6% "somewhat bad," and 2% "very bad" (plus 7% "don't know"). Satisfaction with Oregon Tech's laboratories and technical equipment, excluding computer labs, was 39% "very good job," 38% "somewhat good," 13% said

"somewhat bad," and 3% said a "very bad job," with 5% saying "don't know." Satisfaction with computer labs was 35% "very satisfied," 41% "somewhat satisfied," 10% "somewhat dissatisfied," and 6% "very dissatisfied," with 8% saying "don't know." Engineering students were least satisfied with the labs, while nursing students were least satisfied with library resources.

Fifty-four percent feel that Oregon Tech does a "very good job" maintaining its buildings and facilities, 40% said "somewhat good job," 4% said "somewhat bad job," and 1% "very bad job."

Fully 90% of students said that there is a faculty member who cares about them, particularly more advanced and involved students. Ninety-three percent would recommend Oregon Tech to a friend. And 82% consider their Oregon Tech education to be "very important" to their future success.

Reasons for Choosing Oregon Tech

The answer categories to questions about reasons students chose to attend Oregon Tech were "very important," "somewhat important," "not very important," and "not at all important." In reporting their responses, we focus upon "very important" (see Figure 1).²

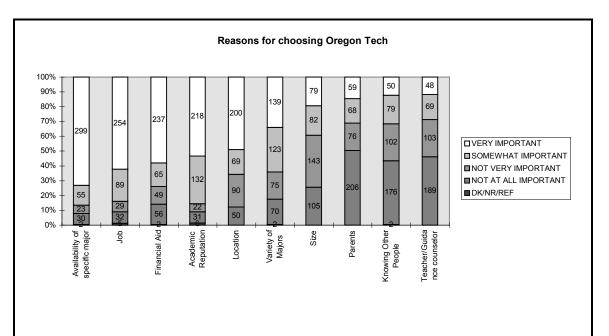


Figure 1: Reasons for Choosing Oregon Institute of Technology

The availability of a specific major was "very important" to 73% of Oregon Tech's students. Sixty-two percent said alumnus' reputations for getting good jobs was "very

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² In this reports' stacked bar graphs, numbers of respondents in each answer category are provided in the interior of the bar, and the corresponding percentages are represented on the vertical axis.

important" in their decision to attend, 58% said financial aid was "very important," 53% said Oregon Tech's academic reputation was "very important," 49% said Oregon Tech's location was "very important," 34% said the variety of majors offered was "very important," and 19% said the size of the campus and student body was "very important."

On social influences, parents were "very important" for 14%, knowing other people who were going to Oregon Tech was "very important" to 12%, the influence of a teacher or guidance counselor was "very important" to 12%, and the social atmosphere of Oregon Tech was "very important" to 11%.

In applying to colleges to attend, 66% of students applied only to Oregon Tech, 10% applied to two colleges, 12% to three colleges, 9% to four, and 4% to four or more. Those who applied only to Oregon Tech tend to be older, are more likely to be female, are less involved in campus activities, and have lower academic aspirations. Of those who applied to more than one college, Oregon Tech was the first choice of 60%, second choice of 25%, and third or more choice of 13%.

Difficulties Encountered

Before coming to Oregon Tech, 22% thought it would be "very difficult" and 65% thought it would be "somewhat difficult." Seventeen percent actually found it to be "very difficult" and 66% "somewhat difficult." Women, older students, those in Health, Arts and Sciences, those who have ever been a General Studies major, those with low academic aspirations (AA degree) and those with very high aspirations (doctorate degree) were more likely to have anticipated academic difficulty. But there were few differences among those who actually found Oregon Tech to be difficult, except those with low and very high aspirations, and those who are dissatisfied with their Oregon Tech experiences generally.

Students encounter various difficulties as they go through college, or they may make choices which interfere with the timely accomplishment of a degree. While at Oregon Tech, 61% have withdrawn from a course at one time or another, 40% have had to repeat a course, 33% have failed a course, 18% have taken a leave of absence or stopped out for awhile, 16% have received an incomplete, 14% have been on academic probation, and 9% have withdrawn from school partway through a term. There is a tendency for males, older students, engineering majors, upper division students, and those who have ever been a General Studies major to have had academic setbacks such as these. Not surprisingly, difficulties vary inversely with satisfaction, i.e., those who have difficulties are much less likely to be satisfied with the overall quality of education they have received at Oregon Tech.

Forty-four percent have felt the need for remedial work or tutoring, especially in math/statistics (79%). Women, older students, nonwhites, Health, Arts and Sciences majors, those who have been General studies majors, lower division students, and those with low aspirations are more likely to feel the need for tutoring.

Seventy-one percent of Oregon Tech students have never changed their major, 20% reported changing their major once, 5% twice, and 5% three or more times. Nearly one-quarter reported being a General Studies major at one time or another, and these students were much more likely to have changed majors (66%).

Fully 93% plan to complete their degrees at Oregon Tech, but many students expressed concerns about issues interfering. When asked how big a concern finances were for completing their education, 44% said finances were a "major concern." If costs go up ten percent, one half more, or 66%, report finances will be a major concern. Nonwhites and women more often expressed financial concerns. One-sixth of students say that their own academic ability is a major concern for completing their degree, particularly lower division students, while physical and mental health was a major concern for 9%. Family issues were a major concern for 24%, particularly older students and women. Getting into classes students want or need was a major concern for 14%, while getting proper academic advising was a concern for 18%. Advising and course access concerns vary inversely with student satisfaction; that is, as concerns increase, satisfaction decreases.

Nearly all students (93%) reported having seen an academic advisor. Those least likely to have seen an academic advisor were nursing students (85%), those who aspired to obtain a doctorate (82%), and those who are not at all involved with campus life (85%).

Of those who have seen an academic advisor, 55% were "very satisfied" with the advice they had received, 28% were "somewhat satisfied," 10% were "somewhat dissatisfied," and 6% were "very dissatisfied." Those most likely to report "very dissatisfied" are nonwhites (11%), nursing students (11%), juniors (11%), those who aspire to doctorate degrees (11%), and those who are "very involved" with campus life (14%).

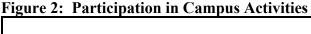
Satisfaction with academic advising is highly related to students' overall satisfaction with their Oregon Tech education. Among those who are "very satisfied" with the overall experience, two-thirds are also "very satisfied" with the academic advising they have received. Among those who are "very dissatisfied" with the overall experience, three-quarters are also "very dissatisfied" with the academic advising they have received.

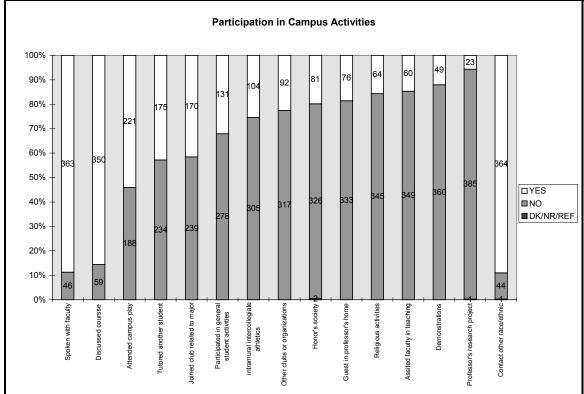
Participation in Campus Activities

Overall, 8% of Oregon Tech students in Spring 1996 felt "very involved" in campus life, 28% felt "somewhat involved," 47% "not very involved" and 17% "not at all involved." There are substantial sex differences in campus involvement. Twice as many men as women reported being "very involved" (10% compared to 5%), and twice as many women as men reported being "not at all involved" (23% compared to 11.5%). In addition, younger students report greater involvement than older students, and nursing students report substantially less involvement than other majors. Employed and non-employed students show nearly identical levels of campus involvement. Less involved

students tend to voice greater dissatisfaction with Oregon Tech; but still, 88% of those who are "not at all involved" say they are satisfied with the education they have received.

The percentage of students involved in specific activities is shown in Figure 2. Overall, 89% have spoken with a faculty member outside of class, 86% have discussed course content with students outside of class or worked on a group project, 54% have attended a campus play or other art event, 43% have tutored another student on campus, 42% have joined a club related to their major, 32% have participated in general student activities (such as Homecoming, Parents' Weekend, Employer Fairs, and International Dinner), 25% have participated in intramural or intercollegiate athletics activities, 22% have joined other types of clubs or organizations on campus, 20% have been elected to an honor's society or taken part in an honor's program, 19% have been a guest in a professor's home, 16% have taken part in religious activities, 15% have assisted a faculty member in teaching, 12% have participated in demonstrations, and 6% have worked on a professor's research project. In addition, 89% have had social contact with someone from another race/ethnic group on campus and 80% with someone from another country.





Thirty-nine percent of students have been employed for pay on the Oregon Tech campus. Males, younger students, upper division students, those who are currently employed, those with high degree aspirations, and students who are involved in campus life are more likely to have been employed on campus. In addition, 29% of Oregon Tech

students have volunteered on campus and 44% have volunteered off campus in the community.

Thirty-six percent of Oregon Tech students would like to become more involved with campus activities. Younger students, freshmen and sophomores, nonwhites, those who have been a General Studies major, those who are "somewhat involved" already, and those who are satisfied with their Oregon Tech education show higher levels of wanting to become involved than others.

Of those who want to become more involved in campus activities, 24% said they would like to join campus clubs or organizations, 20% are interested in participating in more campus activities and functions, 10% would like to become involved in student government, 8% would like to be more involved but do not know how to get involved, 7% are interested in volunteering on campus or in the community, 5% would participate in sports activities, 5% would like to socialize and meet people, 3% mentioned want to work with faculty on research or teaching, and 3% would like to live or work on campus. In addition, 9% said they would like to become more involved, but time devoted to children or work, in addition to being a student, interferes.

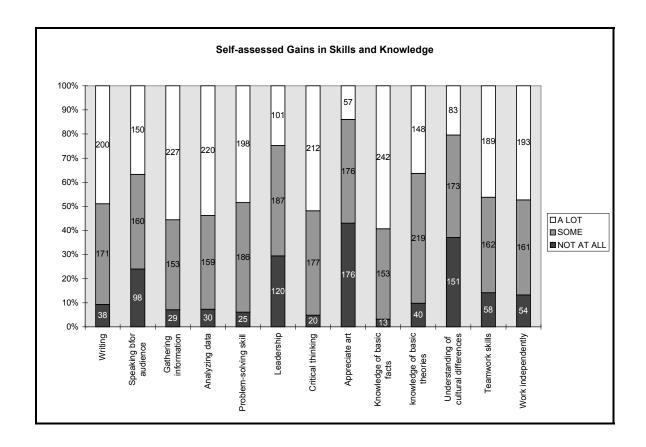
Self-assessed Gains in Skills and Knowledge

Students were asked how much their Oregon Tech experience had improved a variety of academic, learning, social and personal skills, using the answer categories "a lot," "some" or "not at all." Here, we report responses to "a lot" (see Figure 3).

Nearly half of students said their Oregon Tech experience had improved their writing skills "a lot" (49%), 37% said their skills in speaking before an audience improved "a lot," 56% said their skills in gathering information and data improved "a lot," 54% said their skills in analyzing data improved "a lot," 48% said their problem-solving skills improved "a lot," 25% said their ability to exercise leadership improved "a lot," 52% said their critical thinking improved "a lot," 14% said their ability to recognize and appreciate art improved "a lot," and 59% said their knowledge of basic facts and 36% said their knowledge of basic theories improved "a lot." and 20% said their understanding of cultural differences improved "a lot." Forty-six percent said that their teamwork skills improved "a lot," but 47% also said that their ability to work independently improved "a lot." Students' ability to manage their time improved "a lot" for 39%.

Students majoring in Health, Arts and Sciences reported lower gains in all of these areas, except art appreciation, than Nursing and Engineering and Industrial Technologies majors.

Figure 3: Self-assessed Gains in Skills and Knowledge



One-third of students said most of their learning comes from inside the classroom, 7% said most of their learning comes from experiences outside of classrooms, and 59% said in-class and out-of-class learning experiences are about equal.

Computer Skills and Ownership

Seventy percent of Oregon Tech students own a computer, and 85% of the computers they own are DOS-based IBM compatible (just 6% Apple Macintosh). Half said they have a computer account for internet and e-mail connections. Eighty-nine percent say that they know how to use a computer to create or edit documents or graphics or to analyze data (an Oregon Benchmark question). Two-thirds of students had assigned coursework that required computer use "often," 21% "sometimes," 9% "rarely," and 2% "never." Thirty-four percent use campus computer labs "often" to do classwork, 23% "sometimes," 28% "rarely," and 15% "never." As discussed earlier, 76% are "very satisfied" or "somewhat satisfied" with the computer labs and services at Oregon Tech.

Males, upper division students, whites, and Engineering and Industrial Technologies majors tend to show higher levels of computer ownership, skills, and use than other types of students.

Conclusions

This survey represents a "snapshot" of Oregon Tech students in Spring 1996, providing detailed information on how they chose to attend this college, their self-assessed gains in skills and knowledge, their satisfaction with the education they have received, difficulties they have encountered along the way, their involvement in campus activities, their commitment to completing a degree at Oregon Tech, their computer use and skills, and a various background and demographic characteristics. As designed, this survey allows for comparison to other campuses in the Oregon State System of Higher Education who are conducting similar student assessments. In addition, it provides a baseline for comparison in future years to assess the results of improvements and innovations for Oregon Tech students.