



5-1-1988

The Western Washington University Student Survey Series: Student Experiences and Perceptions

Carl Simpson
Western Washington University

Kelly Buck
Western Washington University

Follow this and additional works at: https://cedar.wvu.edu/surveyresearch_docs

 Part of the [Educational Assessment, Evaluation, and Research Commons](#)

Recommended Citation

Simpson, Carl and Buck, Kelly, "The Western Washington University Student Survey Series: Student Experiences and Perceptions" (1988). *Office of Survey Research*. 495.
https://cedar.wvu.edu/surveyresearch_docs/495

This Report is brought to you for free and open access by the Institutes, Centers, and Offices at Western CEDAR. It has been accepted for inclusion in Office of Survey Research by an authorized administrator of Western CEDAR. For more information, please contact westerncedar@wwu.edu.

The Western Washington University
Student Survey Series:
Student Experiences and Perceptions

Volume Two

Carl Simpson
Kelly Buck

May, 1988

Preface to the WWU Student Survey Reports, Volumes One to Five

The Surveys

During Summer, 1986, Western's Vice President for Academic Affairs requested that the Office of Survey Research, located in the Sociology Department, conduct three inter-related surveys:

- **A five year follow-up of 632 1982 Western graduates.**
- **A five year follow-up of 364 individuals who attended Western but left in 1982 without graduating and remained out of Western for at least one year.**
- **A survey of 1280 seniors enrolled during Spring, 1987, who had completed at least 155 credits.**

A discussion of samples and research methods is included in Volume One of the reports based on these surveys.

The purposes of these surveys are to provide information to faculty and staff concerning students' background and orientations, to provide feedback about the relative quality and success of a Western education by asking about students' experiences while at Western and their evaluations of Western, and to describe the quality of former students' occupational and personal lives five years later.

These issues are discussed for Western students as a whole, and, where appropriate, for students in each collegiate unit within Western, as well as for transfer versus natives, men versus women, and other background differences.

The Organization of Reports

The reports are divided into five brief volumes. Each of the first three focuses on one set of measures. The fourth reviews the comments offered by students in response to open-ended questions about their experiences at Western. The fifth is a summary of the first four, written with the larger off-campus audience in mind. Each volume moves segmentally from one topic to the next, keeping each section as free-standing as possible so that the reader can locate the issues of greatest concern and focus on the appropriate sections.

This first volume, Western Washington University Students, begins with a brief review of our research method and then presents findings regarding students' backgrounds, majors, educational careers (transferring versus entering Western as freshmen, timing of choosing a major, educational aspirations, graduation versus non-graduation), orientations to the value of university education, and reasons for choosing particular majors.

Volume Two, Student Experiences and Perceptions, focuses on non-academic experiences such as sources of income and types of problems, students' utilization and evaluation of advising services and of various campus services and facilities, students' perceptions and evaluations of their majors, of General University Requirements, and of Western, overall.

Volume Three, Western Washington University Students Five Years Later, reviews former students' educational attainment, their employment and job quality, their satisfaction with a wide range of life qualities, and the role Western and their major field played in producing those life outcomes.

Acknowledgements

These projects benefitted from the input of Western's Deans and Vice Presidents. We received valuable technical assistance from Steve LaBree, Chris Goldsmith, and Evelyn Albrecht, as well as from the Data Entry and mailroom staffs.

Many sociology students, in Sociology 372, 410, and 310, participated in various phases of these projects. We hope that they will accept this acknowledgement as thanks for their good work.

Thanks to Sam Kelly and Robert Thorndike for helpful reviews of early drafts, to Janet Simpson and Donna Hintgen for indispensable organizational work, and special thanks to John Richardson for collaboration throughout these projects and to Kelly Buck for high quality assistance on all phases of these projects, from conceptualization through writing.

Table of Contents, Volume Two

SOME NON-ACADEMIC STUDENT EXPERIENCES AT WESTERN	1
Living Situation	1
Employment During College	1
Sources of Income	1
Problems Experienced by Western Students	3
UTILIZATION AND EVALUATION OF ADVISING	6
Felt Need for Advisement Over Time	6
Satisfaction With Advising	9
UTILIZATION AND EVALUATION OF CAMPUS SERVICES	11
STUDENTS' ACADEMIC ENGAGEMENT OVER TIME	13
SENIORS' DESCRIPTIONS OF THE COURSES IN THEIR MAJORS	15
Term Papers or Several Short Papers Required	16
Mathematical and/or Statistical Assignments	16
Seminar Format or Student Presentations	17
Independent Study Or Independent Research	17
Reports on Professors Own Scholarly Work	17
Evaluating the Extremes	17
Genuinely Outstanding Professors	19
Low Quality Instruction	19
Unprofessional and/or Unethical Conduct by Professors	19
Material Challenging to Values and Beliefs	19
CHANGES IN FORMER STUDENTS' SATISFACTION WITH WESTERN	20
SATISFACTION WITH COURSES IN THE MAJOR	21
Qualities Analyzed Primarily Among 1987 Seniors	22
Satisfaction with the Quality of Instruction	22
Satisfaction with the Opportunity to Develop Informal Relationships with Professors	23
Satisfaction with the Availability of Courses	24

Table of Contents (cont.)

Satisfaction with Course Sequence and Requirements	25
Satisfaction with the Opportunity to Get Involved in Faculty Projects	25
Qualities Analyzed Primarily Among 1982 Graduates	26
Satisfaction with the "Availability of Internships or Other Experiential Learning Opportunities"	27
Satisfaction with Post Graduate Preparation	28
Satisfaction with Job Preparation	28
Satisfaction with Information Regarding Realistic Job Opportunities	29
Additional Descriptive Data by Collegiate Unit	29
SATISFACTION WITH GENERAL UNIVERSITY REQUIREMENTS	33
DESCRIPTIONS OF GENERAL UNIVERSITY REQUIREMENTS	34
Correlates of GUR Evaluations	35
Satisfaction with Western GURs Compared to Satisfaction with GURs at Community Colleges	36
OVERALL SATISFACTION WITH WESTERN	36
Overall Satisfaction with Undergraduate Courses	37
Overall Satisfaction with Professors at Western	39
Overall Satisfaction with Non-Academic Services and with Campus Activities and Facilities	40
Satisfaction with Some Additional Aspects of Western	43
Overall Satisfaction with Western in Total	44
Correlates of Total Satisfaction with Western	45
SATISFACTION WITH COLLEGE OVER TIME	47
SOME REFLECTIONS ON HIGHER EDUCATION	48
Seniors' Attitudes Toward Selected Aspects of Higher Education	48
If You Could Do It All Over Again....	50
CONCLUSION	51

Volume Two: Student Experiences and Perceptions

Volume Two of the WWU Student Survey Reports touches on a range of students' non-academic and academic experiences at Western and judgements about Western. The majority of findings reported here come from our survey of 1987 seniors, whose experiences are most recent. However, findings from 1982 graduates and non-graduates are also used.

SOME NON-ACADEMIC STUDENT EXPERIENCES AT WESTERN

Our surveys provide only a few measures of non-academic life experiences, all from 1987 seniors. These are reported in this section.

Living Situation

The modal senior (40.7% of our sample) spent none of his/her time at Western in university residences. A few (2.5%), presumably recent transfers, say they were unaware of the WWU residences. 27.2% spent "some", but less than 1/2 of the time in university residences; 15.3% spent "half"; and another 16.8% spent more than half. Among those who used the residence system, satisfaction is relatively high, with 85.8% at least moderately satisfied and 26.8% "very" satisfied.

Employment During College

A majority of Western Seniors, 52%, report having worked at least ten hours per week half or more of their time at Western. Nearly half of those, 22.5%, report having worked at least ten hours per week during "all" of their time at Western. Another 19.3% worked occasionally, while 28.3% "never" worked ten or more hours per week while attending Western.

Of particular interest educationally is how many students held jobs "... on campus which provided you with supervisory or professional skills." A surprising 33.7% answer that they held such a position at least some of the time, with 16.1% saying "some," 7.2% saying "half" of the time, and 10.3% saying more than half the time.

Sources of Income

We asked seniors to indicate what percent of "...all your college expenses, living expenses as well as tuition" came from each of four sources. Responses are listed below, in Table 2.1. As shown there, students find very different ways of financing their educations. For example, nearly one-third draw no funds from parents, while one-fifth are at least 75% supported by parents. Half use no financial aid, but over one-tenth pay for more than half their education through work study and other financial aid.

One implication is wide divergence in the amount of debt experienced by different seniors, as shown in Figure 2.1. Half of Western seniors report having incurred no personal debt through their university attendance. (Another 10% have drawn on parental loans to finance their education, but these are not included in the figure below.) Debt reported among the others ranges between

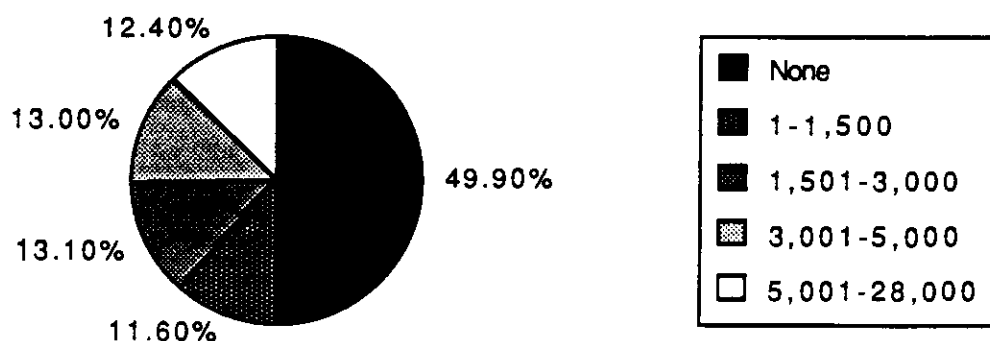
\$500 and \$28,000. Nearly one-fourth have incurred less than \$3000 debt, but another fourth experience rather heavy debts, with 12% over \$5,000, leaving the student body rather highly stratified.

Table 2.1. Percent of 1987 Seniors' Income from each of Four Sources.

Source of Income:	Proportion of Income:				
	None	1-25%	26-50%	51-75%	76-100%
Parents' earnings or savings	30.8	25.2	12.0	12.1	19.9
Own savings or earnings from off-campus work	9.4	43.1	24.1	9.3	13.9
Own or parents' ed'l loans ¹	59.4	26.3	10.2	2.6	1.5
financial aid other than loans (including work-study)	51.7	21.2	14.3	7.5	5.3

In addition to the concern students and their families no doubt feel about repaying educational loans, there is also a question of whether heavy indebtedness may hinder some students from going on to complete desired graduate work. However, we found no relationship between debt level and either highest degree aspiration or the intention to enter graduate work by the Fall after graduation.

Figure 2.1 Total Educational Indebtedness among 1987 Seniors



The sources of funds with which students cover their educational costs differ little by collegiate unit. The greatest differences occur in the case of financial aid. Business majors least often draw on financial aid or work study; these

¹ Responses to this question are inconsistent with a question asking for total loan indebtedness. Only 49.9% report no indebtedness. This is presumably because the source of income question were asked for WWU expenses only, while total indebtedness includes all educational debts.

cover an average of 13.2% of their educational costs, as opposed to the university average of 18.2%. Fairhaven students report an average of 43.3% and Huxley students report 24.8%.

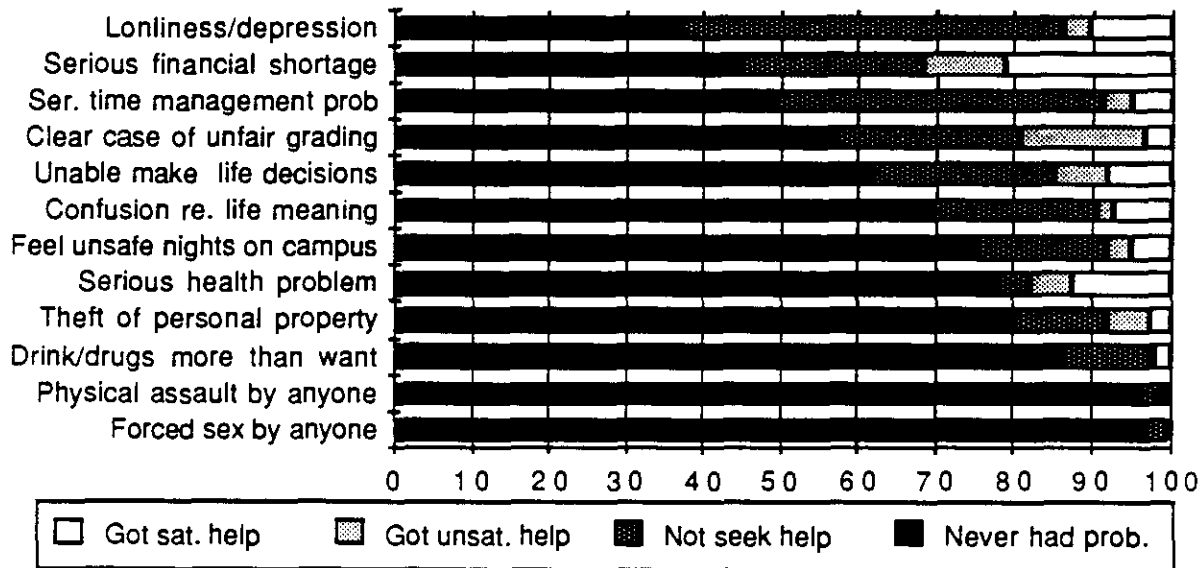
Problems Experienced by Western Students

One aspect of students' lives which is rarely measured by student surveys is what types of problems students encounter during their undergraduate years. Once again, we chose to measure only a selected list of possible problems rather than to perform an exhaustive study of this one topic. After pretest conversations with Western students, we devised a list of 12 potential problems, ranging widely in degree of severity and likely frequency. Students were asked to rate whether they:

- "Never experienced this problem,
- Had this problem, but did not seek assistance,
- Had this problem but received unsatisfactory assistance, or
- Had this problem and received satisfactory assistance."

The survey asked whether each problem had been experienced "while at Western." Therefore, the responses displayed in Figure 2.2 reflect problems accumulated over a period of about three years, the average period the seniors in our sample had attended Western.

Figure 2.2. Problems Reported by Western Seniors, 1987



Some of the problems we asked about are experienced relatively commonly and assistance is seldom sought. In particular, over half of seniors report experiencing "loneliness or depression," "a serious shortage of money," and "serious difficulty with time management." It is likely that most of these are

problems routinely associated with moving away from home to attend college. Only in the case of financial problems do a majority of those suffering one of these problems seek assistance. Among those who do seek aid, about two-thirds report finding help which was satisfactory. "Inability to make important life decisions such as career choices" and "serious confusion over life meaning or spirituality," are also to be expected during youth, although they are somewhat less common, with about two-thirds not experiencing them.

One set of problems we asked about are relatively serious and have little to do with student life *per se*, but seemed valuable to document as part of a portrait of campus living. These are "serious physical health problems," experienced by 21.8% of students, with satisfactory assistance sought and located by 12.6%; "theft of your personal property," experienced by 19.8% with help sought by 8% and found satisfactorily by 2.8%; "physical assault (by anyone, acquaintance or other)", experienced by 3.9% with help sought in only 1.5% of cases, .7% satisfactory; and "forced sexual intercourse (by anyone, acquaintance or other)", indicated by 3% of all students (but 5.2% of female students), with only .3% seeking assistance, all of which was satisfactory.

Two problems on this list stand out because assistance is so seldom sought. One is rape, for which we estimate only 11% of victims seek any assistance.¹ This conclusion would not be surprising in the general population, but is a particular cause for concern in a university setting, which should be "modern" in attitudes about rape and which offers special supportive services. Related to this, one-fourth of seniors (46.1% of female students) say they have felt unsafe on campus at night.

The second is "drinking or using drugs more than you wanted to." This question identifies only those students, 13.5% of the seniors completing our survey, who perceive that they have or have had a problem, presumably fewer than the number who in fact experience problems in this area. Given that these individuals perceive their problem, it is worth discussion by policy makers in the area that only one in five sought assistance. It is reassuring, however, that among those who sought help, three-fourths say the assistance was satisfactory.

Finally, one problem stands out both because it is an indicator of academic management and because those who seek assistance so seldom find satisfaction: "a clear case of unfair grading by a professor." Although unfair is often in the eye of the beholder, it is a cause for concern that 43.1% of seniors feel they have encountered at least one case of clearly unfair grading. The degree to which this issue is taken seriously by students and may be a cause of student alienation is suggested by the fact that students sought assistance in fully 44.8% of these cases, moving the issue at least some distance beyond private dissatisfaction. In 7.7% of cases, students felt they received satisfactory

¹ Presumably, some additional portion of true victims did not report their victimization on our survey.

assistance. This proportion of attempts considered satisfactory (17.2%) is the lowest for any problem on our list, suggesting the complexity in negotiating perceptions of fairness in this area where professors possess legitimate decision rights but where students report a surprising number of conflicts.

Differences by Students' Individual Background. We tested whether the incidence or the satisfactory resolution of problems differ by gender, age, or transfer vs. native status. Statistically reliable differences are summarized below. Problems not mentioned with regard to any of these groups did not show a reliable difference in that case.

- On the average, women are better students than men. They have higher GPAs and report fewer time management problems fewer cases of substance dependency, and fewer perceptions of unfair grading.
- Women are also victimized more often than men. All but one rape and the majority of assaults were against women. Nearly half of women but only 2.4% of men feel unsafe on campus at night. However, men are the victims of theft more often than women.
- Older students, especially those over 30, more often report being lonely or depressed. Those between 24 and 29 report most problems with time management.
- Younger students, especially those 21-23, report more problems with basic life decisions such as careers and more often feel unsafe on campus at night, but have money shortages less often than older students.
- Transfers and natives differ primarily in ways which reflect the fact that transfers are, on average, somewhat older than natives.
- Transfers more often feel lonely or depressed, but also find satisfactory solutions to that problem at a higher rate than natives.
- Native freshmen¹ report more frequent confusion regarding life meaning, problems making basic life decisions, substance dependency, fear on campus at night, and victimization via sexual violence. We may surmise (but not prove, using this dataset) that these problems occur disproportionately among those who spent their first, and youngest, years in college at Western. In addition, natives have been at Western longer than most transfers, so that problems such as rape and substance dependency at Western are presumably more frequent for natives simply because they had greater time to accumulate.
- Minority and non-minority students differ in only one regard, and then only to a moderate extent: minority students indicate they had more problems with

¹Individuals entering Western as freshmen rather than as transfer students. (See Volume I.)

time management. In addition, they sought assistance more often but less often found it satisfactory.¹

Differences by Collegiate Unit. Most differences across collegiate units probably occur because students prone to different problems enter different majors rather than because of some aspect of the major. For example, the problem of feeling unsafe on campus at night varies by major, but only because the proportion of students who are female differs by major. Nevertheless, this section summarizes the ways in which seniors in different collegiate units differ most from each other regarding problems they experienced at Western, to provide descriptive information and in a few cases, such as the perception of unfair grading, to offer information which may carry policy implications.

- Problems of loneliness or depression and confusion about life meaning occur at similar rates for students in most units. However, Business students report experiencing these problems somewhat less often than others while Fairhaven students say they experience them considerably more often.
- Education majors stand out as least often reporting time management problems, while Fairhaven students report most frequent problems in this area.
- Difficulty making life decisions such as career decisions again occurs least often for Business majors. Social Science majors report more frequent than average problems in this areas. Other groups are similar to the university average.
- Reports of unfair grading practices do not vary by major except that students in Arts and Sciences Applied fields report more frequent problems in this area (51.5% versus 40.7% for all other students.)
- Problems of substance abuse, theft, assault, and rape do not differ by collegiate unit.

UTILIZATION AND EVALUATION OF ADVISING

In response to an open-ended question regarding what aspects of Western's academic life should be improved, a substantial number of 1982 graduates and non-graduates suggested advising or career counseling. We therefore included several questions on advising in the Senior survey, which was conducted later.

Felt Need for Advisement Over Time

We asked seniors to recall their felt need for advisement during each year in college, for four different areas: the general curriculum, choice of a major field,

¹ The number of minority students in our sample is too small to allow us to report on more specific groups. Findings concerning minority students must therefore be interpreted cautiously.

courses within the major, and career planning.¹ For each year they attended Western, and for each type of advisement, they indicated whether they:

- " felt no need for advisement
- wanted advisement but received none
- received unsatisfactory advisement
- or received satisfactory advisement."

Seniors' answers are shown in Figures 2.3 and 2.4, on the following page. Native freshmen answered for all years. Transfers answered for only those years they attended Western. Therefore, figures for juniors and seniors are based on around 1200 responses, while those for freshmen and sophomores are based on 525 and 720, respectively.

Some highlights from those figures include:

- Felt need for advisement changes less during students' academic careers than one might suppose. Felt need for advice regarding choice of major is almost identical from freshman to senior year. The particular individuals wishing advice change, but demand is kept high by late decisions and changed decisions. Even more surprising is that fact that need for advice regarding the general curriculum remains constant from sophomore to senior year, after falling from 54.4% among freshmen to 43.7% among sophomores.
- In two areas, demand for advisement does increase with year in school. Desire for advice regarding selection of courses within the major increases from 38% to 76.8% between freshman and senior years and desire for career planning moves from 28.2% to 66.6%. Even in these areas, however, about one-third of the native freshmen who remained to become seniors here desired advisement as freshmen.
- Except for the career planning area, the proportion who felt a need for advisement but did not receive any, either because they did not search it out or because they did not know how to get it, declines from freshman to senior year. Correspondingly, the proportion who received satisfactory advice increases by year. This is especially the case for choice of major and general curriculum. (Note, however, the possibility that individuals who never managed to locate satisfactory advice may have left Western. We cannot be certain because such individuals would not be included in our study of seniors.)
- The ratios of satisfactory to unsatisfactory advisement which seniors report for their freshman years are not highly favorable. For general curriculum, the most immediate area of need, twice as many receive satisfactory as unsatisfactory advisement (25.4% vs. 12.8%.) However, for advice related to majors, advice was only slightly more often satisfactory than unsatisfactory. Advice concerning careers was more often unsatisfactory.
- Among older students, especially juniors and seniors, the proportion of advisement which was satisfactory rises markedly. The highest is for seniors

¹ Current freshmen attend Summer Start and receive more orientation than these seniors.

needing advisement regarding course selection in the major, where 94.7% of those who need advice receive it and 84.9% of that advisement was satisfactory.

Figure 2.3. Advising needs and Evaluation, GURs and Careers

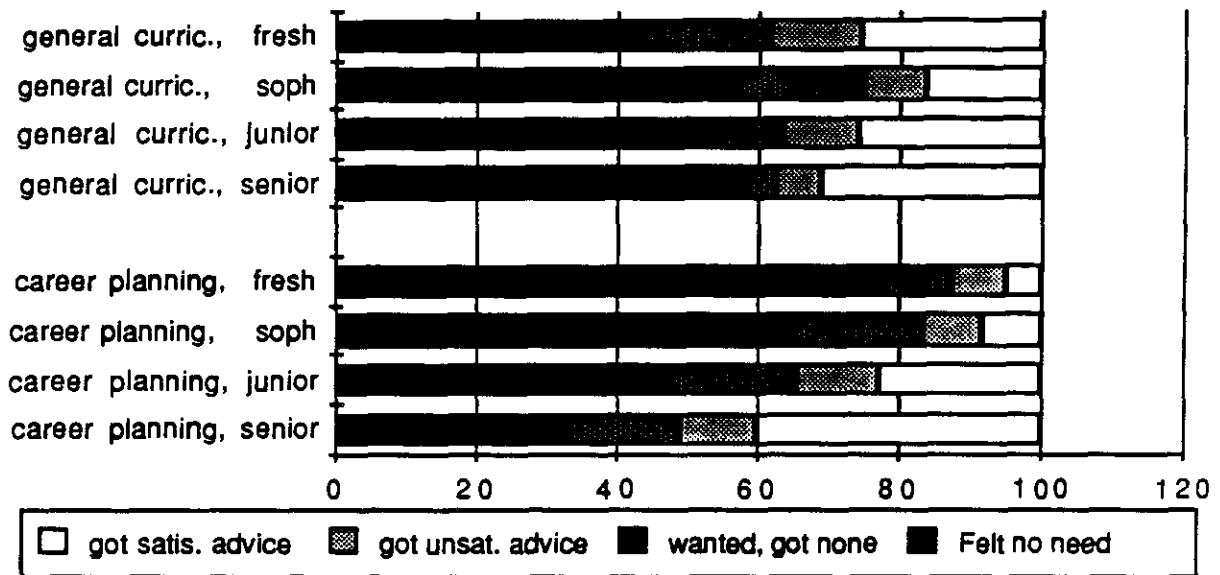
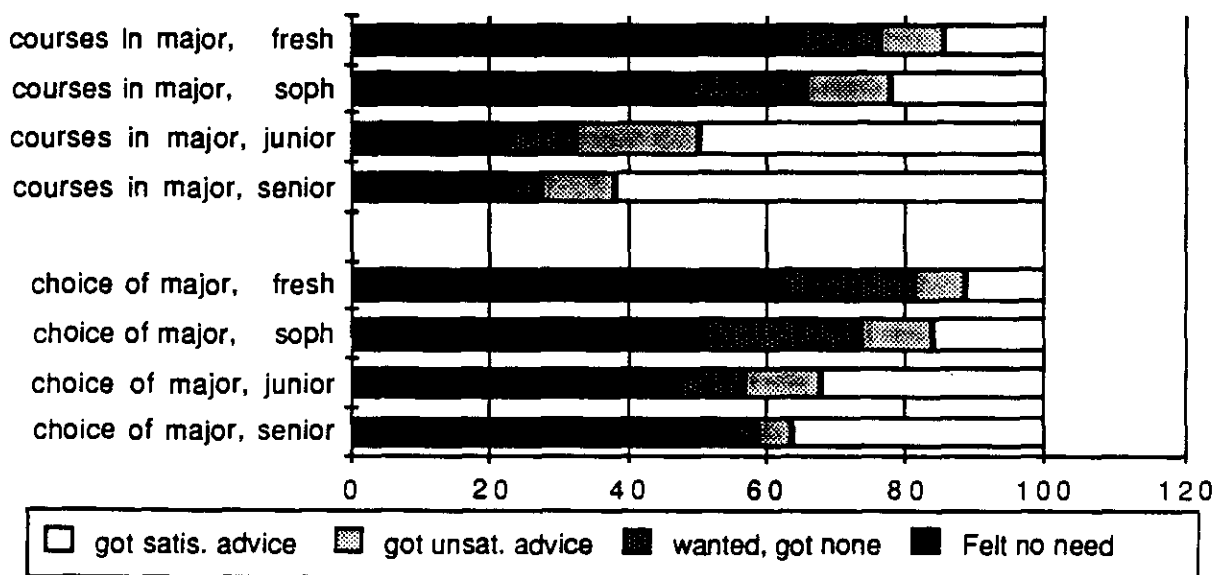


Figure 2.4. Advising Needs and Evaluation, Major Field



- In all areas, there remains an undercurrent of dissatisfaction with advising. For any advisement area, in any year of school, around one-tenth (5% to 13%) of current seniors had received advisement which they found, on balance for the year, to be unsatisfactory. This represents between half and one-seventh of the total advisement received each year.

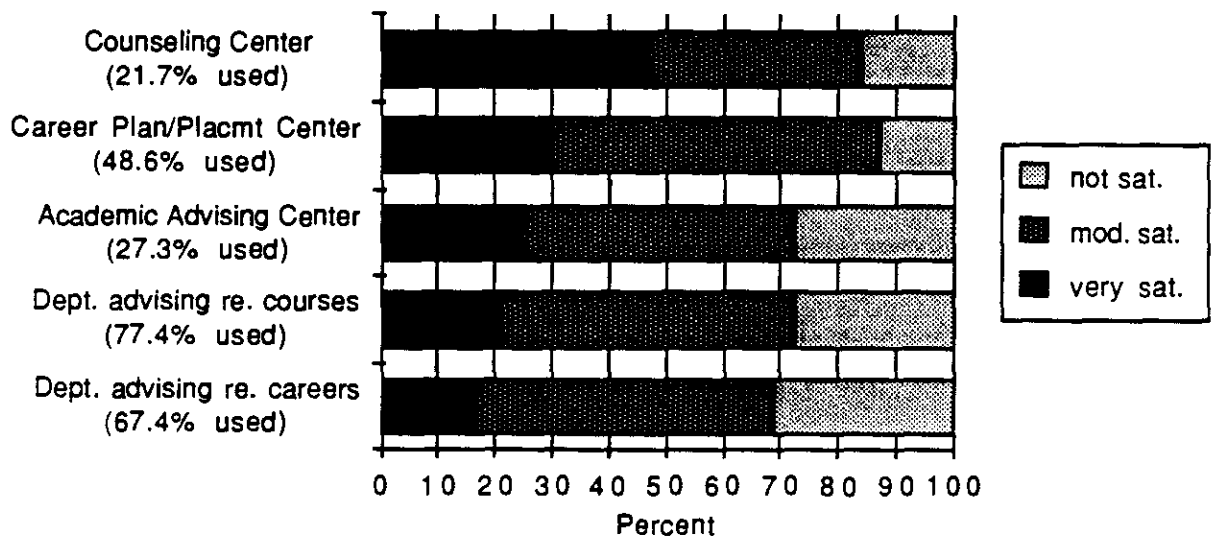
- Finally, the reader should note that this study includes only students who came to Western prior to the expanded Summer Start orientation, so that conclusions regarding advising in the freshman year may be inappropriate.

Satisfaction With Advising

Seniors. Several advising questions were included in a set of measures intended to identify seniors' utilization and evaluation of various campus services or facilities. The question read: "The following [list] are services or facilities available at Western. For each please circle the number that is most appropriate for you." The possible answers were:

- "I did not know about this
- "I know about this but have not used it
- "I used this but was NOT satisfied with it
- "I used this and was moderately satisfied with it
- "I used this and was very satisfied with it."

Figure 2.5. Advice and Counseling: Percent at Each Level of Satisfaction Among Seniors Who Used Each Service



Seniors' responses for departmental advising, the campus wide academic advising center, the career planning and placement center, and the campus counseling center are shown in Figure 2.5. The utilization rate for each service is shown as part of the titles in the Figure. For example, 21.7% of seniors report having used the Counseling Center, while 77.4% have used departmental advising regarding courses. The body of the Chart shows *what percent of those*

seniors who used that service rate it as "very," "moderately," or "not" satisfactory. For example, of the 21.7% of seniors who used the Counseling Center, 46.8% report being very satisfied. Of the much larger number who used departmental advising regarding courses, only 20.6% report being very satisfied.

Figure 2.5 indicates very high satisfaction with the personal counseling services on campus and quite high satisfaction with the career planning and placement center. However, about 30% of those using each of the campus and departmental academic advising facilities report they were "not satisfied." As a quick perusal of Figures 2.5 through 2.8 will show, these represent, with one exception, the lowest satisfaction rates of any of the 23 services we included in this question series. Satisfaction is particularly low with departmental advising concerning careers, with twice as many responding "not satisfied" as "very satisfied" (31.3% vs. 16.6%.) While campus policy makers will not wish to base decisions on one piece of information such as results of this survey, these findings certainly suggest an area of concern on campus.

Graduates and Non-Graduates. We asked individuals who left Western in 1982 a similar, but briefer, set of questions concerning campus facilities, including departmental and campus-wide advising: "How valuable was each of the following to the quality of your experience as an undergraduate at Western? Answers were: "very", "moderately," "somewhat," or "not at all valuable." A service could be non-valuable either because it was never used or because it was used but unsatisfactory. This question therefore indicates only how often services were both used and also evaluated positively.

Table 2.2. Percent of Former Students Who Report that Each Advising Service was "Very" or "Moderately" Valuable to their Undergraduate Experience

	<u>1982 Grads</u>	<u>1982 Non-grads</u>
Department or faculty advising concerning courses	44.1	34.9
Department or faculty advising concerning careers	28.5	24.9
Academic Advising Center	15.6	15.0
Career Planning and Placement Center	36.7	18.6

Findings for advising questions are shown in Table 2.2. For course counseling, departments were central more often than were campus wide services, while for career counseling, the campus center was more often valuable than departments. Most of this pattern is probably explained by differential utilization of these services. Nonetheless, one finding reinforces a concern raised by the senior survey: relatively few graduates see their departments as having offered valuable advice regarding careers (8.3% report "very," 20.2% "moderately," 35.4% "somewhat," and 36.1% "not at all" valuable.)

Table 2.2 also shows a marked difference between graduates and non-graduates in terms of their utilization/value of the facilities most important to graduates -- departmental assistance with courses and campus wide assistance with careers. These findings probably reflect differential access to advising services. Many non-graduates left before becoming well integrated into a department, and the greatest use of the Career Planning and Placement office comes at or near graduation.

UTILIZATION AND EVALUATION OF CAMPUS SERVICES

Figure 2.5 presented findings from a series of questions regarding advisement and counseling services. Figures 2.6 to 2.8 present the same type of findings for various other campus services or facilities. These run the gamut, from the Associated Students organizations to academic services such as the computer center. For the most part, readers are left to examine those findings of particular interest. In addition, the following observations are offered:

- Utilization of different offices varies dramatically, as should be the case depending on their focus.¹ However, evaluations vary less widely. For formal campus offices and services, the proportion who are "not satisfied" with their experiences varies between 5% and 22%, with most around 12-15%. The proportion "very satisfied" varies between 26% and 43%.
- Although indoor recreation and entertainment are used more often than outdoor recreation, satisfaction with outdoor recreation is very high, while satisfaction with indoor recreation is moderate.
- Among all the services we asked about, the modal rating is "moderately" satisfied, and in most cases the number who say "not satisfied" is especially low. The only ones which receive [slightly] more ratings of "not satisfied" than of "very satisfied" are departmental advising, registration, AS government programs, and The Western Front.
- Students report high familiarity with most, but not all, services we asked about. For example, although 66.7% have not used AS clubs, only 3.8% are unaware of their existence. The only services or facilities listed in Figures 2.5 to 2.8 of which more than 5% of students are unaware by name are: departmental advising regarding careers (11%), Academic Advising Center (8.8%), Counseling Center (6.1%), Student Affairs Office (29.6%), outdoor recreation programs (6.8%), indoor recreation programs (7.2%), and AS government programs (11.2%).
- One possible cause for concern is that minority students, more often than others, were unaware of services for eight of the 22 services asked about.
- Older students use most campus services less often than do other students, except for the Financial Aids Office and the Tutorial Center, which they use

¹ It is also likely that use level is underreported for all offices, and especially for less well known offices. Students may be confused by the office name or may forget past contact with an office.

more often. (Eleven offices are used significantly less; nine are used with about the same frequency.)

Figure 2.6. Old Main Offices: Percent at Each Level of Satisfaction Among Seniors Who Used Each Service

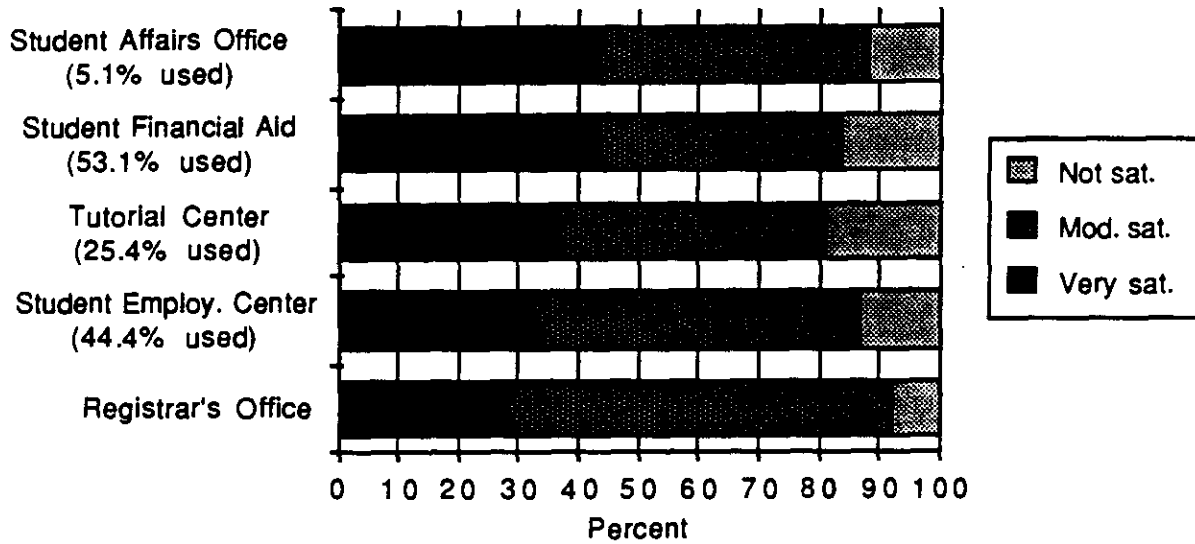


Figure 2.7. Other Services: Percent at Each Level of Satisfaction Among Seniors Who Used Each Service

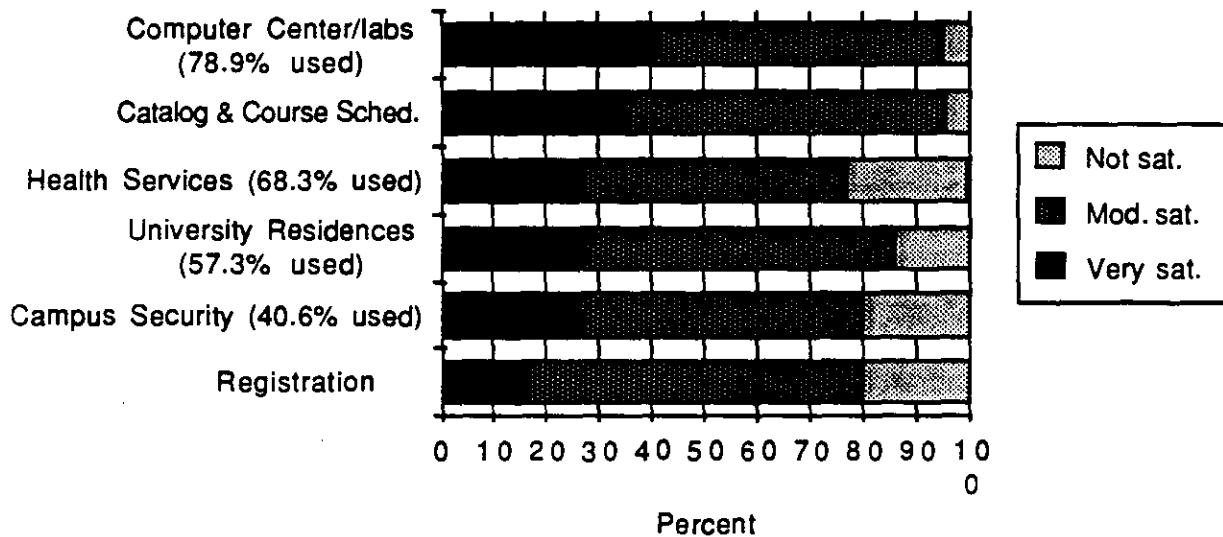
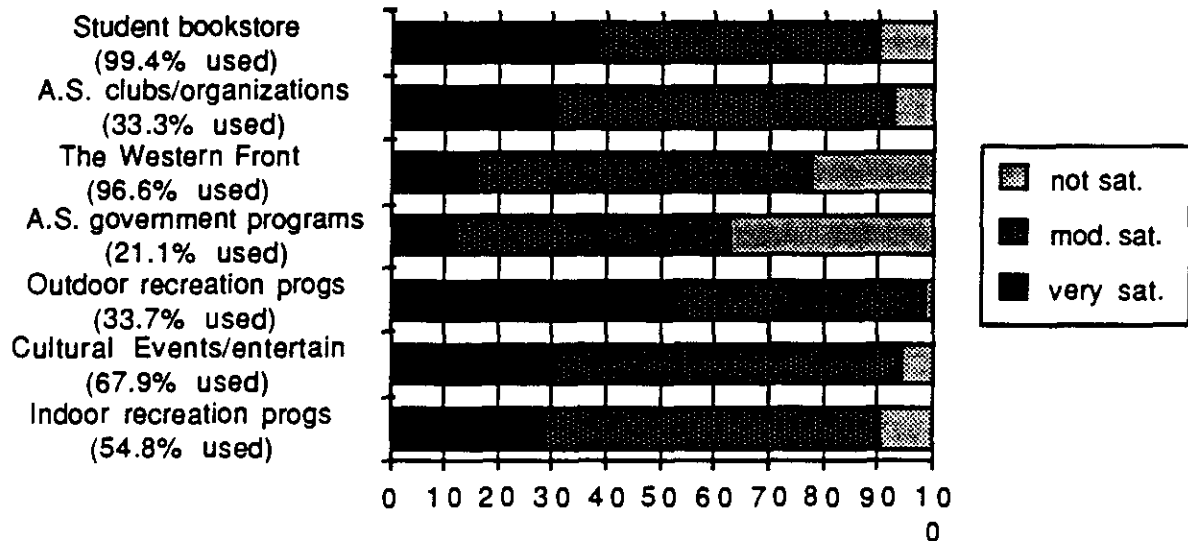


Figure 2.8. Recreation and Student Orgs: Percent at Each Level of Satisfaction, Among Seniors Who Used Each Service



- Transfers use campus facilities less often than natives, perhaps because of their shorter time here. This includes: Campus Residences, AS clubs, Student Employment, Academic Advising, Tutorial Center, Career Planning and Placement, recreation programs, Cultural programs and entertainment, the Student Health Service, Campus Security, and The Western Front. The Financial Aid office and Computer Center are used more often.
- Male and female students differ little in their use of campus facilities. Men make somewhat greater use of indoor recreation, AS clubs, AS government programs, Campus Security, and the Computer Center and Labs. Women somewhat more often use Student Employment, the Counseling Center, and the Student Health Service.

STUDENTS' ACADEMIC ENGAGEMENT OVER TIME

The final aspect of students' experience at Western which this report analyzes is one aspect of students' academic engagement: how many hours of homework students report having done, on average, during their freshman through senior years. Since hours of homework is a relatively strong correlate of GPA, it is very likely that those students who studied least during their freshman years did not survive to participate in our sample of seniors. The estimates we present below are therefore somewhat higher than for all students enrolled at any given time.

Even so, it may surprise many of the Western community to learn how few hours of homework Western students report, in particular during the freshman and sophomore years. As Table 2.3 shows, fully 64.6% of all seniors in our sample

report having studied less than 15 hours per week during their freshman year. By sophomore year, the percent has dropped slightly, to 57.4%. By junior year, the drop is marked, with 35.2% averaging less than 15 hours. For seniors, the figure is 31.3%. Even here, however, one-third of these relatively successful students display surprisingly low engagement, as indicated by number of hours studied per week.

Table 2.3. Percent Who "Typically Studied" Each Number of Hours per Week.

Hours:	Freshman		Sophomore		Junior	Senior
	Native	Transfer	Native	Transfer		
25 or more	6.5	8.2	4.7	9.0	16.4	23.0
20-24	11.5	11.5	15.7	11.1	23.2	24.5
15-19	16.9	14.8	23.3	21.2	25.2	21.1
10-14	25.5	25.3	30.0	28.5	23.1	17.8
5-9	28.4	27.1	23.1	22.0	10.3	9.2
0-4	11.1	13.1	3.1	8.2	1.8	4.3

This set of findings flies in the face of traditional ideas about higher education work loads and performance standards. Many students are spending remarkably little time studying. The seriousness of these findings necessitates careful analysis of possible distortions.

The first of these analyses is to check whether the lower work loads reported for freshman and sophomore years occur primarily among transfer students, the great majority of whom completed these first two years at Community Colleges. Table 2.3 includes this test by showing freshman and sophomore findings separately for natives and transfers. The answer is that the two groups are almost identical. Transfers show a very slight tendency to fall at both extremes -- studying more than 25 hours per week or less than 5 hours per week.

The second check is whether students who report studying little per week are part time students. A minority of students in our sample average less than a full time load during their stay at Western: 7.6% average 9 or fewer credits; 27.1% average 12 credits or fewer. Another 7.5% average 16 or more credits per quarter, with the majority of students (55.6%) averaging 13-15 credits. The question is how much of the variation in average hours studied is accounted for by average number of credits taken. The answer is, remarkably enough, that average credit load has *no* observed impact on reported average number of hours studied. It may be that students tend to establish personally acceptable studying times and GPAs, and then fit course loads to those parameters.

This set of findings concerning academic engagement is intriguing enough that we undertook a small additional study during the sixth and seventh weeks of Fall quarter, 1987. Interviews with 142 new freshmen and 133 new transfers confirm the two basic findings reported above. The percent reporting each level of homework is nearly equal to seniors' retrospective reports. For example, 68.1% of freshmen and 64.4% of transfers report fewer than 15 hours homework per week. Further, the number of credits for which students were enrolled that quarter shows *no association whatever* with the number of hours they reported working. Students reported their total homework time and their time per course. The more credits they were taking, the less time they reported working for each course. Further, students do more hours of homework for GUR courses, but take fewer total credits when they take GURs. Course size does not affect the number of hours worked for a course.

SENIORS' DESCRIPTIONS OF COURSEWORK IN THEIR MAJORS

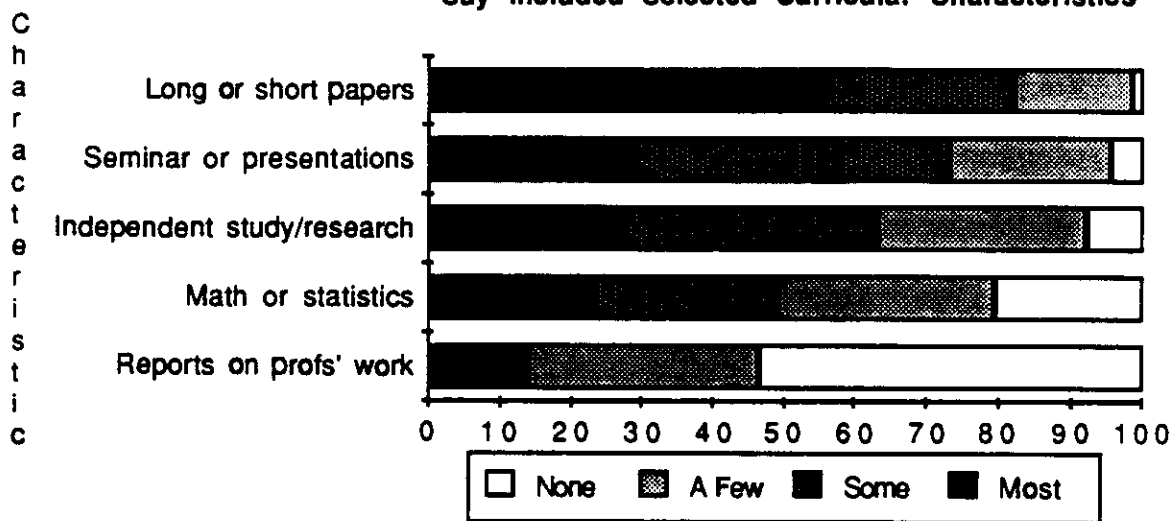
Although it is obvious that the nature of course work varies dramatically with one's major, the widespread recent concern about educational quality recommends gathering information describing the types of challenge students experience in their courses. Students are less able than professors to describe courses accurately. However, we were able with minimal effort to add a few questions asking seniors to describe the courses in their majors, offering this information as part of the ongoing dialogue concerning educational quality.

We asked seniors to indicate whether "most," "some," "a few" or "none" of the courses in their majors included *mathematical or statistical assignments, long or short papers, seminar discussions or student presentations, reports on scholarly work done by the instructor, independent study or research, "professors who were unable or unwilling to provide worthwhile instruction", material which challenged their values or beliefs, unprofessional or unethical behavior by a professor, and professors which they considered genuinely outstanding.*

The first set of these measures, including five non-evaluative course descriptions, is shown in Figure 2.9. Following Figure 2.9, each of these five measures is discussed briefly, including findings concerning differences among collegiate units. These findings are presented for their descriptive value, showing an overall picture of the types of instruction received by students across all Western's various disciplines and also allowing collegiate units to ask whether they differ from others or resemble others in ways they expected.

Differences between collegiate units are reported only when they are statistically reliable. Units not mentioned with regard to any particular measure are close to the university average.

Figure 2.9. Proportion of Courses in the Major Which Seniors Say Included Selected Curricular Characteristics



Term Papers or Several Short Papers Required

As shown in figure 2.9, 49.5% reported that "most" of the courses in their major contained one long or several short papers. Less than one percent say "None" of their major courses required papers.

Huxley and Humanities majors reported the highest percentage, with 86.4% and 74.4% respectively. The Social Sciences and Education were also significantly higher than average, with 69.4% and 66.1%. Math/Science majors and Business and Economics majors had the lowest percentages (18.3% and 27.4%), with Fine and Performing Arts also reliably lower than average (30.3%).

Mathematical and/or Statistical Assignments

Overall, 23.1% reported that "most" of their courses required math or statistical assignments; another 25.9% reported "some." One-fifth (20.4%) reported that "none" of the courses in their major required math or statistical assignments.

As would be anticipated, differences among collegiate units are especially great on this measure. Math and Science majors and Business and Economics majors were most likely to report that "most" of their courses required mathematical or statistical assignments, with 75.2% and 46.9%, respectively. Those least likely to describe "most" of their courses in this way were Humanities majors (0%), Fairhaven majors (0%), Fine and Performing Arts majors (1.3%), and Education majors (1.7%), followed by Social Sciences (4.7%) and Huxley (22.7%).¹

¹ Majors in Applied Sciences say "most" courses involved math/stat assignments in 14.3% of cases. However, this report depends dramatically on which applied major one is talking about.

Seminar Format or Student Presentations

Asked what proportion of their major courses were conducted with a seminar format or required student presentations, 29% indicated "most," while the majority, 43.9%, reported "some."

Fairhaven majors most often reported that "most" of their courses were seminar format or required student presentations (66.7%). Near majorities of Fine and Performing Arts majors (49.3%) and Education majors (49.1%) also indicated that "most" of their major courses could be characterized in this way, followed by Huxley (45.5%) and Applied Sciences (42.9%.) Math and Science majors (4.6%) and Business and Economics major (10.2%) were least likely to describe their courses in this way.

Independent Study Or Independent Research

As would be expected, few seniors (27.9%) reported that "most" of the courses in their major required independent study or research. A larger 39.3% reported that "some" of the courses were structured this way. At the other extreme, 11% reported that "none" of the courses in their majors required independent study or research on their parts.

Huxley (50.0%) and Fairhaven majors (48.0%) reported the highest percentages indicating that "most" of their courses required independent study or research on their part. Seniors majoring in Business and Economics (7.9%) and Math and Science (11.3%) were least likely to report that the courses in their major required independent work.

Reports of Professors Own Scholarly Work

Courses in which professors report on their own professional work are relatively uncommon.¹ Since most professors teach courses in several different areas, the report that "most" courses include reports of professors' original work is necessarily rare (2.3% in this sample.) More importantly, over half of all seniors (53.1%) report that "none" of the courses in their major included reports on scholarly work by their professors.²

This course description varies little by collegiate unit. The College of Business and Economics majors report significantly fewer than average courses involving reports of original work by professors, with 60.0% saying "none" and 0% saying "most." Fairhaven and Huxley College majors report slightly more than average courses involve original work by professors.

Evaluating the Extremes

In addition to asking seniors to describe the content of the courses in their majors, we asked them to indicate how many of the courses in their major were taught by "professors you would call genuinely outstanding," were taught by

¹ Alternatively, students are seldom aware that a professor is reporting on her/his own work

² How much this finding occurs because professors are not performing scholarly work and how much because their work is not reported in class cannot be ascertained by this research.

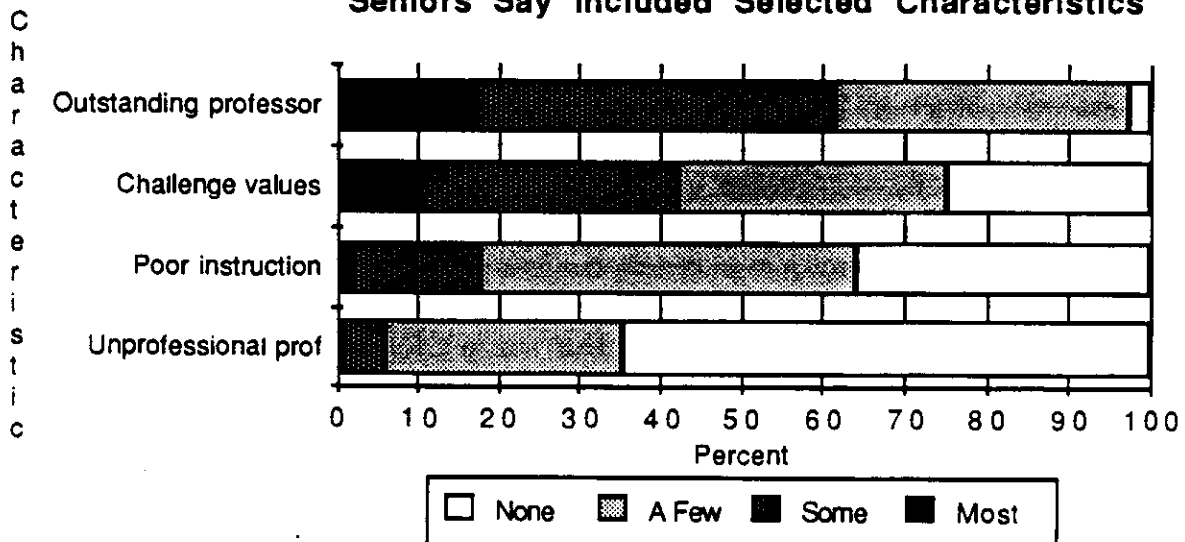
"professors who were unable or unwilling to provide worthwhile instruction," included "unprofessional or unethical conduct by a professor," or contained "material which challenged your values or beliefs."

The first three of these measures ask for students' evaluations of the extremes among professors in their majors -- the number who are truly outstanding or who taught very poorly. These reported extremes offer a perspective somewhat different from the normal one asking for students' overall evaluation of their major courses.¹ Reports of this type are sensitive because they are prone to error. It is always difficult to evaluate performance at work involving human behavior, and particular interactions between students and professors may color students' reports. It is, nevertheless, important for the university to ask these difficult questions as part of an honest, probing self-examination.

The fourth measure included here is evaluative only from the perspective of the traditional liberal arts model, which argues that at least some courses in every students' education should challenge students' preconceived beliefs or values. Since that theory of education applies more to some majors than to others, this measure would be expected to generate considerable differences across collegiate units.

Figure 2.10 presents findings for all Western seniors. It is followed by a verbal discussion of each measure, including reports of which collegiate units depart from the university average to a statistically significant degree.

Figure 2.10. Proportion of Courses in the Major Which Seniors Say Included Selected Characteristics



¹ For such measures, see below in this Volume.

Genuinely Outstanding Professors

As shown in Figure 2.10, 16.9% of seniors indicate that "most" of their major courses were taught by outstanding professors. Another 44.6% report "some," and 35.8%, "a few." Only 2.9% say "none." This reports represent very favorable reviews, since the question asked about "*genuinely outstanding*" professors.

Two collegiate units receive particularly positive reviews: Huxley, with 36.4% saying "most" and 0% saying "none," and Fine and Performing Arts, with 32.9% reporting "most." Majors from the College of Business and Economics least often reported that "most" professors were outstanding (6.6%), followed by Math/Science majors (11.1%), Education majors (12.3%), and Fairhaven majors (13.0%.)

It is especially important that no collegiate unit received frequent reports that "none" of any majors' professor's courses were outstanding, with most rates hovering around 3% and none above 4.3%.

Low Quality Instruction

Only 1.5% indicated that "most" and 16.0% that "some" of the courses in their major were poorly instructed. Nearly half, 46.5%, indicated that "a few" were poorly instructed and a full 36.0% reported that "none" were instructed poorly.

Collegiate units with the highest percentages of seniors indicating that "most" or "some" of the courses in their major were poorly instructed are Applied Fields in the College of Arts and Sciences (25.0%) and Education (24.3%, with only 20.7% saying "none" were poorly taught.) Seniors majoring in Huxley and in the Social Sciences least often reported that most or some of their courses were poorly taught (4.3% and 11.3%.)

Unprofessional and/or Unethical Conduct by Professors

Unprofessional and/or unethical conduct on the part of professors at Western is not common, despite the fact that students are likely to interpret this question much more broadly than would other professionals (e.g., to include grading disputes.) Only 0.6% of seniors indicated that "most" and 5.1% that "some" of the courses in their majors contained such conduct. The substantial majority, 64.7%, report that "none" of the courses in their major contained such conduct.

Seniors majoring in Education had the highest percentage indicating that "most" or "some" of the courses in their major included unprofessional or unethical professors (11.6%), followed by Applied Arts and Sciences majors (11.0%). Huxley majors (2.3%) and Math/Science majors (2.7%) had the lowest percentages reporting such problems in "most" or "some" courses and the highest percentages reporting "none" (77.3% and 73.3%.)

Material Challenging to Values and Beliefs

Overall, 9.9% indicated that "most" of the courses in their major contained material that challenged their values or beliefs. Another 32.1% indicated that

"some" courses in their major contained such material. One-third (33%) reported that "a few," and one-fourth (25%) indicated "none."

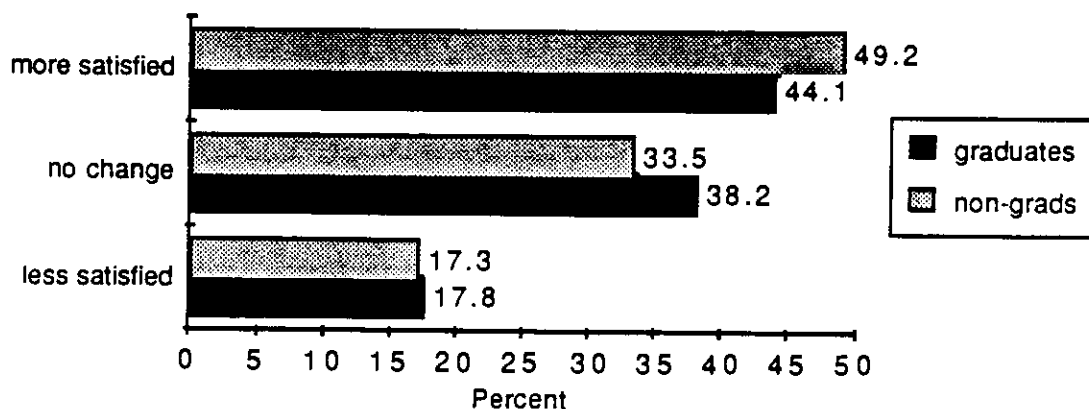
Majors in Fairhaven, Social Sciences, and Fine and Performing Arts most often reported that "most" or "some" of the courses in their major challenged their values and beliefs (66.6%, 56.8%, and 52.6%, respectively.) Math/Science majors reported a percentage significantly lower than others (20.1%, with 50.0% reporting "none.")

CHANGES IN FORMER STUDENTS' SATISFACTION WITH WESTERN

Before students' satisfaction with majors is reported, it is important to highlight one finding illustrating the difference in perspective between seniors and former students. The impact of five years' experience outside Western can increase or decrease former students' appreciation for what they received at Western. Differences between seniors and former students' perceptions of Western may occur because Western has changed in the last five years or because the experience of life after Western has changed former students' perceptions. Except in cases of major curricular change, such as with the School of Education or Huxley college, it seems most likely that differences between seniors and former students reflect the changed perspective of those with five years of post-Western experience.

We asked former students to estimate how their "life experience since Spring 1982" affected their satisfaction with "your education at Western." Their responses are shown below, in Figure 2.11.

Figure 2.11. Change in Satisfaction with Education at Western After Five Years



Nearly half of both graduates and non-graduates have become more appreciative of their education at Western based on their post-Western experiences. Only one-sixth say they have become less satisfied. The

tendency to become more satisfied is more marked among non-graduates than among graduates, although the difference is not statistically significant and may have occurred by chance. The major reasons former students give to explain why they changed levels of satisfaction are their experience of life after college and their comparative experiences at new schools.

Non-graduates are heterogeneous. We can ask whether transfers, who experienced various other university settings, differ from dropouts or from those who returned to complete their degrees at Western. Transfers and dropouts increase their satisfaction at precisely the same rate -- a rate also equivalent to that of graduates. Only those who took leaves and returned to Western differ, with 60.6% saying they increased their appreciation of Western since leaving in 1982. Presumably, that change was part of the reason they returned.

There are few differences across collegiate units in the degree to which individuals changed their satisfaction. Among graduates only, Graduates of the College of Business and Economics increased their satisfaction more often than others. Among both graduates and non-graduates, Social Science majors increased their satisfaction more than average. And among both graduates and non-graduates, majors in Applied fields within the College of Arts and Sciences increased their satisfaction less than average. Other units are clustered close to the university average.

SATISFACTION WITH COURSES IN THE MAJOR

We turn now to students' evaluative feedback concerning their majors. Satisfaction questions are important because they provide a glimpse of the student's perspective on the educational process. Both as Western's clients and as members of the Western community, students' views are valuable. It must be said in passing that students sometimes lack the knowledge to evaluate the instruction they receive validly. Yet some aspects of major courses are seen most clearly by students, and it can be valuable for Western to learn how satisfied majors are with a range of course qualities. We therefore asked seniors and former students to report their satisfaction with a series of items indicating various qualities of courses in their majors. Questions were selected to take advantage of the immediacy of seniors' experiences and of the perspective former graduates have gained from five years experience beyond Western.

Satisfaction questions are especially problematic to report. Despite the fact that many factors, most unknown to this research, influence responses, the temptation is to attribute cause to whatever factors are mentioned in the report. In particular, reports of differences among collegiate units may easily be interpreted as proof that some units are functioning better than others. While that interpretation may in some cases be correct, many other interpretations are also possible. For example:

- Different students are drawn to different units, so that students' background characteristics or aspirations may produce differences across units.
- Students' values and expectations are influenced by the larger society, with the result that particular majors may be seen as most relevant to life, or as offering highest hopes of success. Such values and expectations may cut both ways: evaluations may be higher in fields seen as especially relevant to the 1980s, or they may be lower in such fields because higher expectations are more difficult for university departments to meet.

This section of Volume II discusses a series of measures indicating satisfaction with courses in the major. For each measure, university-wide percentages are reported, followed by a summary of differences among students with varying backgrounds and orientations, and among different collegiate units.¹ Because of the dangers involved in interpreting such differences, we report only the results of multivariate analyses, in which differences among units are calculated only after adjusting for the effects of all individual student characteristics which we were able to measure. These findings are still subject to many interpretations, but they are safer than simple descriptive statistics. We know that differences reported for collegiate units are not produced by the following characteristics which were accounted for statistically in our analysis: students' age, sex, transfer vs. native status, Western GPA, orientation toward higher education, and, for seniors, the number of hours studied during junior and senior years, whether transfer students had finished their AA degree, and number of credits taken at Western.

Qualities Analyzed Primarily Among 1987 Seniors

We begin with student evaluations which are best measured in our sample of 1987 Seniors: the availability of courses in the major, the sequence and requirements of these courses, the quality of instruction in the major, the opportunities provided by the major to get involved in faculty projects, and the opportunities the major provides to develop informal relations with professors. (See Figure 2.11.) Although 1987 Seniors, 1982 Graduates, and 1982 Non-Graduates all responded to these measures, it is most reliable to report the findings for the Senior sample as they represent most accurately the immediate impressions and evaluations of Western today. For percentages reported by all three samples, refer to Table 2.4. The text is organized into discussions of each measure in turn. At the close of each discussion, we comment on differences, if any, among the three samples' evaluations.

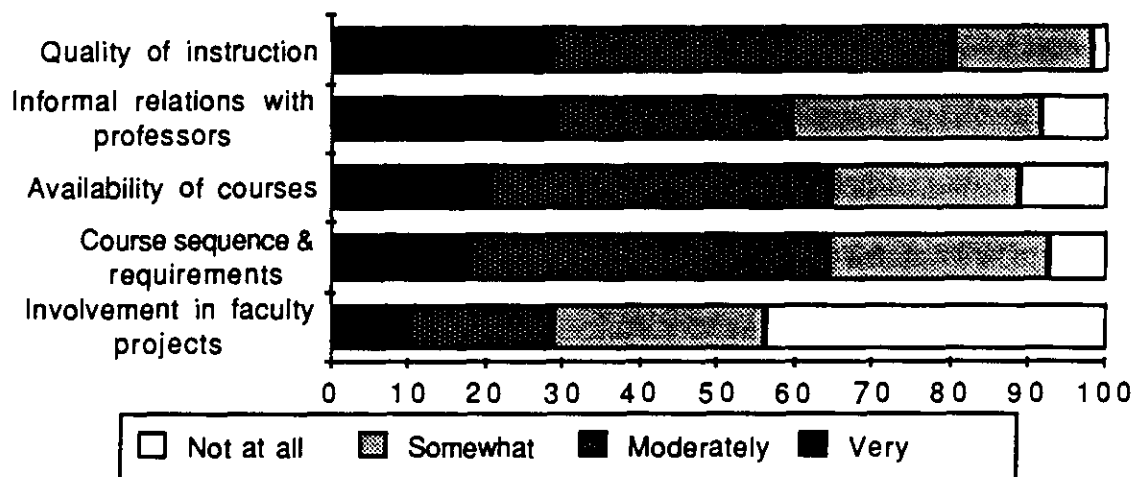
Satisfaction with the Quality of Instruction

Satisfaction with the quality of instruction in majors is high: over one-fourth, 28.4%, of seniors report being "very" satisfied and the majority, 51.9%, are

¹ As throughout these volumes, results are not broken down to specific departments, because most departments have too few students in our samples to provide reliable estimates. Some departments' samples would be large enough, as shown in Volume I, Table 1.3. The original data will be available to these departments for more specific analysis.

"moderately" satisfied, for a total of 80.3% at least moderately satisfied. One-sixth, 17.7%, report being only "somewhat" satisfied and a small percent, 2.0%, report being "not at all" satisfied.

Table 2.11b. How Satisfied Seniors are with Selected Aspects of their Majors



We have little ability to explain relative satisfaction with the quality of instruction.¹ No student background characteristic or attitude toward education influences this measure except that students who entered Western with an AA degree are slightly less satisfied than others. In addition, seniors with higher grade point averages are more satisfied.

After adjusting for the effects of the above factors, three collegiate units generate levels of satisfaction with instruction which are different from the university wide average: satisfaction is considerably higher for Huxley seniors and slightly lower for Education and Business majors in the senior sample.

Satisfaction with instruction in the major is higher among 1982 graduates than among 1987 seniors, as discussed earlier. In addition, in the graduate sample, there are no statistically significant differences among collegiate units. All are clustered close together, with Education at the top. As with seniors, graduates who entered Western as freshmen are less satisfied than transfers.

Satisfaction with the Opportunity to Develop Informal Relationships with Professors

Satisfaction with the opportunity majors provided to develop informal relationships with professors is also relatively high among seniors: 28.6% of all

¹ All the factors reported below account for only 3.1% of the variation in satisfaction with instruction in the major.

seniors report being "very" satisfied. However, a similar percentages report being "moderately" (31.1%) or "somewhat" (31.7%) satisfied, and a noticeable minority (8.6%) report being "not at all" satisfied.

Satisfaction with the opportunity to develop informal relations with professors is affected by certain background characteristics of students, as well as by collegiate unit. Seniors who transferred to Western after attaining an AA degree report lower satisfaction than both those who transferred without an AA, and those who began their educational careers at Western. Seniors with high GPAs report higher satisfaction with their opportunity to develop informal relationships with professors. This may reflect professor's tendency to pay more attention to more serious students, or it may indicate that students who perform well have greater interest in developing informal relationships with professors.

The students' role in creating opportunities for informal relationships may be indicated by three other findings: students with higher educational aspirations while in high school are more satisfied with informal relations, students who say they are more orientated toward "learn[ing] a great deal" than toward "obtain[ing] a degree" are more satisfied, and students who spent more time working "on campus in a position which provided you with supervisory or professional skills" are also more satisfied. Presumably, such students are more satisfied with informal relations with professors because they have developed more such relationships, not because they feel less desire for them.

Over and above these factors, some differences emerge among collegiate units. Seniors are much more satisfied with informal faculty relationships in Huxley, somewhat more satisfied in The College of Fine and Performing Arts and in Applied fields in the College of Arts and Sciences, and substantially less satisfied in the School of Education.

As 1982 graduates look back on their majors, satisfaction with informal relations with professors is higher among those who had higher GPAs at Western and those who say they chose their majors because they enjoyed the subject matter more than for the employment future the field offered. Both of these presumably say as much about the student's tendency to seek out opportunities as about professors' responsiveness. In addition, Business majors expressed lower satisfaction, and education majors indicated slightly less satisfaction.

Satisfaction with the Availability of Courses

While satisfaction with the availability of courses in the major is lower than with the two measures just discussed, it remains moderately high. Two-thirds (64.6%) of seniors report being "very" or "moderately" satisfied. However, a substantial 11.2% were "not at all" satisfied with the availability of courses in their major.

This level of dissatisfaction presumably reflects realistic problems encountered arranging course schedules, an interpretation illustrated by the fact that seniors who transferred to Western report lower satisfaction with the availability of courses than those who began their education at Western. Further, those who

transferred with an Associate of Arts degree report much less satisfaction than both natives of Western and those who transferred here without an AA degree.

Across all collegiate units, women consistently report higher satisfaction with the availability of courses in their majors.

Above and beyond the influences of these individual characteristics, seniors majoring in Business and Economics, Applied fields in the College of Arts and Sciences, Education, and the Humanities report lower satisfaction with the availability of courses than all other seniors in the university. This problem is most severe for Business majors, followed by Education majors. Transfers into Business report especially low satisfaction.

Among 1982 graduates, the pattern of findings is similar, although all relationships are weaker: Transfers and Business majors express lower satisfaction with the availability of courses. In addition, students of minority ethnic status also report lower satisfaction with this particular aspect of their education at Western.

Satisfaction with Course Sequence and Requirements

Overall 17.4% of seniors report being "very" satisfied with the sequencing and requirements of courses in their majors. Fully 46.9% report moderate satisfaction, while 28.3% were only "somewhat" satisfied, and 7.4% were "not at all" satisfied.

We have little ability to explain differences in seniors' evaluation of the course sequences and requirements in their majors. Of those few factors which do emerge, most appear to reflect general, consistent patterns of relative satisfaction with all aspects of the major. Seniors with high GPAs and those who indicate more intense study habits report higher satisfaction with course sequences and requirements than do others. Also, those who transferred to Western with an AA degree report lower satisfaction than those who transferred to Western without an AA, who in turn are less satisfied than those who began their studies at Western.

After adjusting for these factors, senior Education majors express lower satisfaction with course sequences and requirements than other majors, as do those seniors majoring in Business and Economics after transferring to WWU.

Satisfaction with the Opportunity to Get Involved in Faculty Projects

Seniors are markedly dissatisfied with the opportunity their majors provide for "getting involved in faculty projects". Only 9.8% reported being "very" satisfied, 18.9% "moderately" satisfied, 27.5% "somewhat" satisfied, and a full 43.7% "not at all" satisfied with this aspect of their majors.

Several factors are associated with relative satisfaction with the opportunity to get involved in faculty projects. As in the case of satisfaction with informal relations with faculty, these correlates may help explain how likely the student is to pursue such opportunities, how likely the student is to be selected for them, or how much the student desires such involvement.

Seniors with higher GPAs, and with higher educational aspirations during High School express higher satisfaction. Also, those who worked on campus in positions likely to offer supervisory or professional experience are more satisfied. In addition, seniors who transferred to Western with an AA degree express lower satisfaction with their opportunity to work with faculty. This may reflect their general tendency to be less satisfied with Western, reduced opportunity for involvement during a relatively short stay at Western, or higher expectations for such opportunity.

After adjusting for individual differences among students, we find Huxley and Fairhaven College seniors expressing much higher satisfaction than others.¹ Education and Humanities majors express considerably lower satisfaction, while Business and Social Science majors express slightly lower satisfaction. Differences among collegiate units may or may not reflect differences in the tendency of faculty to engage in professional projects which involve students. However, the generally low student satisfaction suggests much higher student demand than is met in the majority of departments.

Among 1982 graduates, only one factor emerges as reliably associated with satisfaction with the opportunity for involvement in faculty projects: graduates of the College of Business and Economics express substantially lower satisfaction than others.² Among 1982 non-graduates, however, patterns are more similar to those for 1987 seniors: Humanities majors are much less satisfied in this area and Education majors are considerably less satisfied.

It is also worthy of note that this measure is one of the few for which 1982 graduates report lower satisfaction than do 1987 seniors. Either the general drift toward increasing satisfaction after graduating does not apply here or graduates' original level of satisfaction was much lower than that of current seniors.

Qualities Analyzed Primarily Among 1982 Graduates

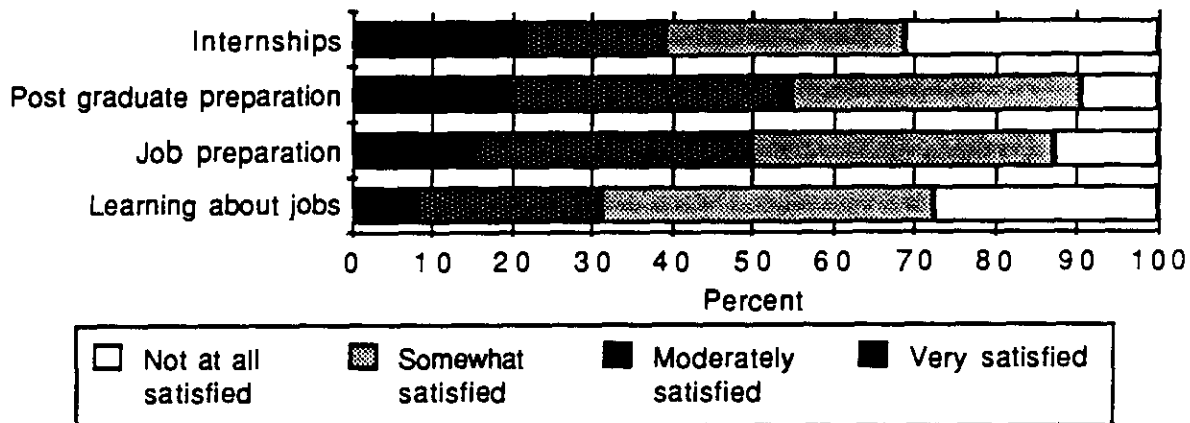
It is most meaningful to report the findings from the graduate sample for measures of satisfaction with internships, job preparation, and post graduate preparation since graduates are the ones most likely to have a clear idea about the importance of these factors to life after college. We asked graduates to indicate whether they were "Very satisfied", "Moderately satisfied", "Somewhat satisfied", or "Not at all satisfied" with each of following: Availability of internships in their major, the opportunity their majors provided to learn realistically about jobs in their field, how well their majors prepared them for their current job, and how well their undergraduate majors prepared them for post-graduate education.

Findings for these measures are displayed in Figure 2.12.

¹ However, our sample contains too few Fairhaven majors for that finding to be statistically reliable.

² This question was asked of only those responding by mail. Analysis is therefore based on a smaller number of cases than for most measures.

Table 2.12 Graduates' satisfaction with selected aspects of their major



Satisfaction with the "Availability of Internships or Other Experiential Learning Opportunities"

A large proportion of graduates would have preferred more "hands-on" experience in their majors. While 21.4% report being "very" and 17.5% "moderately" satisfied, 29.8% were only "somewhat" satisfied, and fully, 31.2% reported being "not at all" satisfied with the availability of internships or other experiential learning opportunities in their majors.

The fact that a large proportion of students express both the highest and the lowest possible levels of satisfaction suggests considerable differences in the availability of these experiences or in students' felt need for them. Some differences in felt need may be generated by employment experiences after graduation. Nearly twice as many 1982 graduates as 1987 seniors say they are "not at all" satisfied with these opportunities. Since most satisfaction increases for graduates, it is likely that specific experiences since graduation have reinforced the perception that "hands on" learning would have been helpful. This interpretation is reinforced by the fact that younger graduates express greater dissatisfaction than those who are older, presumably because of their relative lack of life experience outside college.

Business graduates are markedly less satisfied with this aspect of their education, perhaps indicating the desirability of prior experience in their jobs, or their relative orientation toward vocational preparation. However, Humanities graduates also express considerably lower satisfaction in this area, and they are less vocationally oriented than other majors. Finally, Math/Science graduates are slightly less satisfied in this area, while Huxley graduates are slightly more satisfied.

The pattern of findings among 1982 Seniors is remarkably similar to that for graduates except that overall satisfaction is higher. Huxley seniors are

considerably more satisfied than others. Business and Math/Science seniors are considerably less satisfied, while Social Science, Humanities, and Fine and Performing Arts seniors are slightly less satisfied.

Satisfaction with Post Graduate Preparation

Among 1982 graduates, 19.7% report being "very" satisfied with how well their major "prepared students for graduate work." Another 34.9% reported being "moderately" satisfied, 35.7% "somewhat" satisfied, and 9.7% "not at all" satisfied.¹

We have relatively little ability to explain graduates' relative evaluations on this measure, which may mean that variation in evaluations rests more on individuals' specific graduate school experiences than on background characteristics or experiences at Western.² Graduates who earned a higher GPA at Western are considerably more satisfied with the preparation they received, as should be the case given that grades reflect learning. In addition, Math/Science and Social Science graduates report considerably higher satisfaction with their preparation for graduate work than do other majors. Graduates of the College of Fine and Performing Arts are slightly more satisfied.

Satisfaction with Job Preparation

Satisfaction with how well majors "prepared students for employment" is moderate. Overall, 15.2% of students who graduated in 1982 report being "very" satisfied. The great majority report being "moderately" or "somewhat" satisfied: 34.7% and 37.3% respectively. And a rather large 12.9% reported being "not at all" satisfied with the job preparation they received, some of these because they had changed fields.

We have even less ability to explain satisfaction with job preparation than satisfaction with preparation for graduate work.³ Graduates whose orientation during school was toward training for specific employment rather than toward broad liberal arts education are more satisfied with their job preparation. Majors from the College of Fine and Performing Arts and the Social Sciences are less satisfied than others. Additionally, Math/Science majors are slightly more satisfied while Humanities majors are slightly less so. Finally, graduates who transferred to Western, and especially those who took fewest credits at Western, are less satisfied with their job preparation.

It is of interest here that two collegiate units stand out as generating higher than average satisfaction with job preparation among 1982 non-graduates: Applied fields in the College of Arts and Sciences and Education. These effects are stronger than any among graduates.

¹ This analysis is based on a total of 444 individuals since many who had not pursued any graduate work felt no basis on which to answer.

² Using all the variables tested for this series of measures, we are able to explain less than 7% of the variation in responses to this question.

³ We are able to explain 4.9% of variation in this measure.

Satisfaction with Information Regarding Realistic Job Opportunities

Graduates express little pleasure with the opportunity they feel their majors afforded them to learn realistically about employment in their fields. Only 7.7% report being "very" satisfied. Another 23.3% reported moderate satisfaction, but a full 41.5% reported being only "somewhat" satisfied, and a large 27.5% reported being "not at all" satisfied .

In our analysis of graduate surveys, no factors appeared to be reliably associated with satisfaction with the degree to which majors taught students about realistic job opportunities in their fields.¹ Among other things, this means that satisfaction is relatively equal across all collegiate units. It is therefore interesting that three units generate substantially different findings among 1987 seniors: Huxley majors indicate especially greater satisfaction than others, applied majors in the College of Arts and Sciences express considerably greater satisfaction, and Social Science majors express considerably less satisfaction. With our current information base, we cannot analyze whether these fields have changed in their effectiveness, or these students' later experiences will moderate their judgements to match those of 1982 graduates.

Additional Descriptive Data by Collegiate Unit

These brief reviews of findings have reported only the results of multivariate analysis. This format reduces detail and protects interpretations, but also provides less specific information to particular collegiate units who happen not to be mentioned in any particular discussion. Table 2.4 is included below in order to offer this greater detail to interested individuals. These are descriptive only; they are influenced by a range of factors, including student characteristics as well as characteristics of the majors themselves.

¹ Part of the reason that no reliable effects are located in this instance is that this question was asked of only the mail survey of graduates. This analysis is based on only 263 individuals.

Table 2.4 Percent of 1987 Seniors, 1982 Graduates, and 1982 Non-Graduates Who Report Being "Very" or "Moderately" Satisfied with Selected Aspects of their Major, by Collegiate Unit.

	<u>Seniors</u>	<u>Graduates</u>	<u>Non-Graduates</u>
Availability of courses			
CBE	54.3	72.0	50.0
Educ	57.4	84.6	62.1
A&S: Soc. Sci	71.0	78.8	91.3
A&S: math/sci	75.6	75.0	62.1
A&S: Humanities	63.2	77.2	52.2
A&S: Applied	58.5	68.9	69.0
Fine and Prfm Arts	66.7	76.5	66.6
Fairhaven	64.0	52.7	50.0
Huxley	82.8	83.4	71.5
Course Sequence and Requirements			
CBE	61.0	a	a
Educ	48.7		
A&S: Soc. Sci	70.9		
A&S: math/sci	71.2		
A&S: Humanities	66.0		
A&S: Applied	64.0		
Fine and Prfm Arts	59.2		
Fairhaven	54.6		
Huxley	77.3		
Quality of Instruction			
CBE	78.3	87.0	65.1
Educ	72.1	92.4	89.7
A&S: Soc. Sci	80.5	86.1	65.2
A&S: math/sci	86.3	85.0	86.2
A&S: Humanities	86.4	91.2	86.9
A&S: Applied	74.8	76.6	85.8
Fine and Prfm Arts	86.8	86.3	80.0
Fairhaven	76.0	84.2	83.3
Huxley	97.7	80.0	63.3

^a This question not asked of this sample.

(Table 2.4 Continued)

	<u>Seniors</u>	<u>Graduates</u>	<u>Non-Graduates</u>
Opportunity for Involvement in Faculty Projects			
CBE	23.0	3.7	10.0
Educ	14.0	9.1	8.3
A&S: Soc. Sci	22.7	32.3	25.0
A&S: math/sci	35.8	21.7	42.9
A&S: Humanities	15.8	17.4	00.0
A&S: Applied	33.7	27.5	16.7
Fine and Prfm Arts	37.3	21.4	35.7
Fairhaven	57.2	33.3*	50.0
Huxley	71.8	53.4	35.7
Opportunity for Informal Relations with Professors			
CBE	52.9	22.2	23.1
Educ	38.1	41.3	37.5
A&S: Soc. Sci	61.3	57.5	36.2
A&S: math/sci	56.8	44.0	62.6
A&S: Humanities	58.7	55.2	7.7
A&S: Applied	66.6	53.0	60.0
Fine and Prfm Arts	76.0	55.0	52.6
Fairhaven	76.0	75.0*	88.8*
Huxley	81.9	62.5	70.6*
Availability of Internships			
CBE	33.9	3.6	14.3
Educ	73.1	59.2	23.1
A&S: Soc. Sci	50.0	45.9	33.3
A&S: math/sci	34.7	30.4	42.8
A&S: Humanities	56.3	25.9	12.5 *
A&S: Applied	64.1	55.1	46.1
Fine and Prfm Arts	55.1	26.6	33.4*
Fairhaven	70.9	50.0*	88.9*
Huxley	85.7	68.8	53.3*

* This estimate is highly unreliable due to small sample size.

(Table 2.4 Continued)

	<u>Seniors</u>	<u>Graduates</u>	<u>Non-Graduates</u>
Learning About Realistic Job Opportunities			
CBE	48.0	31.7	20.0
Educ	50.9	40.0	47.1
A&S: Soc. Sci	34.7	30.0	26.7
A&S: math/sci	40.3	28.0	25.1
A&S: Humanities	45.6	29.6	8.3
A&S: Applied	65.9	33.4	44.4
Fine and Prfm Arts	54.0	28.5	33.4
Fairhaven	47.7	42.9 *	50.0*
Huxley	78.0	35.3	33.3*
Job Preparation			
CBE	a	54.0	41.8
Educ.		65.0	66.7
A&S: Soc. Sci		32.8	18.1
A&S: math/sci		63.1	50.0
A&S: Humanities		50.9	36.9
A&S: Applied		52.2	66.7
Fine and Prfm Arts		31.9	34.6
Fairhaven		38.9	44.4*
Huxley		46.6	31.6*
Preparation for Graduate Work			
CBE	a	40.3	46.4
Educ.		47.1	47.7
A&S: Soc. Sci		62.5	52.3
A&S: math/sci		75.5	72.7
A&S: Humanities		56.5	57.1
A&S: Applied		40.0	50.0
Fine and Prfm Arts		72.3	64.0
Fairhaven		60.0	22.2*
Huxley		55.2	53.0*

* This estimate is highly unreliable due to small sample size.

a This question not asked of this sample.

SATISFACTION WITH GENERAL UNIVERSITY REQUIREMENTS

Western seniors and graduates were asked "How satisfied are you with the following aspects of your General University Requirements (GURs) at Western?" The aspects included, and reported in Figures 2.13 and 2.14, were, for seniors: *How much GURs stimulated new ideas, How well GURs captured your interest, The quality of instruction in GURs, and How relevant GURs have been to your other courses at Western.* For graduates, two retrospective perceptions were added: *How well GURs prepared students for graduate work, and How relevant GURs have proved to be to your life.*

Figure 2.13. Seniors' Satisfaction with Selected Aspects of General University Requirement Courses

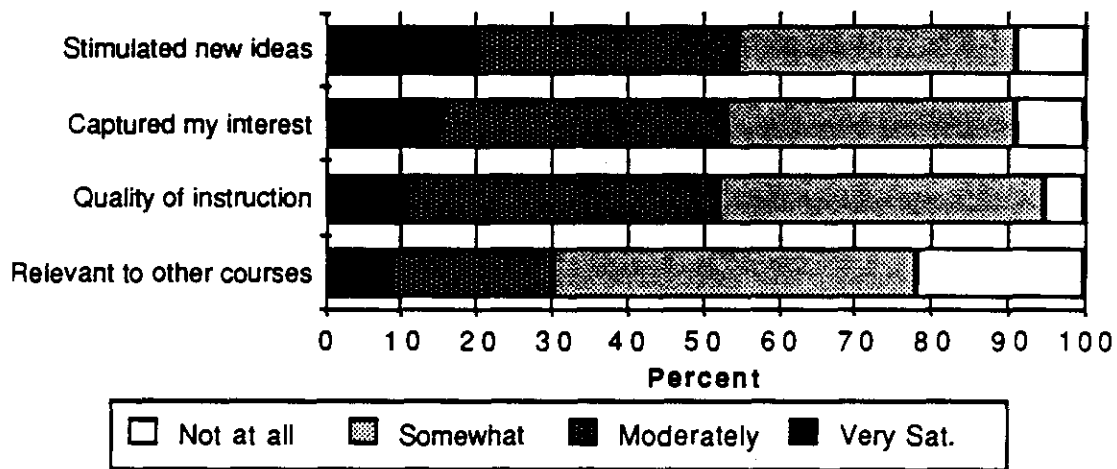
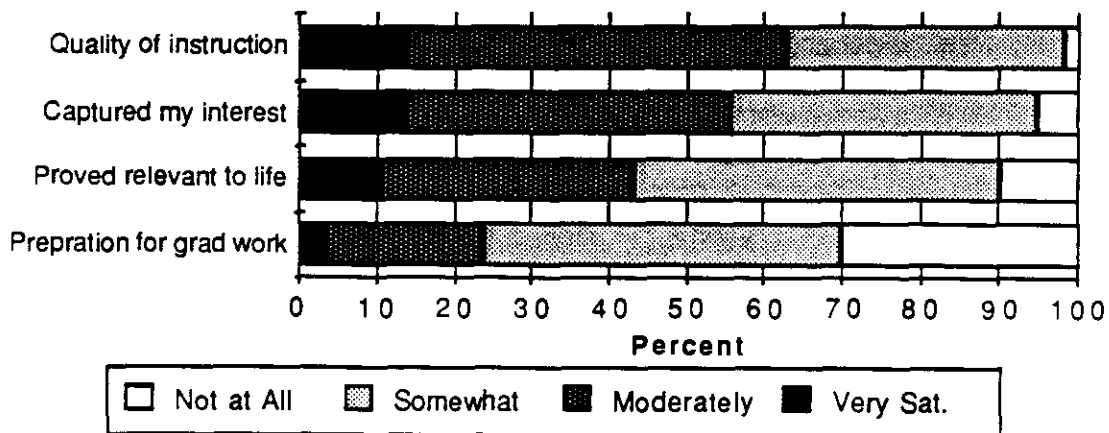


Figure 2.14. Graduates' Satisfaction with Selected Aspects of General University Requirement Courses



Across all measures reported in Figures 2.13 and 2.14, relatively few report being "very satisfied" or "not at all satisfied" with their GUR courses. Ratings tend to split evenly between the two middle values on our answer scale: "moderately" and "somewhat" satisfied. For most measures, about three-fourths give these two mid-range responses.

Two questions requesting ratings for "the quality of instruction in GURs" and "how well GURs captured your interest" were asked of both 1987 seniors and 1982 graduates. Responses were remarkably similar for both measures among both seniors and graduates. In all cases, between 11 and 15% were "very" satisfied. In three cases, between 52% and 55% were either "very" or "moderately" satisfied, while the opposite extreme, "not at all" satisfied, garnered between 5 and 9%. In one case, graduates' ratings of the quality of GUR instruction, ratings were higher, with 62.6% "very" or "moderately" satisfied, and only 1.9% "not at all" satisfied. This may reflect graduates' increased valuation of Western education which was noted earlier.

The rating that received the highest proportion of "very" satisfied responses, 19.8%, is satisfaction with the degree to which GURs stimulated new ideas. However, the combined "very" and "moderately" satisfied ratings total 54.5%, similar to other ratings, and the "not at all" satisfied category garners 9.0% of responses.

The two items on which GUR courses receive lowest evaluations involve curricular coordination: for seniors, satisfaction with "how relevant GURs are to your other courses" and, for graduates, satisfaction with "how well GURs prepared students for graduate work." In both cases, less than one-tenth gave "very" satisfied ratings, and "moderately" satisfied ratings were outweighed by "not at all" satisfied ratings (21.8% to 22.0% and 20.4% to 30.3%).¹

Finally, one measure is especially interesting because it capitalizes on the perspective offered by graduates five years after Western. Graduates were asked to evaluate "how relevant GURs have proved to be to your life." One-tenth (10.5%) said "very" satisfied, while another tenth (10.1%) said "not at all" satisfied. The most common response was "somewhat," with 46.6%. Here, as with other GUR satisfaction measures, moderation is the key. Satisfaction with life relevance is somewhat lower than with the instructional experience itself, but ratings in both cases are in the moderate range, showing neither great dissatisfaction nor great satisfaction.

DESCRIPTIONS OF GENERAL UNIVERSITY REQUIREMENTS

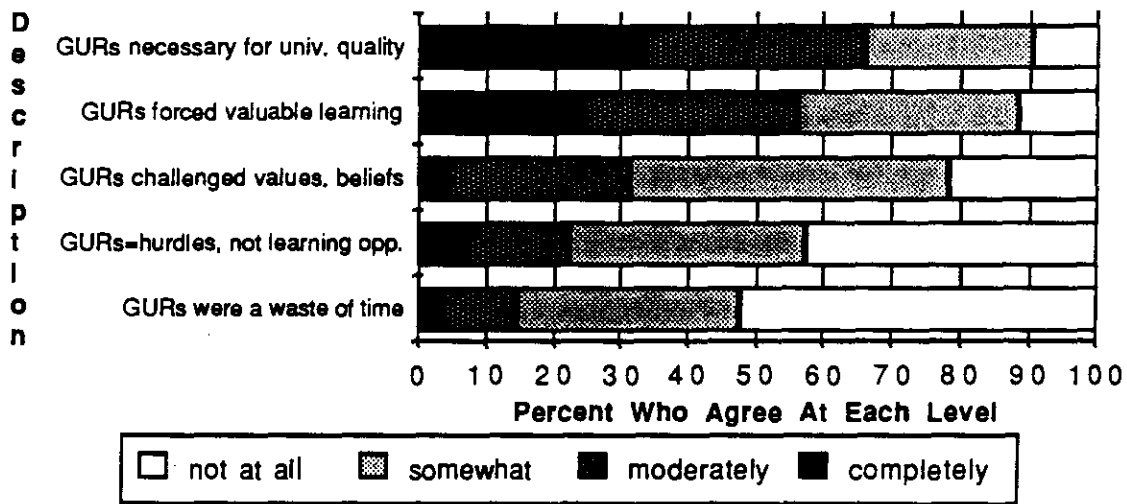
Although evaluations of GUR quality are moderate, support for the existence of GURs is rather high. Figure 2.15 displays results of a question series asking 1982 graduates "How accurately would you say each statement below describes your experience of General University Requirements at Western?"

¹ GURs preparation for graduate study was evaluated only by those who had completed some graduate work.

Graduates were asked whether each statement was "completely," "moderately," "somewhat," or "not at all" accurate.

One-third (33.3%) of graduates feel it "completely accurate" to say that "GURs were necessary to insure that my education was of true university quality." Another 32.6% say that statement is "moderately" accurate. Similarly, 24.7% say it is "completely" accurate that "GURs forced me to learn a lot I'm now glad to know," with another 31.5% reporting "moderately" accurate. About one-tenth of graduates felt each of these statements was "not at all" accurate.

Figure 2.15. Degree to which 1982 Graduates Agree with Selected Descriptions of General University Requirements



Two negatively worded questions are seen as "not at all" accurate by about half of those we interviewed. Over half (52.6%) feel it is not at all accurate that "GURs were a waste of time," while only 3.2% say this statement is "completely" accurate. To the statement, "GURs were hurdles to cross more than opportunities to learn," 42.6% responded "not at all" accurate and 7.2% said "completely" accurate. These measures show the majority of students supportive of the GURs they took, despite their moderate evaluations of GUR quality.

It may be of concern to GUR instructors in some fields that only about one-third (31.4%) of graduates say it is "moderately" or "completely" accurate that "GURs often challenged my values and beliefs." One-fifth (21.9%) felt this description was "not at all" accurate.

Correlates of GUR Evaluations

Although students with different backgrounds offer only moderately different evaluations of GURs, some consistent patterns exist. Female students give consistently higher evaluations of GURs than do male students. Older students

also offer higher evaluations, although differences are modest. Comparing native freshmen with transfers who took at least some of their GURs at Western, we find natives more appreciative of GURs' relevance to other courses, stimulus for new ideas, challenge to beliefs, and ability to force learning. These groups are equal in their evaluation of instructional quality.

Academic engagement and achievement are associated positively with evaluation of GURs. Those with higher Grade Point Averages offer higher evaluations, especially regarding GURs' ability to capture their interest. In addition, those who report doing more hours of homework also rate GURs higher, although only to a slight degree. These findings are not unique to GURs. Those with higher engagement and academic success also evaluate their major courses more positively.

Satisfaction with Western GURs Compared to Satisfaction with GURs at Community Colleges

About one-fourth (24.3%) of seniors in our sample took no GURs at Western, having entered with their GURs satisfied. These individuals could not judge Western GURs. However, we asked them to evaluate the GURs they took elsewhere. Their evaluations are very similar to those offered of Western GURs, but consistently somewhat more positive. In one case, the evaluation of the quality of instruction in GURs, the difference is quite marked, with 21.3% versus 10.3% saying they were "very" satisfied. Similarly, 46.9% of seniors rating non-Western GURs, but only 37.6% of those with Western GURs say it is "not at all accurate" that "GURs were a waste of time." Differences between the two groups are much smaller for other measures, but evaluations are consistently slightly higher for GURs outside Western.

The tendency of women, older students, harder working students, and more successful students to offer higher evaluations than others holds true among students who took their GURs elsewhere as well as for Western GURs. Interestingly enough, all these associations are higher for non-Western GURs, perhaps because of the varied contexts in which they took their GURs.

OVERALL SATISFACTION WITH WESTERN

In addition to the relatively specific satisfaction questions reported above, for courses in the major, for General University Requirements, and for non-academic facilities, we asked a final series of satisfaction questions: "Overall, how satisfied are you with each of the following aspects of Western?"¹ The aspects to be rated included summary evaluation targets such as "non-academic services available to students" and also some specific aspects of Western which had not been included elsewhere, such as the intercollegiate athletic program. Most of these items were asked of all three samples -- seniors, graduates, and non-graduates.

¹ Response categories were "very," "moderately," "somewhat," and "not at all."

This section of Volume II begins by presenting findings for summary measures of satisfaction with "undergraduate courses at Western," "professors at Western," "non-academic services available to students," and "campus life activities and facilities at Western." For each measure, overall satisfaction among the three samples is presented, followed by a discussion of correlates of that measure of satisfaction.

For each measure of overall satisfaction, we examined the following categories of possible correlates of satisfaction with undergraduate courses:

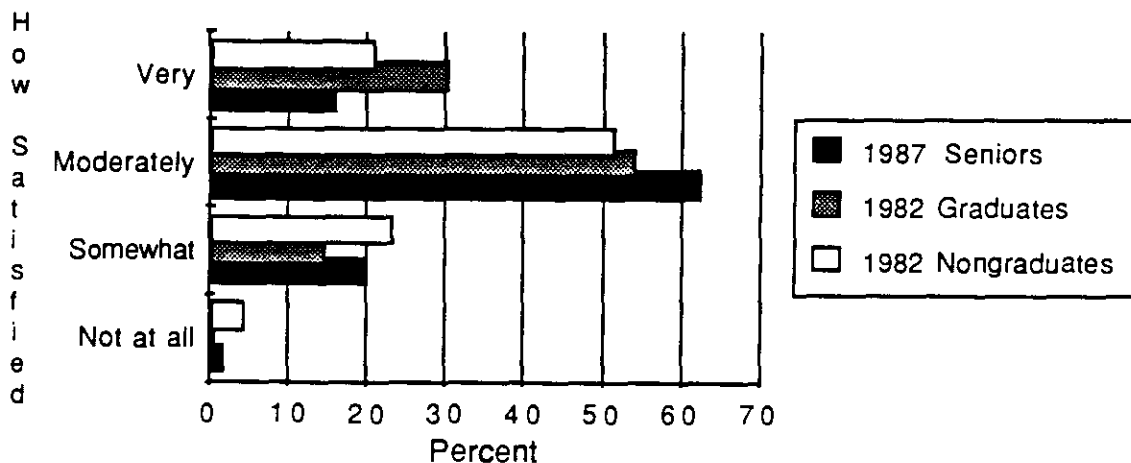
- Individual students' background characteristics. (See Volume I.)
- Students' engagement and orientations toward education. (See Volume I.)
- Students description of the structure and content of major and GUR courses.
- Students satisfaction with various aspects of their major and GUR courses.
- Collegiate unit.

Overall Satisfaction with Undergraduate Courses

For all three samples -- seniors, graduates, and non-graduates -- satisfaction with undergraduate courses (as with most other aspects of Western) is moderately high. (See Figure 2.16.) Very few found Western's undergraduate courses "not at all" satisfactory, and these were primarily non-graduates. About one-fourth report being "very" satisfied, but the clear majority, as they average the variety of courses they took during their time here, conclude that "moderately satisfied" is the most accurate summary.

It is of considerable interest that graduates of five years are almost twice as likely as seniors to be "very" satisfied with their courses. According to graduates' reports, this is likely to result from an increasing appreciation of their undergraduate experience, based on their five year post-Western experiences.

Figure 2.16. Overall Satisfaction with Undergraduate Courses, Three Samples



Students' backgrounds are unrelated to satisfaction with undergraduate course.

As would be expected, engagement is positively associated with satisfaction, with students who work more and achieve higher grades expressing greater satisfaction. In addition, students who held higher educational aspirations in high school are more satisfied with Western courses.

Students' orientations are only slightly predictive of satisfaction. The orientation which proves most closely associated with satisfaction is support for liberal arts education. Three different measures indicating belief in the importance of GURs and the liberal arts show a moderate positive association with satisfaction with undergraduate courses.

Overall satisfaction with undergraduate courses is unrelated to the structure or content of the courses themselves, as described by our respondents, with one exception. Satisfaction with the relevance between GURs and other courses is associated with overall satisfaction with courses. Related to this, students' concern about the sequencing of GURs and about Western's introductory orientation to the curriculum also affect satisfaction with courses. Those who advise taking GURs before moving on to a major are more satisfied and those who felt their experience at Western would have been improved with a more thorough orientation upon arrival are less satisfied.¹

As would be expected, overall satisfaction with courses is associated with students' satisfaction with particular aspects of courses. The strongest of these specific ratings are of professors in the major and GURs. For all three samples, the more satisfied students are with the quality of instruction in majors or in GURs, the more satisfied they are with undergraduate courses overall. Similarly, the more of their major or GUR courses students say involved professors who were "unable or unwilling to provide worthwhile instruction" or who were "unethical or unprofessional" in conduct, the less satisfied students were with all courses. In addition, two aspects of satisfaction with major courses -- satisfaction with the sequence and requirements in the major and with the availability of courses in the major -- show a moderate association with overall satisfaction with undergraduate courses.

However, the strongest correlates of overall satisfaction with undergraduate courses are judgements concerning GURs. Of the measures we tested, four stand out as the strongest predictors. Of these, three involve GURs: how well GURs captured students' interest, the quality of instruction in GURs, and the amount they stimulated new ideas. The fourth measure is quality of instruction in major courses.² This pattern holds for 1982 graduates and non-graduates as well as for current seniors.

These findings, taken with the finding that students more oriented to liberal arts education are more satisfied, suggests the pivotal role students' experience

¹ For freshmen, orientation has become much more intensive since the individuals we interviewed entered Western.

² Each has a correlation of between .30 and .33.

with GURs has in forming their overall satisfaction with the courses they take as undergraduates.

Certain measures are appropriate only for former Western students. There is a very strong positive correlation between 1982 graduates' and non-graduates' satisfaction with how well the courses in their major prepared them for employment and for post graduate education and how satisfied they reported being with both courses at Western and Western professors. Similarly, their satisfaction with the degree to which GURs related to everyday life is positively associated with overall satisfaction with undergraduate courses and professors.

Across collegiate unit, differences in overall satisfaction with courses are extremely small and are, with one exception, explained entirely by the differences in individual orientation which lead students to choose particular majors. That exception is that 1982 graduates from applied majors in the College of Arts and Sciences are slightly less satisfied than others. For seniors and non-graduates, no reliable differences across units are observed.

The finding that satisfaction is approximately equal across all collegiate units is consistent with the relatively great impact of General University Requirements on satisfaction with courses. However, satisfaction with major courses also heavily influences overall satisfaction, so that this equality of satisfaction across units provides a picture of university-wide curricular balance, as seen by students.

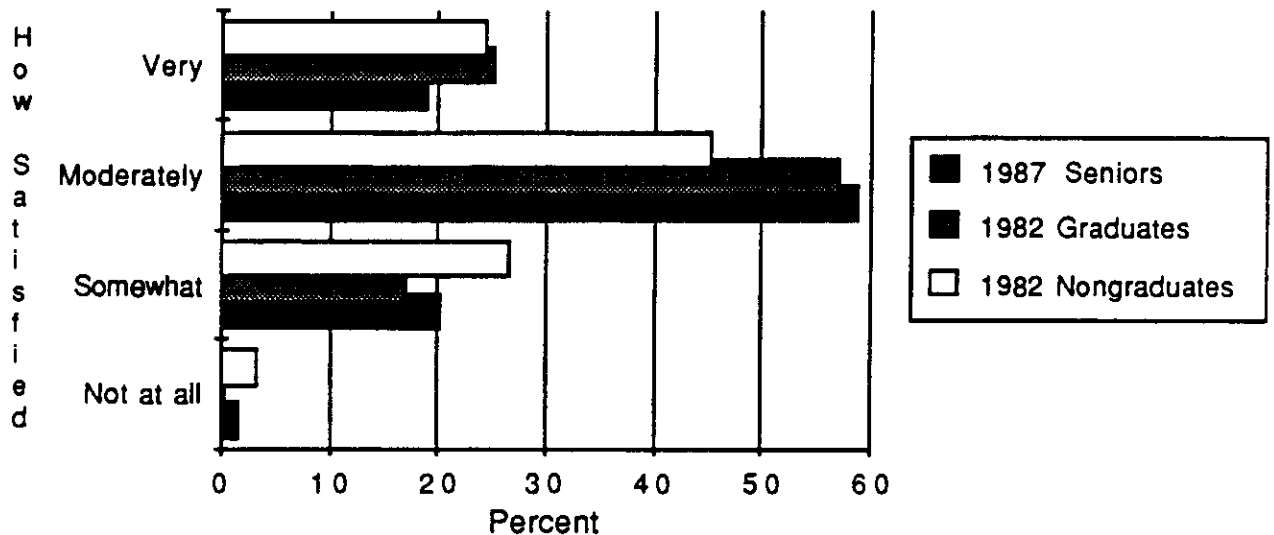
Overall Satisfaction with Professors at Western

Satisfaction with professors is, of course, closely related to satisfaction with courses. For all three samples, overall ratings of professors are almost identical to those for ratings of undergraduate courses. Further, satisfaction with professors is the strongest single predictor of satisfaction with courses. However, these two measures are not identical. We can explain about 25% of satisfaction with courses by knowing satisfaction with professors. This is a strong association for social science data, but not an overwhelming one.

For measures of individual background, engagement, orientation to education, and the structure and content of courses, findings regarding satisfaction with professors are almost exactly parallel to those for satisfaction with courses.

Given the measures we have available to test, student's overall satisfaction with Western professors is best predicted by students satisfaction with the quality of instruction in their majors (by far the strongest single correlate) and by reports of the proportion of professors in the major who are seen as "genuinely outstanding," "unwilling or unable to provide worthwhile instruction," or who displayed "unethical and/or unprofessional behavior." That is, *the number of major department professors at each extreme heavily influences the average rating for all professors.*

Figure 2.17. Overall Satisfaction with Professors at Western, Three Samples



In addition, overall satisfaction with Western professors is influenced by satisfaction with some specific aspects of the major. The strongest of these is the opportunity to develop informal relationships with the professors in the major, followed by satisfaction with the opportunity to get involved in faculty projects, the opportunity to learn realistically about jobs in the field, and the availability of courses in the major.

Ratings of the major have much greater impact on satisfaction with professors than do ratings of GURs. Only students' satisfaction with the quality of instruction in GURs helps explain overall satisfaction with professors. This differs from overall satisfaction with courses at Western, where ratings of GURs have greater influence than ratings of courses in the major.

Finally, satisfaction with professors also differs somewhat from overall satisfaction with courses in that collegiate units in some cases generate reliably different levels of satisfaction. After adjusting for students' backgrounds and the orientations which influence choice of a major, Huxley seniors remain considerably more satisfied, Education seniors are slightly less satisfied, and math/science graduates are slightly more satisfied with professors than are other students. No differences are observed among non-graduates.

Overall Satisfaction with Non-Academic Services and with Campus Activities and Facilities

Our overall satisfaction measures included two non-academic aspects of Western: "non-academic services available to students" and "campus life activities and facilities at Western." The pattern of findings for these measures is similar to that for academic measures, in that the great majority of all ratings are

in the category: "moderately." However, ratings of non-academic services are somewhat lower than academic ratings. (See Figures 2.18 and 2.19.)

Non-academic measures also parallel academic measures in that our three samples are remarkably similar to each other and in that 1982 graduates offer the most positive evaluations. It appears that the increase in satisfaction which they report (above) applies to campus life as well as to academic qualities of Western, although it is less visible in the case of non-academic services on campus.

Figure 2.18. Overall Satisfaction with Non-Academic Services, Three Samples

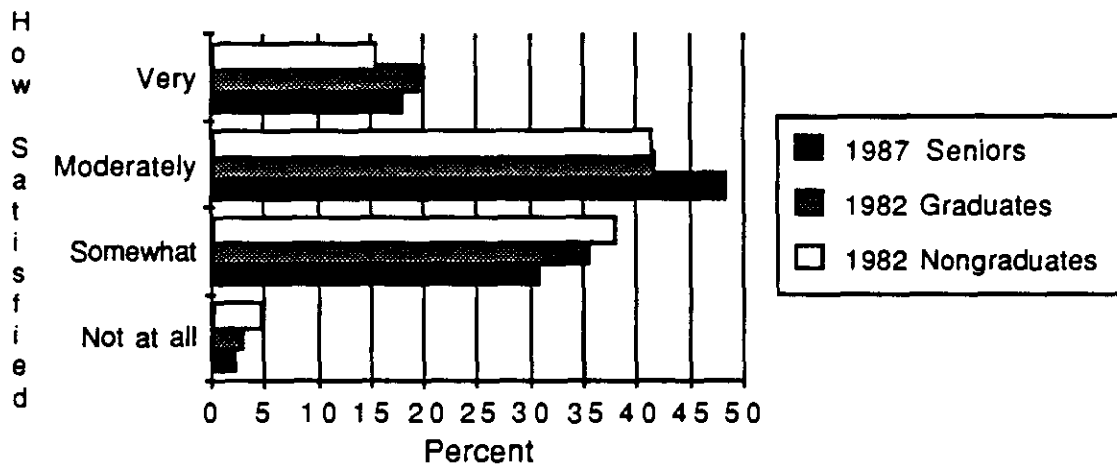
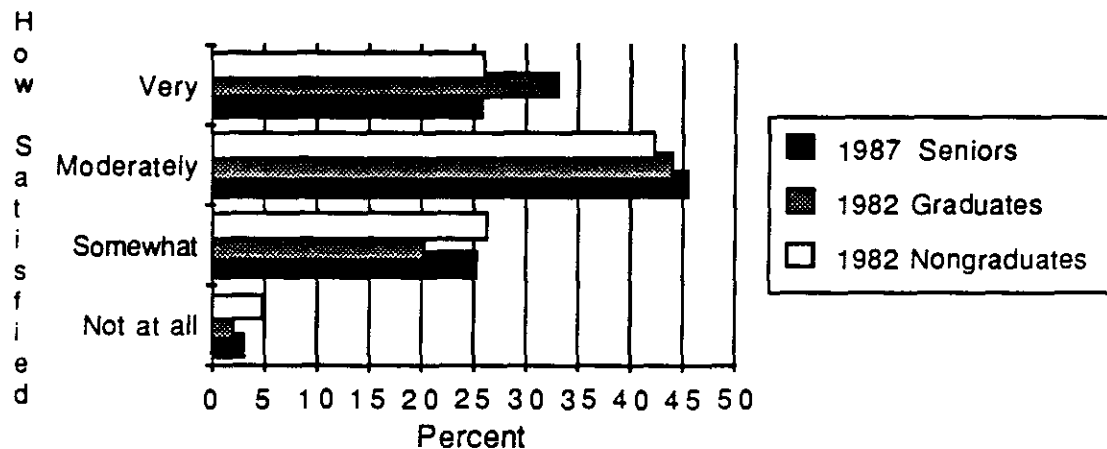


Figure 2.19. Overall Satisfaction with Campus Activities and Facilities



Satisfaction with non-academic services and with campus activities and facilities are quite closely related. Each explains about 24% of the variation in the other. These two measures share most patterns of association with other

variables, but also differ in limited ways noted below. We begin with shared patterns.

Satisfaction with the non-academic side of Western is higher among women and among native freshmen. No other background characteristic or measure of engagement is related to non-academic satisfaction.

Perhaps surprisingly, several measures of satisfaction with academic aspects of Western contribute to an explanation of students' satisfaction with non-academic experiences. Regarding courses and professors in the majors, satisfaction with the quality of instruction, with informal relations with professors, and with the availability of experiential learning opportunities are associated with satisfaction with non-academic life, a finding especially marked for 1982 graduates. This may be a halo effect, with some students more satisfied with all aspects of Western. However, the particular measures involved suggest that opportunities for interaction with faculty outside traditional classroom situations may explain this impact of the academic on the non-academic.

Of particular interest is the finding that satisfaction with non-academic services, and to a smaller extent with campus life activities, is associated with satisfaction with General University Requirements and with an expressed orientation toward liberal arts education as opposed to vocational credentialing. Satisfaction with GURs is more closely linked to non-academic satisfaction than the strongest of the measures of satisfaction with the major. The GUR measures most closely linked to the non-academic are the perception that GURs stimulated new ideas and how well GURs "captured your interest."

While it is unlikely that GUR courses directly affect students' appreciation for non-academic facilities, these findings may suggest an underlying student orientation toward appreciating a variety of opportunities beyond their direct occupational preparation in the major. This interpretation is consistent with findings, but remains speculative. One other association between the academic and non-academic supports this view: Satisfaction with Wilson library shows a quite strong association with both measures of satisfaction with non-academic life at Western.

It is also of interest to ask which of the many campus facilities or activities are most closely associated with overall satisfaction with the non-academic side. We asked seniors two series of questions which are relevant here:

a) Whether they ever used each of a series of campus services or offices and, if so, how satisfied they were.

b) Whether they ever experienced each of a series of problems and, if so, whether they received satisfactory assistance versus no assistance or unsatisfactory assistance.

We tested whether each of the items included in each of these measures (reported earlier in this Volume) is associated with satisfaction with non-academic life at Western.

Except for recreational facilities, cultural events and entertainment on campus, and Associated Students clubs, relative use of facilities is unrelated to satisfaction with non-academic life. In these cases, those who make greater use of the facility are more satisfied with non-academic life. In general, it appears individuals feel they have access to whatever facilities they wish to use, so that use is not problematic.

Satisfaction with the various facilities we asked about is associated to varying degrees with overall satisfaction with non-academic life. By far the strongest correlate (the factor most strongly predicting overall satisfaction) is with Associated Student programs, followed (in descending order of association) by satisfaction with: outdoor and indoor recreation facilities, the Student Assistance Center, the Student Affairs Office, cultural events and entertainment on campus, the intercollegiate athletic program, and the university residence program.¹ Also moderately associated with overall satisfaction are satisfaction with the Student Employment Center, the Academic Advising Office, the Tutorial Center, the Career Planning and Placement Office, the course catalogue and class schedule, and the book store.²

Whether a student had ever experienced any of the problems we asked about is entirely unrelated to satisfaction with non-academic life or facilities. When problems did occur, getting satisfactory assistance is typically associated with overall satisfaction with the non-academic side of Western, but to only a small degree. The issues which appear to have at least a moderate impact on overall satisfaction are satisfaction with assistance for problems concerning: making a career choice, finances, health, and to a smaller extent, time management and legal problems of theft or assault.

Finally, the strongest correlate of satisfaction with non-academic campus activities at Western is satisfaction with Bellingham as a place to live.

Satisfaction with Some Additional Aspects of Western

Figure 2.20 displays the percentages of 1982 graduates who are "very," "moderately," "somewhat," or "not at all" satisfied with "Bellingham as a place to live," "Wilson Library," "lectures and exhibits on campus" "the intercollegiate athletic program," and "the amount of ethnic and cultural diversity in the student body." Figures are graphed only for 1982 graduates. Three of these measures are available only on the follow-up survey. On the other two measures, current seniors differ only slightly from graduates: about ten percent fewer seniors are "very" satisfied with Bellingham, and about eight percent fewer seniors are "not at all" satisfied with intercollegiate athletics. It is likely that satisfaction with Bellingham increases after graduates depart to live elsewhere. Whether

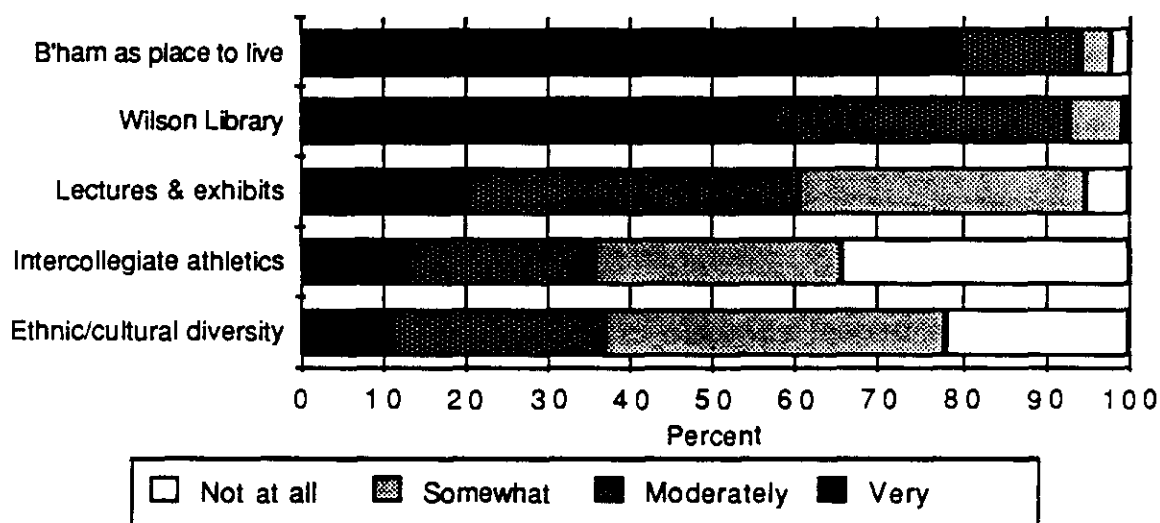
¹ The findings reported here do not indicate level of satisfaction with any facility or service, but rather the impact of relative satisfaction or dissatisfaction with these services on students' satisfaction with their entire non-academic experience. The stronger the association, the more salient that item apparently is to students' overall experience.

² Readers who wish to identify facilities not associated with overall satisfaction with non-academic life may refer to Figures 2.5 through 2.8 for a full list of the facilities rated.

seniors are more satisfied with athletics because they have improved recently or for other reasons cannot be estimated with our data.

The findings displayed in Figure 2.20 differ from most overall satisfaction findings in their tendency to be extreme rather than moderate. Satisfaction with Bellingham is overwhelming. Satisfaction with Wilson library is also very high, with nearly three-fifths saying they are "very" satisfied. At the other extreme, satisfaction with the ethnic and cultural diversity of the student body is very low. The level of diversity is, of course, known to be low because of Western's location. What is learned here, is that, despite their choice to attend Western, students tend to be dissatisfied with that lack of diversity. The same finding holds for the athletic program. Satisfaction with campus cultural events -- lectures and exhibits -- is moderate, although even here, a large proportion of students indicates marginal satisfaction.

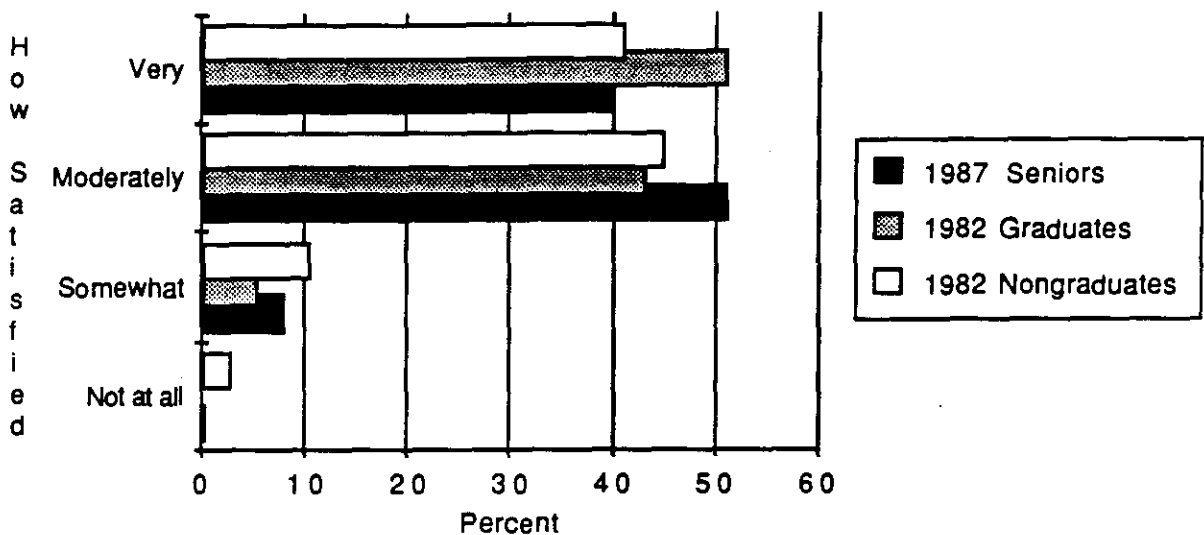
Figure 2.20. Satisfaction with Some Additional Aspects of Western, Among 1982 Graduates



Overall Satisfaction with Western in Total

When students combine the entire range of their experiences with Western into one report of total satisfaction, the result is even more positive than the great majority of more specific ratings. Over 90% are "very" or "moderately" satisfied, with an even division between "very" and "moderately." As with other measures, 1982 graduates are the most highly satisfied, with current seniors and non-graduates about equal. Since both graduates and non-graduates report increasing their satisfaction over the past five years, it is likely that non-graduates are the least satisfied group at the time they leave Western, and that the 1987 seniors will become more satisfied over the coming years.

Figure 2.21. Overall Satisfaction With Western in Total



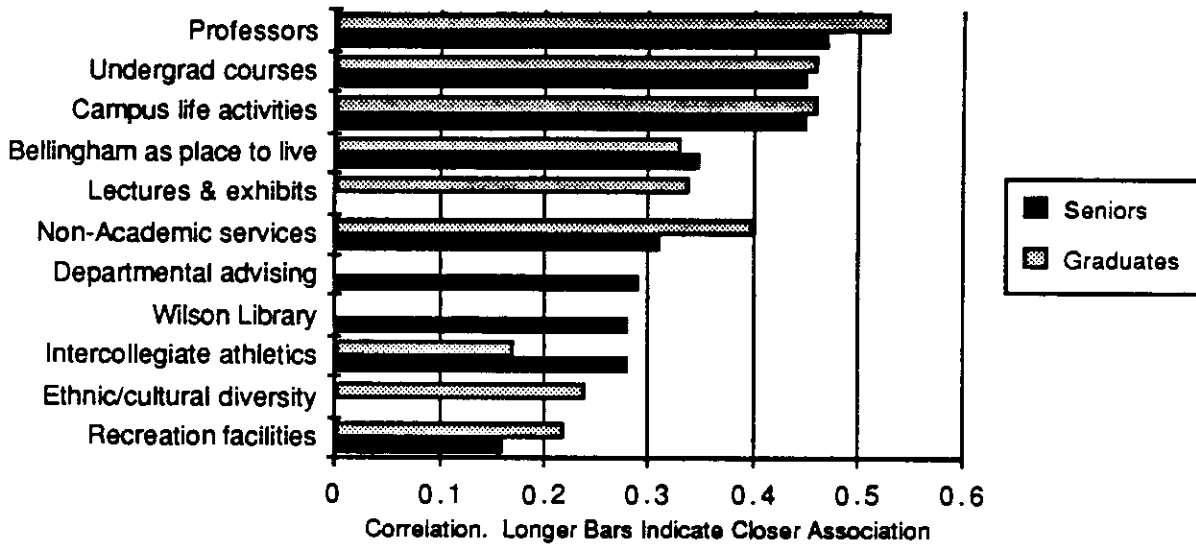
Correlates of Total Satisfaction with Western

The three most powerful predictors of total satisfaction with Western have been discussed above: satisfaction with professors, with undergraduate courses, and with campus life activities and facilities.¹ This means that all the factors associated with these three measures (reported above) tend also to be associated with total satisfaction. Here, we do not repeat a discussion of those specific correlates. Instead, Figure 2.22 summarizes the association between total satisfaction and several aspects of the overall campus environment. The goal of this analysis is to examine which of various qualities of the campus experience are most closely tied in students minds to *overall* satisfaction with Western. This provides some insight into how students mentally construct the college experience.

The importance of the core college experience -- attending classes -- is underlined by the finding that the strongest correlate of total satisfaction with Western is satisfaction with Western professors. Further, satisfaction with undergraduate courses is the second-strongest correlate. Two other academic measures, satisfaction with departmental course advising and with Wilson Library also show relatively strong association with total satisfaction.

¹ These three account for 31.6% of the variation in total satisfaction. If satisfaction with Bellingham is added, 37.9% of variation is explained.

Figure 2.22. Correlations Between Selected Major Aspects of Western and Students' Total Satisfaction with Western



However, the academic side is balanced by a strong correlation between total satisfaction with Western, and satisfaction with campus life activities and facilities, as well as relatively strong correlations with Bellingham as a place to live, and non-academic services. Athletic programs and recreational facilities are also associated with total satisfaction. Although these are not strong associations, they are valuable to note because they overlap with none of the other satisfaction measures shown here. It appears that they are very important for some, but not at all important for others.

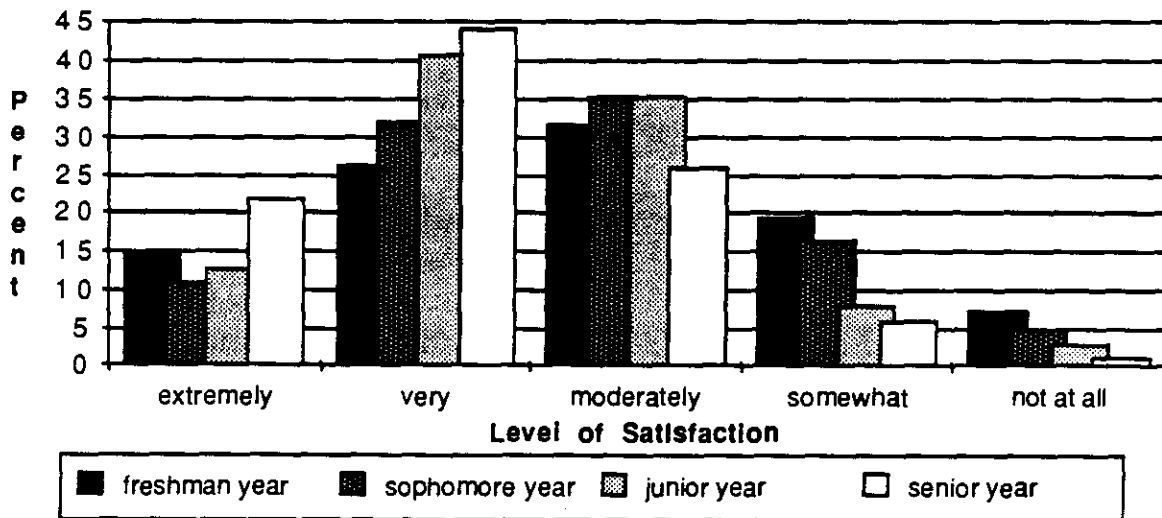
Finally, two indicators of Western's cultural flavor -- satisfaction with the lectures and exhibits on campus and satisfaction with the amount of ethnic and cultural diversity in the student body -- show strong enough association with total satisfaction to be worth noting. These measures, included only in the five-year follow-up surveys, suggest that for some students, the relative cultural homogeneity of the student body and the limits on special cultural events decrease overall satisfaction with Western. However, the effects are not strong, indicating that most Western students apparently view these qualities as less central to their experience than many other aspects of Western.

SATISFACTION WITH COLLEGE OVER TIME

A final analysis in the area of satisfaction with Western and with higher education involves seniors' reports of how satisfied they were with "...your college or university experience during each year in school [freshman to senior.]" Results for all seniors, those who transferred along with those who spent all four years at Western, are displayed in Figure 2.23.

Figure 2.23. shows a gradual increase in satisfaction over the years, with a larger increase senior year. It is tempting to interpret this finding in conjunction with other observations, that homework engagement increases over the years, that many seniors report raising their aspirations during their time in college, and that most courses in the major are taken junior and senior years. The conclusion of this line of thinking is that many of Western's undergraduate population begin school with weak attachment to higher education, and that those who survive to senior year show a gradual pattern of increasing engagement and satisfaction. However, it must also be remembered that Figure 2.23. includes only those students who remained enrolled through their senior year. The pattern we see may be produced in part because those students whose satisfaction got lower during their stay left school. At the least, it is valuable to know that those who did become seniors began their higher education with somewhat low levels of satisfaction, which increased over time.

Figure 2.23. 1987 Seniors' Satisfaction With the College Experience, Freshman Through Senior Years



Consistent with earlier reports, satisfaction is very little affected by individual background variables or by collegiate unit. These satisfaction patterns appear relatively universal. It is also important to note that the differential satisfaction between earlier and later college years is not influenced by the fact that the

majority of seniors are looking back on their freshman and sophomore years in colleges other than Western. Transfer students are slightly more satisfied than natives with each of their four years in college -- those at Western and those elsewhere.

SOME REFLECTIONS ON HIGHER EDUCATION

The final section of this Volume reports students' judgements about selected issues regarding higher education. Seniors were asked a brief series of attitudinal questions, each posing a statement and asking for students' agreement or disagreement as an expression of their attitudes. In addition, former students were asked to look back on their experiences since leaving Western and indicate how they might now change their educational experience if they could repeat it.

Seniors' Attitudes Toward Selected Aspects of Higher Education

A basic tenant of the Liberal Arts perspective on higher education is that the college experience changes students beliefs and attitudes. Asked whether that happened to them as a result of attending Western, 43.4% agreed that it had, as shown in Figure 2.24.¹ Agreement is higher among younger students, as would be expected, but, surprisingly, is higher among transfers, who spent less time at Western and who took fewer of the required liberal arts sequence (GURs) at Western. Reports that college changed beliefs do not differ among collegiate majors except that Math/Science majors less often agree that they have been changed.

Seniors were also asked to agree or disagree with another statement regarding the liberal arts: "It is very important for Western to maintain a commitment to strong liberal arts education, to ensure that graduates will gain more than just technical skills." This statement flies in the face of much 1980s ideology, but it is approved by 73.3% of seniors, half of those agreeing strongly. Only 11.6% disagree.

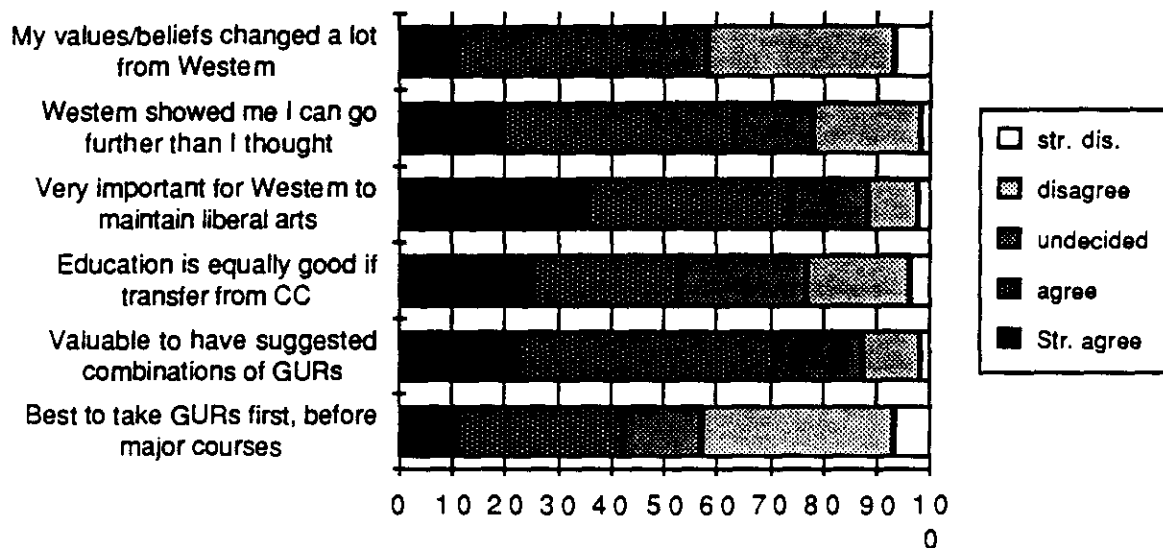
Responses to this question vary more widely across among collegiate units than the other attitudes statements in Figure 2.24. Business majors offer much less strong support for the liberal arts at Western; the same is true, but to a smaller degree, for majors in Math/Science and Applied Arts and Sciences. Stronger than average support for liberal arts at Western is expressed by majors in the Humanities, the Social Sciences, and Fairhaven. In addition, female students express greater support for liberal arts education.

An intriguing glimpse into the educational careers of Western students is gained through two questions, one of which is shown in Figure 2.24. We asked students to agree or disagree that "attending Western has taught me that I can go farther in school and accomplish much more than I once thought," and that "during college, I have learned that my occupational aspirations during high

¹ Responses to these questions were: "strongly agree," "agree," "undecided," "disagree," and "strongly disagree."

school were unrealistically high." Nearly two-thirds (62.5%) agree with the first statement; only 11.3% agree with the second. This indication of rising confidence and aspirations is consistent with findings discussed earlier in this volume and in Volume One. This pattern is consistent across all collegiate units and individual background attributes except that Math/Science majors less often report that attending Western has raised their sights, and female students slightly, but reliably, more often say their sights have been raised.

Figure 2.24. 1987 Seniors' Agreement or Disagreement with Selected Statements



Three other measures in Figure 2.24 have to do with seniors' reflections on strategies for accomplishing an education. More than half of students agree that "Attending a community college for two years and then transferring to a four year university provides just as good an education as attending all four years at a university." Only 23.7% disagree. Transfer students agree with this statement at a much higher rate than natives; the experience of pursuing education in this fashion apparently sustains, rather than chastens, the motivation which initially led to the decision to transfer. Answers to this statement do not differ by collegiate unit or other background factors.

Nearly three-fourths of students agree that "It would be valuable for students to be given suggested sequences or combinations of GURs." This does not, however, mean that most students prefer lock-step educational sequencing. The same number disagree (42.7%) as agree (42.0%) that "The best way to organize a college career is to take GURs first and then to move into courses in a major field." The desire for suggested combinations of GURs is slightly greater among female students and smaller among Math/Science majors, but otherwise equal among all students. Support for sequencing GURs first is

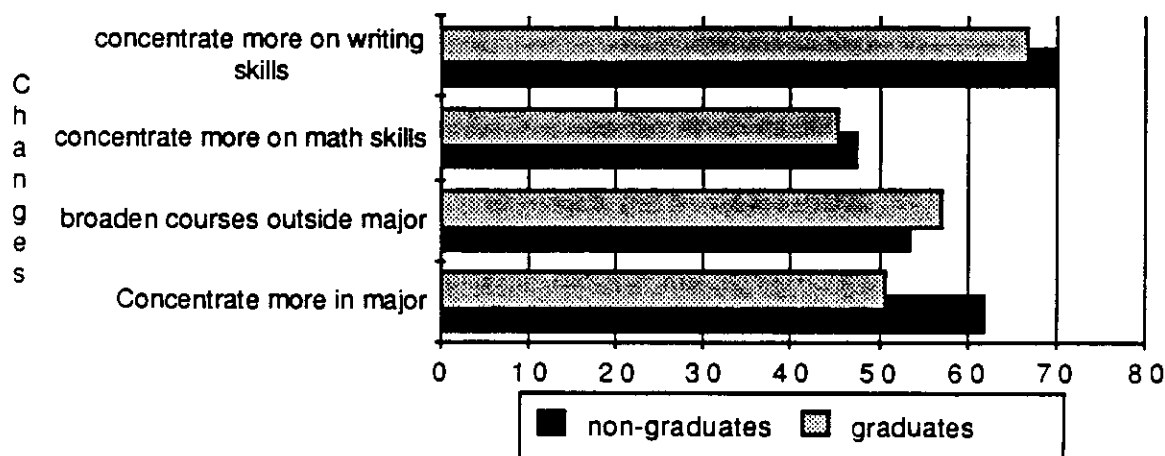
greater among older students, transfers, and Math/Science majors, with opposition greater among Social Science majors.

If You Could Do It All Over Again....

One value of a five-year follow-up is that former students can reflect on the wisdom of the particular choices they made during school. We asked both graduates and non-graduates: "If you could do it all over again knowing what you know now, how likely is it that you would make [the changes listed]?"¹ Results are displayed in Figure 2.25.

Of the changes we asked about, clearly the most popular is to "concentrate more on developing your writing skills." Among non-graduates, nearly half of the agreements shown in Figure 2.25 were emphatic responses of "definitely." A smaller number, but nearly half of both groups, would concentrate more on developing mathematical skills. We asked two questions concerning strategy regarding specialization: whether they would "concentrate course work more in your major field" and whether they would "broaden your interests and take more courses outside the major." Over half say they would make each of these changes. In fact, a number of individuals say they would "probably" make both changes, despite their apparent incompatibility. This apparently means they would enlarge the total number of courses taken. The finding that equal numbers would broaden as would concentrate more suggests that the university is now taking the middle ground, allowing both options.

Figure 2.25. Percent of Graduates and Non-Graduates Who Would Make Selected Changes If They Repeated Their Education



¹ Response categories were "definitely," "probably," "probably not," and "definitely not." The first two categories were combined to equal "yes" in Figure 2.25.

A notable pattern in these findings is the similarity between graduates and non-graduates. It appears that the two groups experience a similar post-college environment and come to similar judgements about the desirability of each change in their educational background. It is also noteworthy that graduates would now broaden their interests more often than non-graduates, while non-graduates would more often concentrate more in their majors. These changes presumably reflect differences in the strategies these two groups followed while at Western.

These preferences for how education might be revised vary little with personal background and only a little across collegiate units. Neither gender nor transfer status affect preferred changes. However, students who were older when they graduated would now more often concentrate course work in their majors, less often broaden their interest, and less often develop their math skills.

Business majors less often report that they would broaden their interests outside the major, and more often say they would place greater emphasis on developing their writing skills. Social Science majors would take more courses outside their majors. Fewer humanities majors would emphasize development of their math skills. Otherwise, no differences occur among graduates of different units.

The consistency of these preferred changes across personal background, collegiate unit, and whether or not one graduated from Western suggests that any attention given by Western policy makers to these preferences should be applied at the university level. At the same time, perhaps the major impact of these findings is that a large proportion of former students find after experiencing the post-Western world that they would now be better off had they done more of something while in college, and that except for the preeminence of writing skills, balancing competing demands and offerings may be more important than expanding in any one area.

CONCLUSION

Volume Two of this series has focused on Students' experiences at Western and their evaluations of those experiences. On the non-academic side, students' finances, the problems they experienced while at Western, their utilization of various campus services, and their evaluation of campus services are reviewed. On the academic side, we analyze students' descriptions and evaluations concerning selected aspects of the courses in their majors and of their General University Requirement courses, students' evaluations of Western overall and of major segments of the Western community, and change in students' satisfaction with Western after five years.

Satisfaction with nearly all of aspects of Western is high, with the great majority of students at least "moderately" satisfied and a substantial number "very" satisfied. Satisfaction is especially high for professors and courses in students' major fields and most Student Affairs offices. Satisfaction is somewhat lower

for academic advising, especially that offered by major departments, and for Associated Students services. Satisfaction with GURs is also modest, but the majority of students nevertheless display a lively support for GURs and the liberal arts.

These areas of student experience are described for Western as a whole and broken down by membership in each of nine collegiate units. While such groupings fall short of the precision one might wish -- analysis of each separate major field -- we hope some insight may be offered into the different experiences of students majoring in different parts of the university. Fewer differences exist across colleges than might be anticipated. While students choose majors for very different reasons (cf. Volume I) their evaluations of these majors are quite similar.

Students display not only relatively high satisfaction with Western, but also a pattern of increasing satisfaction. Seniors report gradually increasing satisfaction over their years in college, along with increasing educational aspiration and increasing engagement. When former students look back on their higher education, nearly half of both graduates and non-graduates report that their satisfaction with Western has increased since they left, while only one in six reports decreasing satisfaction.