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The Masters Degree Program at Western A Follow-up Survey of the Masters Class of 1993

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EXECUTIVE SUMMARY

Between Summer, 1992 and Spring, 1993, 403 Masters degrees were awarded at Western. The first survey of Masters recipients by the Office of Institutional Assessment and Testing, conducted in Spring, 1994, contacted 290 (72.9%) of them.

The majority of Western's Masters recipients (58.6%) are women. One in six (18.1%) are not U.S. citizens; fewer (5.8%) are U.S. minority group members. Ages are diverse. The oldest was 63 at graduation; the youngest, 23. One-fourth (28.9%) were over 40. Over half (57.1%) received their undergraduate training in Washington, 28.9% at Western. The average GRE scores were 507 on the Verbal, 524 on the Quantitative, and 536 on the Analytic.

Nearly half (46.8%) of Western's 1993 Masters degrees were granted in education, with just over half of those prepared as teachers. Two-fifths were spread across fourteen departments in the College of Arts and Sciences, with the largest programs in Speech Pathology and Audiology (8.5%), Psychology (4.7%) and English (4.0%). The College of Business and Economics also contributed 7.5%, the College of Fine and Performing Arts 4.7%, and Huxley College 1.2%.

About 19.0% of all Masters degree recipients in the class of '93 took all or most of their course work for the Masters degree off campus. Nearly all these took teaching degrees.

A surprising proportion of Masters degrees (47.8%) were awarded in fields other than the field of the student's undergraduate degree. In part this is because of the large proportion of education majors.

The average Masters recipient accumulated 69.9 credits of graduate work (with a median value of 61 credits) plus an average of 6.7 undergraduate credits. About one-fifth graduated with 50 credits or fewer and one-sixth with more than 91 graduate credits. Most of those with very high credit levels were education majors who received teacher certification. On average, those graduates accumulated 51.1 more credits than others (115.0 vs. 63.9).

The total time Masters students required to complete their degrees is also varied. The longest Masters career began in 1982, eleven years before the 1993 graduation. More than nine-tenths (92.6%) completed within five years, however, and 59.3% completed within two years.

Many of Western's Masters students report very demanding schedules. The average number of credits completed per quarter is 8.4. The average weekly hours of homework generated by those credits is 25. Nearly one-third (20.3%) worked as Teaching Assistants (TAs) and 5.8% on work study at least one quarter. In addition, 70.0% worked for pay (not including TA, RA, or work study). A remarkable 30.6% report doing *full-time* non-TA work throughout their Masters program. A majority of those employed full-time were off-campus Education majors. Reported homework time per credit is as high among those working full-time as among others, except that off-campus Education majors report significantly lower homework levels.

Over half (52.8%) completed the degree with no educational debt. On the other hand, 19.9% owed more than $10,000.

Satisfaction is high with Western, its professors, the quality of instruction, opportunities for informal interaction with professors and thesis support from them, and the preparation the Masters provided. Satisfaction is lower for career advising, opportunities for experiential learning, opportunities to get involved in faculty projects, and opportunities for financial assistance. Satisfaction with Western/Bellingham as a place to live is overwhelmingly high.

The great majority (92.4%) are employed, while only 4.9% are unemployed and looking for work. Most of those employed are working full-time. Three-fourths (75.5%) report working 40 hours or more; only 13.9% fewer than 30 hours per week. Unlike Western's Bachelor level alumni, Masters alumni are almost always working in the same field as their degree. Only 6.1% are working in a "different" field, compared to one-third of Bachelors alumni.

It may be surprising to many to learn that more than half (52.1%) of employed Western's Masters class of '93 began their jobs at least one full year *before* their graduation. One-third (35.4%) began their jobs three years before graduation, with 10.0% starting in 1980 or earlier. Teachers are by far the most likely to return to a Masters degree at Western while continuing in a long-held job.

The average annual salary for all (full-time and part-time) is $32,740. We do not find evidence of differnces in earnings produced by the different Colleges/areas at Western. Earnings are markedly higher for Business and Education majors. However, the reason proves to be that these graduates began their jobs much earlier than others, often long before entering gradaute school, and were more often working full-time throughout graduate school. These factors markedly raise earnings after graduation. When they are taken into account statistically, no additional earning differences occur between graduates of different colleges.

Job satisfaction is high, with 85.1% "very" or "mostly" satisfied with their jobs, overall. Even larger percents are highly satisfied with job qualities consistently found to be the most important to employees--the feeling that a job is worthwhile and enjoyment of the types of daily work one does.

INTRODUCTION

During Winter and Spring, 1994, Western conducted a survey inviting feedback from Western's Masters degree recipients. The Career Services Center has followed Masters recipients annually in recent years to get data concerning their employment and earnings. The survey reported on here also asked about perceptions of Western, financial and other matters while these former students were at Western, as well as future plans. These additional questions were asked in hopes of gaining a more thorough profile of our Master's students, before, during and after attending Western.

During the four quarters, Summer 1992 through Spring, 1993, Western graduated 403 recipients of the Master's degree. Our survey was completed by 290 (72.9%) of these. In addition, we have information from Registrar's files on all 403. This report includes information from both sources.

THE ORIGINS OF WESTERN'S MASTERS STUDENTS

A brief profile of Western's Masters class of '93 can be gleaned from Registrar's data and survey data.

- ***Gender.*** The majority (58.6%) are women. This gender mix is approximately the same as with Western's undergraduates, although the mix of majors is quite different.

- ***Ethnicity.*** Western's Masters recipients are more diverse than our undergraduate population. The reason is the number with citizenship outside the U.S. Over one in six (18.1%) of Masters recipients in the class of '93 were foreign born--most, presumably, Canadian. Seventy-one percent were "other white," which translates to 87.3% of U.S. citizens. In addition, African Americans, Native Americans, Hispanic Americans and Asian Americans constitute a total of 4.8% of Masters recipients, with each of the four groups representing 1.5% or less of the total. The final 4.8% fall into the "other" category.

- ***Age.*** Western's Masters graduates are highly diverse in age. The oldest graduate in the Masters class of '93 was 61. The youngest were 23. Two-thirds (66.3%) of the class were over 30 at graduation; over one-fourth (28.9%) were over 40, with 3.7% over 50. The most common ages are between 25 and 31, with 47.1% of all; each of these ages provided more than 5% of the class.

- ***Undergraduate Origins.*** The most common undergraduate origins[1] for Western's Masters recipients are from Western (28.9%) and from out-of-state non-Ph.D. granting institutions (26.4%). (See Table 1.) Another 16.5% received undergraduate degrees from out-of-state Ph.D. producing universities, making a total of 42.9% who received undergraduate training out of state, while 57.1% originated in-state. Washington public schools other than Western provided undergraduate training to 18.9% of Western's Masters recipients. (See Table 1.)

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[1] Counted as the school from which the undergraduate degree was received. We have no knowledge of schooling prior to transfer. Nor do we know the individual's state of residence prior to or during undergraduate training.

Table 1. Source of Undergraduate Degrees, WWU Masters Class of '93

Undergraduate School	*Percent*
Western Washington University	29.2
University of Washington	7.8
Washington State University	5.3
Central Washington University	4.2
Evergreen State College	1.0
Eastern Washington University	0.7
Private college/University in-state	8.6
Out-of-state, Ph.D. producing university	16.6
Out-of-state, other university	26.6
Total	100.0% (286)

As a possible guide to departments deciding where to advertise for their Masters degree at Western, Appendix A lists the specific schools, sorted by state, from which the Masters class of '93 received their undergraduate degrees. The list excludes individuals who took more than a five year break between undergraduate and graduate work, on grounds that they are likely to have moved locations before exploring information on graduate schools. The list is also divided into Woodring students and all others. Since a large proportion of Woodring's students are off-campus, undergraduate origins may have a different meaning for that group.

- ***Graduate Record Examination (GRE) Scores.*** The average GRE scores for Western's Masters graduates in the class of '93 were 507 on the Verbal, 524 on the Quantitative and 536 on the Analytic. (See Table 2.) GRE scores are similar by major and college, with only a few exceptions. Math/science majors score significantly higher on the quantitative and analytical exams, while Fine and Performing Arts majors scored lower, on average; Applied majors within the College of Arts and Sciences and Education majors scored significantly lower than others on the verbal exam. Analytic scores are higher for Math/Science majors and Humanities majors, and lower for Education majors and Applied majors within the College of Arts and Sciences.

Table 2. Scores on the GRE Exam, WWU Masters Class of '93

GRE Score	*Verbal*	*Quantitative*	*Analytical*
400 or lower	15.9	15.9	15.0
410-500	35.9	28.8	26.2
510-600	30.9	32.1	27.4
610-700	13.3	15.1	23.3
over 700	4.0	8.1	8.9
Total	100% (370)	100% (370)	100% (346)

MAJOR FIELDS

Nearly half of Western's 1993 Masters degrees were granted in education: 46.8% in Woodring College of Education and 2.7% in the Natural Science teacher preparation program located in the College of Arts and Sciences (see Table 3). The majority of education majors were prepared as teachers (25.7% out of the 46.8%), with elementary, secondary, adult education and college administration accounting for the remainder (21.1%). Two-fifths were spread across fourteen departments in the College of Arts and Sciences, with the largest programs in Speech Pathology and Audiology (8.5%), Psychology (4.7%) and English (4.0%). The College of Business and Economics also contributed 7.4%, the College of Fine and Performing Arts 4.7%, and Huxley College 1.2%. (See Table 3.)

About 19% of all Masters degree recipients in the class of '93 took all or most of their course work for the Masters degree off campus. Nearly all these completed teaching degrees. One-third (37.0%) of Woodring's Masters were awarded to primarily off-campus students. For both Woodring and other colleges, about one-fourth of Masters recipients took "most" of their work *on* campus. One-third (37.0%) of Woodring and 75.5% of all others report taking "all" their course work for the Masters on Western's main campus.

CONTINUITY OF MAJOR FIELDS

A surprising number of Masters degrees (47.8% of all) were awarded in fields other than the field of the student's undergraduate degree. In two instances, Woodring College of Education and the College of Business and Economics' MBA degree, a wide range of undergraduate majors is to be expected, and they do occur at Western. In addition, one-fourth (25.2%) of Masters in other fields were offered to students who say they received their undergraduate degrees in fields different from their Masters degree. This tendency is strongest in Arts and Sciences applied areas, social sciences, and Fine and Performing Arts. Another ten percent of Masters degrees involve a change of majors, but within the same college/area (e.g., within math/science, humanities, or social sciences). (See Table 4.)

Excluding Business and Education majors, a comparison of students who changed majors and those who did not reveals that changers are significantly older (averaging 38.0 years of age at graduation for those who changed colleges, as compared to 35.2% for those who changed within a college and 32.3% for those in the same major). Logically, given this age difference, changers also experienced greater delay between undergraduate and graduate work and less often received their degrees from Western. They also express less inclination to continue for a degree beyond the Masters. On the other hand, those who changed majors do not differ significantly by gender or ethnicity.

The survey offers little basis on which to estimate the impact of changing fields on departments or on students. What is known is that those who changed colleges took an average of 15 credits more than those who remained in the same field or changed within colleges. The average GPA they earned while at Western was identical to that for non-changers. Further, their reports of satisfaction with Western and successful employment after Western are essentially identical to those of non-changers.

Table 3. Major Fields, WWU Masters Class of '93

College and Department	*Percent*	*Number*
COLLEGE OF ARTS AND SCIENCES	**38.7**	**156**
Anthropology	2.0	8
Biology	1.2	5
Computer Science	2.0	8
English	4.0	16
Foreign Language	.5	2
Geology	2.5	10
History	1.7	7
Liberal Studies	.5	2
Mathematics	2.2	9
Phys Educ-Health-Recreation	1.7	7
Political Science	2.5	10
Psychology	4.7	19
Natural Science/Science Education	2.7	11
Speech Pathology & Audiology	8.5	34
Visual Communications	2.0	8
COLLEGE OF BUSINESS AND ECONOMICS	**7.4**	**30**
Business Administration (MBA)		
COLLEGE OF FINE AND PERFORMING ARTS	**4.7**	**19**
Art	1.7	7
Music	1.5	6
Theatre Arts	1.5	6
HUXLEY COLLEGE OF ENVIRONMENTAL STUDIES	**1.9**	**8**
Huxley	1.2	5
Geography*	.7	3
WOODRING COLLEGE OF EDUCATION	**46.3**	**186**
Elementary Education	10.0	40
High & Middle School	9.7	39
School Administration - Elementary	5.5	22
School Administration - Secondary	9.5	38
Adult Education Administration	2.7	11
Student Personnel Administration	2.4	10
Reading Consultant	1.0	4
Remedial Reading	4.5	18
Learning Resource Administration	1.0	4
STUDENT-FACULTY DESIGNED	**.2**	**1**
TOTAL	**100.0%**	**400**

*In the College of Arts and Sciences when the Masters class of '93 entered.

Table 4. Change from Undergraduate Major, by College/Area of Graduate Major, Masters Class of '93

Masters Degree Major	Stayed in Same Field	Changed to: Different Field in Coll.	Different College	Total (N)
Arts and Sciences				
Humanities	87.0	8.7	4.3	100% (23)
Math/Science	70.8	16.7	12.5	100% (24)
Social Science	60.0	10.0	30.0	100% (30)
Applied areas	55.6	5.6	38.9	100% (36)
Business and Economics	29.4	29.4	41.2	100% (17)
Education	39.1	8.6	52.3	100%(128)
Fine and Performing Arts	53.8	15.4	30.8	100% (13)
Environmental Studies	*			

* Too few cases (2) for calculation.

CREDITS ACCUMULATED AND TIME TO DEGREE

Western's average Masters recipient accumulated 69.9 credits of graduate work (with a median value of 61 credits). In addition, an average of 6.7 undergraduate credits were accumulated as part of the Masters program, bringing the total average credits as part of a Masters program at Western to 76.6.[2] About one-fifth graduated with 50 credits or fewer and one-sixth with more than 91 graduate credits. Table 5 provides greater detail, dividing Masters recipients by whether or not they also received a teaching certificate.

Table 5 raises the question: why are some students taking so many more courses than usually required for the Masters degree? The largest number of credits accumulated was 204 - more than four times the usual requirement. One answer to this question is embedded in Table 5. A considerable number of Masters students (46, 11.4%, of the 403 in the class of '93) also receive teacher certification at Western. On average, those graduates accumulated 51.1 more credits than others (115.0 vs. 63.9). None of them earned fewer than 61 credits, while the great majority earned above 90 credits enroute to their combined Masters and teaching certificate.

Another answer is that some programs require more credits than the university requirements of 45 or 48. For example, the MBA program requires up to 88 credits,

[2] Calculated only for those not receiving an undergraduate degree from Western.

depending on the student's background in business, the Psychological Counseling program requires 81 credits, and the Speech Pathology and Audiology program requires 66 credits. Each of these departments enrolls a substantial number of Masters students. Eliminating the 46 individuals who received certification from the calculations, we find the average number of credits accumulated enroute to a Masters degree at or under 62 credits in 16 of the 23 departments that awarded Masters degrees to the class of '93. Other departments' averages are consistent with their requirements except for a few cases where too few graduated for averages to be meaningful.

Table 5. Number of Graduate Credits Accumulated by those Receiving a Teaching Certificate and by Others, Masters Class of '93

Number of Credits Accumulated	*Non-Certificate*	*Certificate*
50 or fewer	21.3	0
51 - 60	32.2	0
61-70	20.7	6.5
71-90	16.5	17.4
91-120	7.6	37.0
121+	1.7	39.1
Total (N)	100% (357)	100% (46)

Other factors explain a little bit of the variation in number of credits. Students who changed major fields report taking slightly (7.5) more credits than do others, a finding perhaps more surprising for how small the additional course load is than for how large. Off-campus students took 4.1 fewer credits toward a Masters or 19.9 fewer credits toward a Masters and a certificate.[3]

One factor that might be expected to influence credits accumulated, the number of years from entry to completion of the program, shows surprisingly little predictive power. Only the handful of students who finished the program very quickly, in less than two years, completed with fewer credits. For others, the elapsed time to degree is unrelated to number of credits taken. Another factor that has no influence on number of credits accumulated is undergraduate alma mater.

It is interesting that few Masters recipients feel that they took more credits than the minimum required. Over half, 53.2%, say they took "the minimum number of credits required." Another third, 32.3% say they took fewer than 15 credits over the minimum, with the remaining 14.5% reporting that they took more than 15 credits over the minimum. This final group was asked why they took substantially more credits than required. Four-fifths reported that they chose to pursue additional knowledge, either to

[3] Based on too few cases to be a stable estimate, however.

prepare for a Ph.D. program or for some other reason. One-fourth say they lacked undergraduate background when entering the program or that their program required additional credits for some particular reason. Only one person (2.3% of the 43 respondents) offered any criticism, blaming poor advising. These responses give no evidence that credit loads are perceived as a problem, despite the fact that many students are paying for considerably more than the official minimum number of graduate credits.

The length of time Masters students took to complete their degrees is also varied. The longest Masters career began in 1982, eleven years before the 1993 graduation. More than nine-tenths (92.6%) completed within five years, however, and 59.3% completed within two years. Indeed, 15.8% of the Masters class of '93 entered Western in 1992 or 1993.

Looking at quarters enrolled rather than elapsed time, variability remains high. Four-fifths (80.3%) of the Masters class of '93 were enrolled between three and nine quarters. A few, 3.9%, were enrolled two or fewer quarters. Another 9.0% were enrolled 10-12 quarters, with the final 7.3% enrolled more than twelve quarters.

The wide range of velocities with which students pass through Western's Masters programs presumably indicates the wide range of individual lives and situations. Although the number of credits students accumulate is in large measure explained by programmatic considerations, the elapsed time to pass through the program is not. Indeed, the number of credits accumulated explains only a tiny portion of the variation in how many quarters students were enrolled or in the total time between entering and completing the program.

As implied by the above findings, there is also great variation in the number of credits per quarter taken by different Masters students. The lowest average number of credits per quarter was 3.0; the highest, 16.0. Just under 23.0% averaged fewer than 6 credits per quarter; another 27.0% averaged between 6.01 and 8.0, making exactly 50.0% who averaged 8 credits or fewer per quarter. Another 21.8% averaged between 8.01 and 10.0 credits, 17.3% between 10.01 and 12.0, and the remaining 11.9% averaging above 12 credits per quarter.

BEING AT WESTERN

Reports conceming experiences at Western are somewhat complexified by the fact that some of our Masters recipients were not experiencing Western's main campus and faculty. About four-fifths of the Masters class of '93 report having completed "all" (56.3%) or "most" (24.6%) of their graduate courses "on Western's main campus." The remaining 19.1% completed half or less of their work on campus; the majority of this group (10.8%) took "none" of their courses on the main campus. Aside from four people in various fields, all those who report having taken little work at Western's main campus received their degrees in education.

Although the survey was relatively brief, questions were asked about students academic engagement and employment experiences during their Masters program, and their evaluations of their experiences at Western. Reports below are based on all respondents unless otherwise noted. At some points, those who took less than half their work on the main campus are separated from others in the analysis. The goal is not to focus on that group, but to clarify what experiences respondents are describing or evaluating.

Academic Engagement and Employment

Many of Western's Masters students report demanding schedules. The average number of credits completed per quarter is 8.4, with 13.6% averaging more than 12 credits and 20.3% averaging less than six. The average weekly hours of homework generated by those credits is 25, with 18.2% reporting over 35 hours per week and 14.6% reporting fewer than 15 hours per week. Nearly one-third (20.3%) worked as Teaching Assistants (TAs) at least one quarter; 11.7% more than three quarters. Another 5.8% worked for some number of quarters under work study funding. In addition, 70.0% worked for pay (not including teaching or research assistance or work study).

The number of hours graduate students worked for pay appears to be a prime consideration in understanding Western's Masters program. We divided work into TA, Research Assistant (RA), and work study (WS)--all on campus work within departments--versus all other employment. For convenience, since about 80.0% of on campus work was as TA, all this work will be refered as "TA." Fully 30.6% report doing *full-time* non-TA work throughout their Masters program, 29.0% without TA funding and 1.6% with some TA funding in addition. (See Table 6.) More than half (53.6%) report averaging more than 15 hours per week. Of the 30% who report no employment aside from TA, half report working as a TA, RA or work study, so that only 15.9% completed their Masters without working. At the other extreme, 8.4% reported averaging more than 15 hours per week while also serving as TA for at least 1 quarter, and 8.7% report working for pay *more* than 40 hours per week during their Masters program.

Table 6. TA/RA/Work Study and Other Work, Masters Class of '93

Work Situation	*Percent*	*(Number)*
No TA* and no other employment	15.9	(40)
No TA and 1-15 hours per week	3.6	(9)
No TA and 16-39 hours per week	16.3	(41)
No TA and 40+ hours per week	29.0	(73)
TA 1-3 quarters and 0-15 hours/week	10.8	(27)
TA 1-3 quarters and 15+ hours/week	5.2	(13)
TA 4+ quarters and 0-15 hours/week	16.2	(41)
TA 4+ quarters and 15+ hours/week	3.2	(8)
Total	100%	(252)

* The term TA refers here to work as Teaching Assistant, Research Assistant or Work Study recipient. More than three-fourths of all such work was as Teaching Assistant.

Needless to say, credits taken per quarter and hours of homework, number of quarters as TA or work study, and average hours per week worked during graduate school represent trade-offs. In particular, those who worked longer hours tended to take fewer credits and do fewer hours of homework, although university funding demands full-time enrollment, so that TA or work study funds were not associated with fewer credits completed per quarter. Even so, some individuals kept extremely busy schedules. For example, of the 77 Masters recipients in the class of '93 who report averaging at least 40 hours per week work during graduate school, 19 (24.7%) averaged eight or more credits per

quarter enrolled and 31.4% report averaging 25 or more hours per week on homework. Fifteen of the nineteen who worked full-time and averaged more than eight credits per quarter received Masters in teaching, nine of them primarily off campus.

The question arises whether the students who keep this breakneck schedule have time to study and succeed in their programs. Comparisons of GPA at Western shows approximately equal grades received by these extremely busy individuals and others. Also, in most cases, these extremely busy individuals report having spent as much homework time as others taking the same number of credits. The exception to this rule is that primarily off-campus education majors, a considerable portion of this very busy group, report having spent markedly less time on homework than others with similar credit loads. The number of individuals involved is small enough that no firm conclusions should be drawn. The average homework level reported by all education Masters students is, however, significantly lower than for other students. Education majors average 18 hours per week vs. 28 hours per week for non-education majors. Education majors also average slightly lower average credits per quarter--7.8 vs. 8.9.

In addition to working long hours, many Masters students borrow heavily, although a perhaps surprising number complete their degrees with no indebtedness at all. Table 7 provides some detail, showing 52.8% completing the degree with no educational debt, but also showing 19.9% owing more than $10,000. The highest debt level reported was $30,000 except for one individual who reported $40,000.

Table 7. Total Education Debt at Graduation, Masters Class of 1993

Total Debt	*Percent*
$0	52.8
$1,000-5,000	14.7
$6,000-10,000	12.6
$11,000-20,000	15.1
Over $20,000	4.8
Total	100.0% (271)

Satisfaction with Western

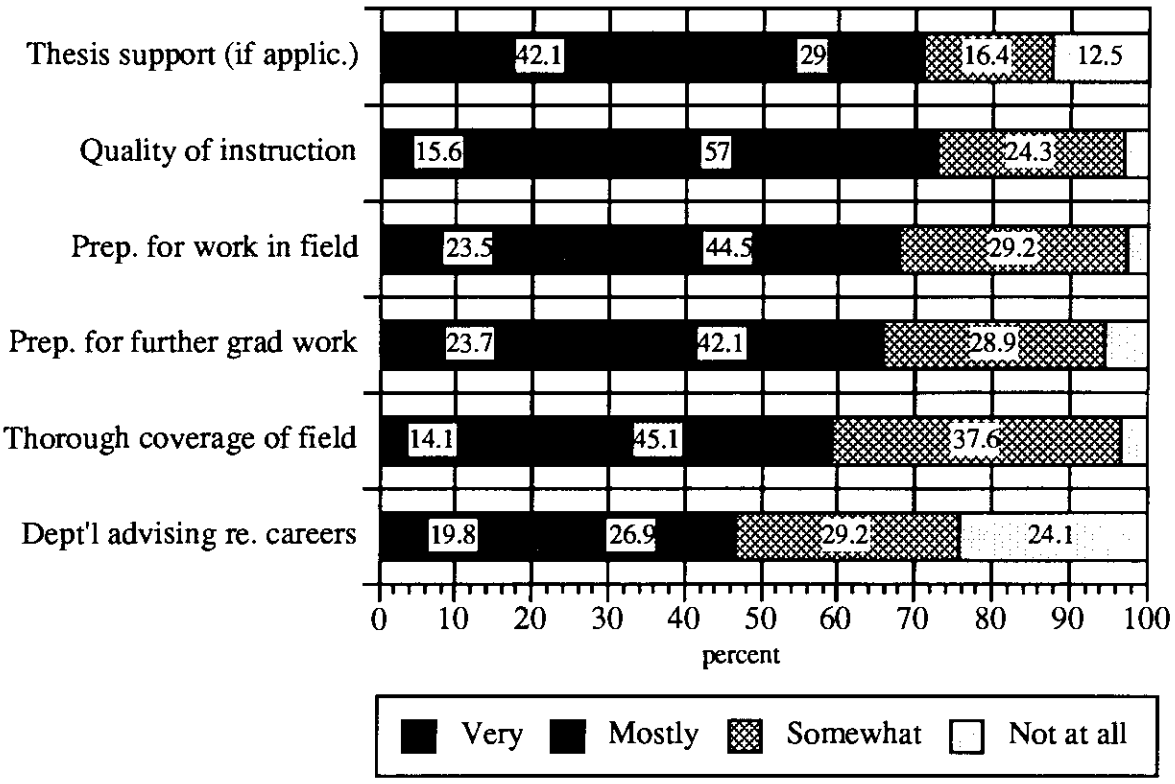
As part of Western's assessment program, the survey of Masters recipients included a series of questions asking satisfaction with various aspects of each individual's Masters program at Western. (See Appendix B.) Most of these address the particular department in which the program was located. Results are displayed in Figures 1, 2 and 3. For simplicity of presentation, the numbers of respondents for each question are not indicated in the figures. Unless otherwise noted in the text, percentages are based on 280-290 survey responses. Some questions did not apply to all students--in particular, off campus students already employed full-time. These cases are noted during discussion of the findings. Figure 1 displays satisfaction with several aspects of the major department. Findings are sorted according to the percentage who report being "very" or "mostly" satisfied. The distinction between "mostly" and "somewhat," the next scale value, is

relatively potent in terms of Western's self-evaluation, as is the distinction between "somewhat" and "not at all" satisfied.

The highest satisfaction shown in Figure 1 is with "support you received for your thesis," which applies to just over half of all Masters recipients. Figures are therefore based on the 152 respondents who completed Masters theses. The thesis experience is an intense one, so that more respondents report the extreme answers of "very" and "not at all" satisfied than for most other questions. On balance, satisfaction is high, with 71.1% at least "mostly" satisfied. Satisfaction does not vary department by department and presumably therefore depends on the individual student and the individual faculty members with whom s/he worked.

Masters recipients are also quite satisfied with the quality of instruction, how well they were prepared to work in their field, and how well they were prepared for continued graduate education.[4] More than two-thirds were "very" or "mostly" satisfied with each, and five percent or fewer were "not at all" satisfied with each. It is perhaps worth noting that the great majority rate faculty "mostly" satisfactory, presumably because they have close familiarity with the faculty in their department and find most, but not all, to be highly satisfactory.

Figure 1. Satisfaction with Selected Aspects of Major Department, WWU Masters class of 1993



[4] Some of those already working full-time felt career advising was not applicable, making the sample size for that item 253. Fully 29% declared the issue of preparation for continued graduate work inapplicable; the sample for that item was 190.

Satisfaction with "how thoroughly your curriculum covered the field" was somewhat lower than with other items, although few were "not at all" satisfied. Apparently, the work experience of some students has led them to question the coverage of the field provided by their studies.

As with all the Bachelor-level alumni surveys we have conducted at Western, career advising generates little satisfaction among Masters recipients. Fewer than half rate it "very" or "mostly" satisfactory.

Among the survey's satisfaction measures (see Appendix B) there are few correlates. For the most part, satisfaction appears to vary by individual experience and judgment, rather than by demographic background or university department. There are only a few consistent exceptions to this generalization. Students who report studying more hours and who took more of their coursework on campus are somewhat more satisfied with the quality of instruction, their preparation and the curriculum. Students who received their degree in education are considerably less satisfied with quality of instruction and somewhat less satisfied with their preparation and the curriculum.

Figure 2 continues in the same vein, this time assessing former students' satisfaction with four different opportunities within their graduate programs. Satisfaction with opportunities to develop information relationships with professors is particularly important, according to the published literature on the quality of the university experience, and all the more so at the graduate level. Satisfaction is high in this arena. How satisfied students are with opportunities for informal association with professors is heavily influenced by students' engagement. Students who work fewer hours off campus, who are TAs, who study more hours, and who completed more of their Masters work on Western's main campus are distinctly more satisfied in this area than are other students. These factors explain why education graduates are the one departmental group distinctly less satisfied than others, since most off-campus students and a disproportion of those who work full-time and study few hours were in education.

Nearly one-fourth (23.4%) of respondents felt the issue of opportunity to pursue "internships or other experiential courses" was not applicable to their graduate education. Of the 218 who answered this question, one-fifth were highly satisfied and one-fourth were not at all satisfied. These satisfaction reports reflect both the students' desire for such opportunities and their perception that the opportunities exist. Those who served as TA or RA are more satisfied with their opportunity for experiential learning, along with those in speech-pathology, an especially experiential program. No reliable differences exist among other departmental programs except that computer science majors are somewhat less satisfied than average with opportunities for internships or experiential learning.

In a related area, satisfaction with opportunity to get involved in faculty projects is very low. One-third (33.8%) see the question as not applicable to their education. Of the 184 who responded, more were "not at all" satisfied than were "very" or "mostly" satisfied--the only measure in Figures 1 through 3 for which that is true. Such opportunities tend to require faculty engaged in scholarly pursuits and sometimes require funding. Students appear to value such opportunities and, in many cases, to be disappointed by their absence.

Finally, as would be expected given limited resources, satisfaction with opportunities for financial support is low. One-third of students declared this issue not applicable to them. Of the 188 who answered the question, only 41.0% were either "very" or "mostly" satisfied, while a full 34.6% were "not at all" satisfied. Also not

surprising is the finding that those who received TA support were much more satisfied with opportunity for financial aid than others and that those who took all their coursework on the main campus are more satisfied, presumably because opportunities are in fact less available off the main campus. In particular, those who worked more full-time were much less satisfied with opportunity for aid. No differences exist by department. Education majors are less satisfied in this area, but only because so many of them worked full-time and were off-campus.

Figure 2. Satisfaction with Selected Opportunities within the Major Department, WWU Masters class of 1993

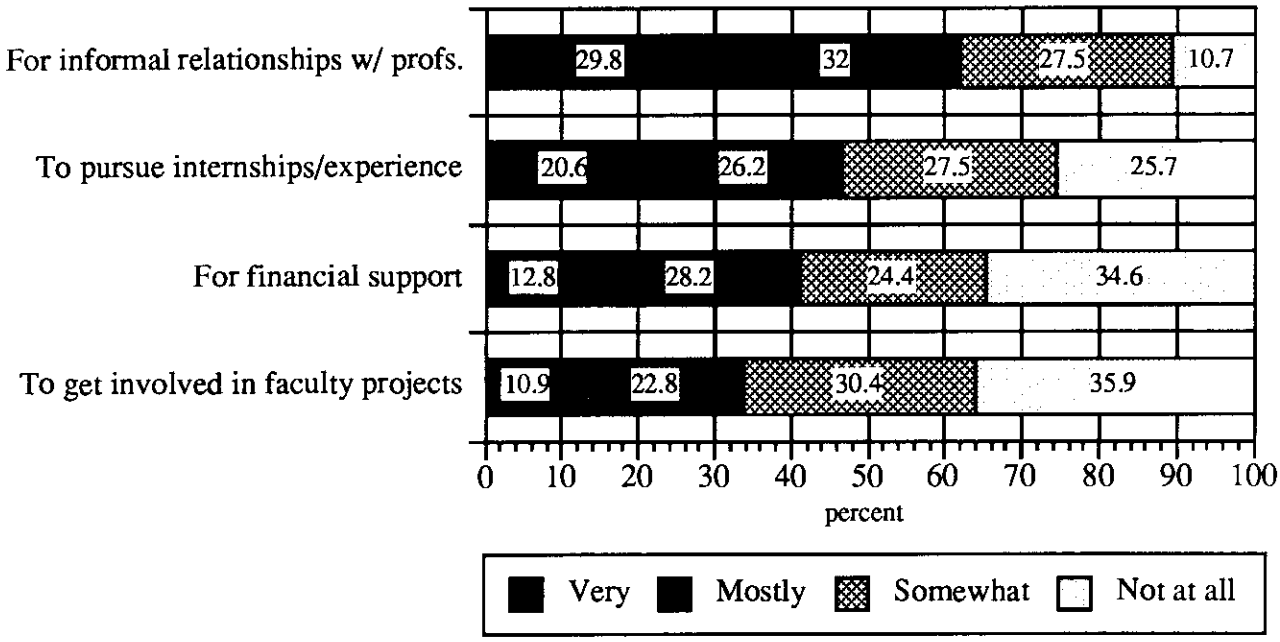
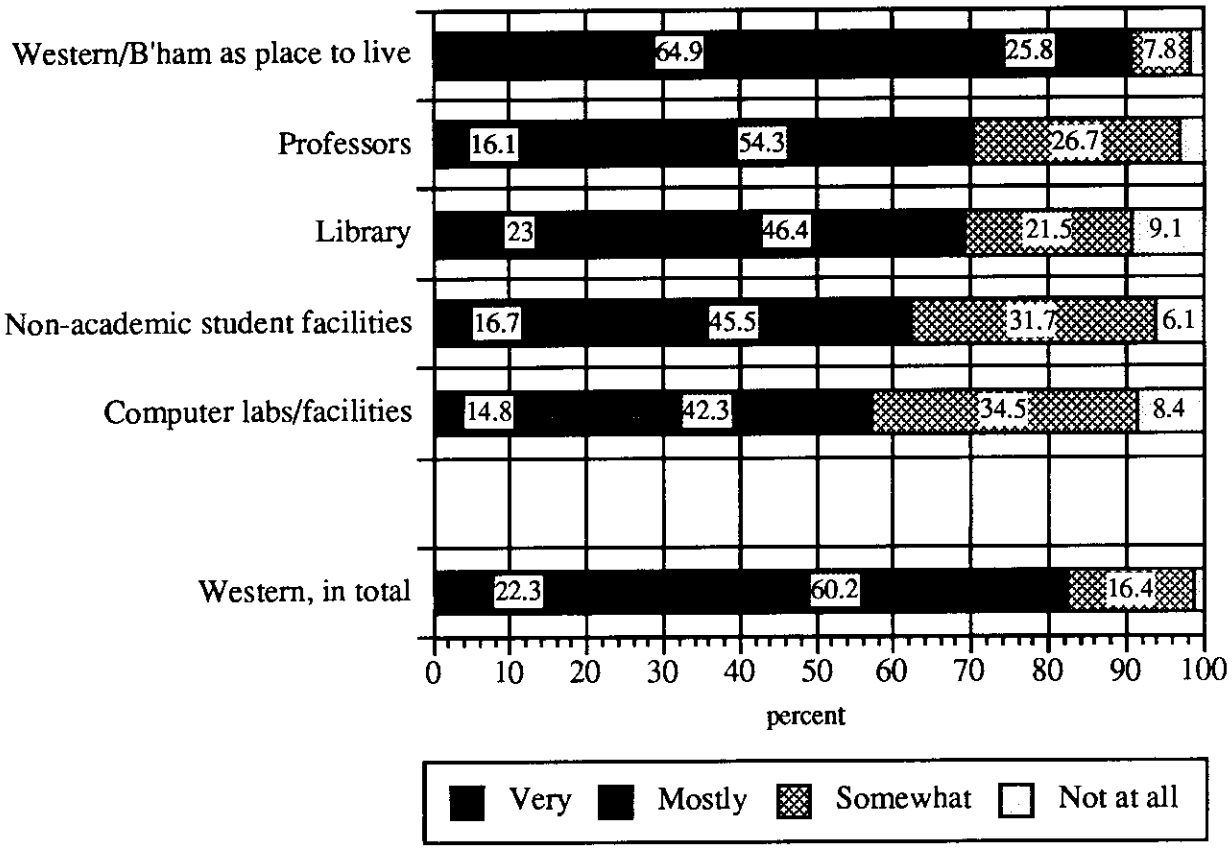


Figure 3 moves the focus of students' evaluations to the campus as a whole, although the "professors" they have in mind are presumably nearly all within their departments. For the 194 respondents who had lived in Bellingham, satisfaction with Western/Bellingham as a place to live is overwhelming, with two-thirds marking the highest answer on the scale. In this, Masters students parallel Bachelors students we have surveyed in the past. The campus and surrounding ecology remains one of Western's strong points.

Satisfaction with the two major academic supports for graduate education--professors and the library--is quite high, at about 70.0% "very" or "mostly" satisfied, although the great bulk of answers fall in the "mostly" category rather than in the highest category. For the 203 students for whom "computer labs and other facilities at Western" were relevant, satisfaction is a bit lower than satisfaction with professors and the library. Satisfaction with "non-academic student facilities at Western" is intermediate to these others.

When students average all the qualities that make up their overall satisfaction with Western, the result is very positive, with 82.5% "very" or "mostly" satisfied, although the overwhelming bulk of responses are "mostly." It is also important that so few students (1.1%) felt "not at all" satisfied.

Figure 3. Satisfaction with Selected Aspects of WWU, Masters Class of 1993



Again, there are few background variables or departments that explain variation in students' satisfaction with Western or its major facilities. Older students are somewhat less satisfied with the library, Art students are slightly more satisfied than other students with the library but slightly less so with computer labs, while Psychology students are slightly less satisfied with the library. Education majors are somewhat less satisfied with professors.

EDUCATION AND EMPLOYMENT ONE YEAR AFTER GRADUATION

On average, the respondents to this survey had graduated just under one year before our survey. Some had been out as little as 6 months and others as much as 18 months, but the bulk graduated in March (30.6%) or June (50.2%) of 1993, 10-14 months prior to our survey. Further education and employment reports reflect that time lag for job search, etc.

Further Education after Western

Three fourths (74.0%) of Western's Masters graduates plan no further education. Two-fifths (20.1%) plan to enter further graduate study within two years, and a few (5.9%) are enrolled in further study one year after leaving Western. The largest group of these are pursuing a Ph.D., with others seeking another Masters degree or teaching certification. Of the larger group who plan to enter further graduate study in the future,

three-fourths (75.0%) plan the Ph.D. Another 18.1% plan another Masters degree, and 5.6% plan a teaching or other certificate.

Employment

The great majority of the Master's class of '93 (92.4%) are employed, while only 4.9% are unemployed and looking for work. Even the great majority (84.0%) of those currently enrolled in graduate study also report being employed.

Most of those employed are working full-time. Omitting the handful in graduate school, 5.4% are working less than 20 hours per week, 8.6% between 20 and 29 hours, 10.5% between 30 and 39, 40.5% exactly 40 hours, and 35.0% more than 40 hours per week.

Unlike Western's Bachelor-level alumni, Masters alumni are almost always working in the same field as their degree. Three-fourths say their jobs are in the "same" field, 18.9% in a "related" field, and only 6.1% in a "different" field. Among Bachelors degree recipients, about one-third are found working in fields different from their major one year after graduation.

It may be surprising to many to learn that more than half (52.1%) of employed Western's Masters class of '93 began their jobs at least one full year before their graduation. One-third (35.4%) began their jobs in 1990, about three years before graduation. Indeed, 10.0% began their current jobs in 1980 or earlier, giving them many years' tenure prior to entering the Masters program. Teachers are by far the most likely to return to a Masters degree at Western while continuing in a long-held job.

Earnings

Earnings among Western's Masters Class of '93 are quite high. For the 17.3% who reported earnings on part-time work, the bulk of earnings are understandably low, but a surprising proportion report high earnings from part time work. Among full-time employees, more than 90% earn above $20,000, and fully 33.5% earn over $40,000. (See Table 8.)

Table 8. Annual Income among Full-Time* and Part-Time Employees, Masters Class of 1993

Income Level	*Full-Time*	*Part-Time*
Less than $10,000	0	23.3
$10-19,000	9.2	44.2
$20-29,000	27.7	11.6
$30-39,000	30.6	7.0
$40-49,000	17.5	7.0
$50,000 and above	15.0	7.0
Total	100% (206)	100% (43)

* Full-time is defined as working 32 hours per week or more, following the U.S. Department of Labor definition.

If the levels of earnings by Western's Masters graduates are somewhat surprising, the breakdown of earnings by college/discipline may be more so: teachers, often seen as having limited earning power, earn far more than average and the eleven graduates from the college of Fine and Performing Arts earn almost as much. It is less surprising that MBA recipients earn well and that applied areas produce higher earnings than others in the Arts and Sciences. Numbers are low enough for most colleges that these figures may not be stable year to year, and there are too few respondents from most departments to publish figures. But the sample is large enough to be quite stable for education majors, who average over $39,000 one year after receiving their Masters degrees. (See Table 9.) The average full-time earnings for all disciplines other than Business and Education, is, on the other hand, only $29,650 - nearly $10,000 lower. (See Table 9.)

Table 9. Average Annual Income* by College/Area, Masters Class of 1993

Masters Degree Major	*Average Earnings*	*Total (N)*
Arts and Sciences		
Humanities	$25,140	100% (17)
Math/Science	$23,270	100% (22)
Social Science	$21,960	100% (25)
Applied areas	31,900	100% (36)
Business and Economics	$41,200	100% (17)
Education	$36,920	100% (126)
Fine and Performing Arts	$32,000	100% (13)
Environmental Studies	**	
All Masters Recipients, Class of '93	$32,740	100% (250)

* Including all employed, full-time and part-time.

** Too few cases (1) for calculation.

The unusually high average earnings by Western's Masters recipients result in large part from the fact that half of the full-time employees in the class of '93 were education majors, who earn about $10,000 more per year than the others. This in turn raises the question: why are earnings so much higher among educators? Assuming that a good deal of the answer lies in the greater age and experience of education majors, a series of possible predictors were tested, including when graduates first began their current jobs. Findings confirm that after other correlates are taken into account statistically, there is no difference in earnings between teachers and others. Even this equality is relatively good news for education majors, but the anomaly of teachers earning far more than others is explained. (See Table 10.)

Table 10 reports a multiple regression analysis of the factors that reliably predict annual earnings among the Masters class of '93. It also includes a list of factors tested but found not to explain variations in earnings. The particular value of such analysis is that

estimates are gained of how much each factor uniquely affects earnings, after the effects of all other [measured] factors are taken into account statistically.

Table 10. Factors Explaining Differences in Annual Income, Masters Class of 1993

Factor Influencing Income	*Nature of Impact, on Average*
Number of hours per week on job	Each ten hours on job adds $4,100
Gender	Women earn $2,660 less per year
Year began current job	Each year earlier adds $810
Foreign national (most, Canadian)	Report $21,400 more than U.S. cit.
Hours worked per week in grad school, not incl. TA/RA/wk study	Each ten hours adds $1,500

Total variance in earnings explained by these factors = 55.6%

Factors tested and found not to influence earnings: age; year received undergraduate degree; ethnic minority status; lag between undergraduate and graduate study; time spent in Masters program; whether changed majors for the Masters; which college/area major field was in; hours studied at Western; on vs. off-campus program; debt level accumulated during program; whether or not took extra credits during program; and verbal, quantitative, and analytical GRE scores.

As is usual for such analysis, part-time workers earned much less than full-time (40 hour per week employees earn $8,200 more than half-time employees, adjusting for other background differences). Also as usual, the more time on the particular job, the greater the earnings. Indeed, each year on the job produces an estimated $810 additional income in this sample. That finding is substantial in this sample because so many of Western's Masters recipients enter the program already in the job they report at our survey, one year after completing the program.

The impact of years on the job on earnings is also important in that it explains a great proportion of the earnings differences across majors (reported in Table 9). Many more education majors than others have held their jobs for long periods, which explains much of their higher salaries. The same holds true of the MBA graduates and the Fine and Performing Arts graduates in our sample. Indeed, after regression analysis statistically adjusts for the impact of that factor and others shown in Table 10, no reliable differences are observed in the earning power of any college/area.[5]

Two findings reported in Table 10 are less usual. First, foreign nationals report earning substantially more than U.S. citizens. We have no specific information concerning why, but two factors are clear. First, the largest proportion of non-U.S. citizens are Canadians, who report their earnings in Canadian currency. Adjusting for currency exchange reduces the differential advantage of non-U.S. citizens by about one-half. Second, the 71 foreign nationals in the sample include eight of the ten highest earners in the sample, all reporting highly unusual salaries for recent graduates at any level. These individuals are statistical "outliers"--cases highly unusual for various unique

[5] With much larger samples, differences might prove reliable, but would in any case by quite small, if the present analysis holds.

reasons. Including them as a separate group within the regression analysis allows for adjustment for their effect on overall earnings.

Second, working relatively full-time during graduate school adds income after graduation. This factor builds on the finding that longer tenure on the job increases later earnings; among those employed for a substantial period, more full-time employment is associated with particularly high earnings. This finding is probably most notable for its implications about the characteristics of many of our Masters students. The population of Masters students is so heterogeneous that we are not comparing students who "have to work their way through college" with those who do not. Instead, we are comparing one life course--finish undergraduate school and go to graduate school after a relatively short period--with an entirely different life course-- become employed, work for a substantial period, then pursue the Masters degree part-time, off-campus if possible, while continuing to work.

Job Satisfaction

The final topic addressed in this report concerns the more subjective aspects of the jobs held by the Masters Class of '93. We asked a series of job satisfaction questions (See Appendix B.) Figure 4 presents the percent who were "very", "mostly," "somewhat," or "not at all" satisfied with their jobs in each respect listed.

Figure 4. Satisfaction with Selected Aspects of Employment, WWU Masters Class of '93

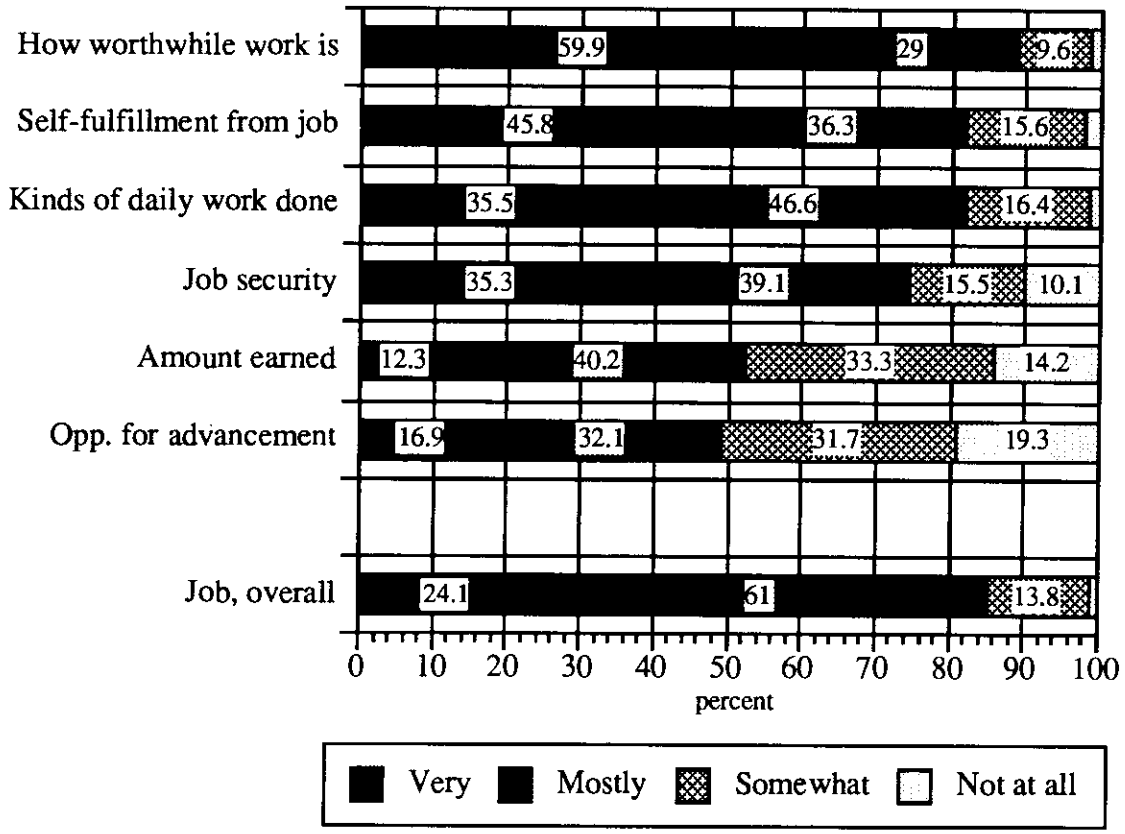


Figure 4 indicates very high job satisfaction with the qualities of jobs that have greatest impact on overall job satisfaction--the feeling that a job is worthwhile--that one is doing something important--and enjoyment of the types of daily work one does. While satisfaction with earnings and opportunities for advancement are lower, overall job satisfaction is quite high among the Masters Class of '93.

Appendix A.
SCHOOLS FROM WHICH UNDERGRADUATE DEGREES WERE RECEIVED, WWU MASTERS CLASS OF '93

GRADUATES IN EDUCATION

Schools in Washington

Pacific Lutheran University
Seattle University
University of Washington
Whitman College

Schools Outside of Washington

California State University, Long Beach
Emory University
Oregon State University
Pennsylvania State University
Simon Fraser University
University of British Columbia
University of Maine at Farmington
University of Montana
University of Notre Dame
University of Oregon
University of Portland
Utah State University
Washington University in St. Louis

GRADUATES IN FIELDS OTHER THAN EDUCATION

Schools In Washington

Evergreen State College
Gonzaga University
Pacific Lutheran University
Seattle Pacific University
University of Puget Sound
Walla Walla College
Whitman College
Whitworth College

Appendix A.
(Continued)

GRADUATES IN FIELDS OTHER THAN EDUCATION

Schools Outside of Washington

Ball State University
Bethany College, Lindsborg, KS
California State University, Chico
East Coast University
Florida State University
Geneva College
Indiana University
Laurentia University
Marlboro College
Minot State University
Montana State University
Oregon State University
Oregon Tech
Pacific Lutheran University
Pepperdine University
Simon Fraser University
South Dakota State University
St. Cloud State University
State University NY-Plattsburgh
Texas A & M University
University of Alaska, Fairbanks
University of Alberta
University of Calgary, Alberta
University of California, Santa Barbara
University of Hawaii at Hilo
University of Montana
University of Nevada, Reno
University of North Carolina-Wilmington
University of Victoria, B.C.
University of Wisconsin-Stevens Point