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ABSTRACT

In Phase I of a study, all students (n=4,488) enrolled in schools in the Minnesota Association of Private Postsecondary Schools (MAPPS) completed a quality assessment instrument to evaluate their school. In Phase II, a sample of 2,000 students who completed the initial assessment were followed up to measure completion, placement, and student satisfaction. The response rate was 40.2 percent. Findings indicated two-thirds of all students had completed their program; completers were more likely to work full time, find jobs related to training, and receive additional training on-the-job and in the classroom; and completers and noncompleters reported relatively low wages. Noncompleters reported lower levels of satisfaction; completers reported much higher levels of satisfaction. Students appeared dissatisfied not with the instructional program but with other school services such as admissions and financial aid. Cosmetology students were most likely to complete the program and find full-time employment. Business students had the lowest completion rate and highest noncompletion rate; they included the largest group of students who remained in school. Eighty percent of cosmetology students and 75 percent of trade/technical students would recommend their school compared to 57 percent of business students. (Appendixes include 11 references; frequencies for all students; norms for business, trade/technical, and cosmetology students; and questionnaire.) (YLB)



Measuring Outcomes:

A Follow-Up of Minnesota Private Career School Students

By:

Richard W. Moore and Edward J. Smith Training Research Corporation

Sponsored By:
Minnesota Association of
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EXECUTIVE SUMMARY

Rackground

In 1987 the Minnesota Legislature committed itself to improving quality assessment in higher education by establishing the Task Force on Postsecondary Quality Assessment. As part of its work the Task Force funded pilot quality assessment projects in each system of higher education. This report presents the results of the second phase of the pilot project for the private career school system. The project was sponsored by the Minnesota Association of Private Postsecondary Schools (MAPPS).

The Task Force on Postsecondary Quality Assessment set two goals for quality assessment: (1) to improve teaching, and (2) to improve accountability to citizens, students and policy makers (Minnesota Higher Education Coordinating Board, 1989). To achieve these goals in the private career school system MAPPS joined with Training Research Corporation (TRC), a nonprofit research institute in Northridge, California. Working with MAPPS, TRC designed a two-phase Quality Assessment Project. In Phase I all students enrolled in MAPPS' schools completed a quality assessment instrument to evaluate their school. In Phase II a sample of the students who completed the initial assessment were followed up to measure completion, placement and student satisfaction.

This report presents the state-wide results of Phase II of the project.



Conclusions

Completing and Dropping Out

Completion rates for Minnesota students compare favorably with national statistics. Two-thirds of all students had completed their program by the time of the follow-up. If only students who left school are considered the placement rate is 81%. This compares with national figures of about 60%.

Completers appeared to be more successful in the labor market than non-completers on several measures. Completers were more likely to work full-time and less likely to work part-time than non-completers. Completers were more likely to find jobs related to training and more likely to receive additional training both on-the-job and in the classroom.

Conversely completers were more likely than non-completers to report that they experienced some unemployment. Non-completers were more likely to report that they had received a pay raise or been promoted. This may be because they had been out in the labor market longer than completers.

Both groups reported relatively low wages, with half the students earning \$1,224 per month or less.

Student Satisfaction 1990

Compared to the in-school survey, students report lower levels of satisfaction, although when asked if they would recommend the school to a friend, the majority said yes.

Decreased student satisfaction fits with other research that shows student satisfaction is a second student satisfaction.

Decreased student satisfaction fits with other research that shows student satisfaction declines the longer students are enrolled.

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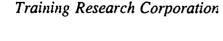
Not surprising, students who completed reported much higher levels of satisfaction than non-completers. Seventy-three percent of completers reported that they would recommend their school to a friend compared to only 47% of non-completers.

The source of dissatisfaction did not appear to be the instructional program, which still received relatively high ratings. Rather, students appeared to be dissatisfied with other school services such as admissions and financial aid. One area that had particularly low levels of satisfaction was placement services, particularly "job leads" and "placement counseling", where less than 40% of the students reported they were satisfied. This is particularly troubling since a schools' reputation for job training was a major reason many students choose their school. These data suggests that schools are raising expectations for placement that are not being met, although it is important to note that most program completers find employment and rate their jobs as highly related to their training. The dissatisfaction reported here may reflect some increased difficulty students encountered finding jobs during recessionary economic conditions.

An analysis of satisfied and dissatisfied students found that dissatisfied students tended to be younger and had come to their school directly out of high school. Conversely, satisfied students tended to be older and more likely to have attended another post-secondary institution. These differences indicated that older student may have different, perhaps more realistic, expectations than younger students.

Differences Among School Types

This analysis revealed several important differences among the business,



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trade/technical and cosmetology schools. Cosmetology students were most likely to complete and find full-time employment. Cosmetology students were also the most likely to report that they had received additional training. It is important to note, however, that the sample of cosmetology students was small and came from only a few schools, and it may not be representative of the many cosmetology schools that did not participate in the project.

Business students had the lowest completion rate, the highest non-completion rate and contained the largest group of students who remained in school. Once in the labor market they were the least likely to work full-time and the most likely to work part-time or be self-employed. Business students were less likely than other groups to report that they had received additional training and more likely to report that they had experienced some unemployment. In part, this pattern for business students may be due to the fact that over 20% were still enrolled at the time of the survey.

Patterns for trade technical students fell between the cosmetology and business students on most of these measures.

Differences between types of schools on student satisfaction were dramatic. Eighty percent of cosmetology students and 75% of trade/technical schools would recommend their school to a friend, compared to only 57% of business students. These differences may reflect differences in the outcome measures. Cosmetology students who would most likely find full-time employment were also most likely to report they would recommend their school to a friend. Conversely, business students, who were least likely to find full-time jobs and most likely to still be enrolled, were least likely to report they would recommend their school to a friend. Responses of trade/technical students once again fell between these two groups.



I. INTRODUCTION

Background

In 1987 the Minnesota State Legislature committed itself to improving quality assessment in higher education by establishing the Task Force on Postsecondary Quality Assessment. As part of its work, the Task Force funded pilot quality assessment projects in each system of higher education. This report presents the results of the second phase of the pilot project for the private career school system. The project was sponsored by the Minnesota Association of Private Postsecondary Schools (MAPPS).

The Task Force on Postsecondary Quality Assessment set two goals for quality assessment: (1) improvement of teaching, and (2) accountability to citizens, students and policy makers (Minnesota Higher Education Coordinating Board, 1989). To achieve these goals in the private career school system, MAPPS joined with Training Research Corporation (TRC), a nonprofit research institute in Northridge, California. Working with MAPPS, TRC designed a two-phase Quality Assessment Project. In Phase I, all students enrolled in MAPPS' schools completed a quality assessment instrument to evaluate their school. In Phase II a sample of students who completed the initial assessment were followed up to measure completion, placement and student satisfaction.

The MAPPS/TRC team set six objectives for the project:

1. Provide each private career school with an objective assessment of how its students evaluate its performance.



- 2. Provide each school with a complete objective picture of its students' demographic characteristics and previous educational experiences.
- 3. Provide each school with objective information on how well its students do in the labor market after leaving school, as well as data on why some students do not complete their program.
- 4. Provide each school with a set of state-wide norms for private career schools against which a school can compare its own data, and see its performance in perspective.
- 5. Provide each school with a method for using data provided by the system to improve its school.
- 6. Produce state-wide reports describing the characteristics of students in private career schools, their assessment of the schools they attended and their experience in the labor market.

In May 1990 MAPPS' schools received school Phase I reports, which gave them complete data on their students' assessment of the school, and normative data against which to compare their school. Each report included a manual and worksheets that helped the staff at each school translate the data into program improvements. School administrators attended a workshop sponsored by MAPPS and TRC where administrators analyzed their school's data and developed action plans for program improvement.

In December 1991, participating schools received Phase II reports, which also included a manual and worksheets to help administrators analyze their former students responses and compare their school to state-wide norms.

Purpose of This Report

This report presents state-wide data from the Phase II follow-up survey of proprietary school students, and provides the general public and policy makers with objective data on training outcomes and the quality of private career schools in Minnesota.



II. METHODS AND REPORTS

In this section we discuss the research methods used in Phase II of the assessment, describe the content of the school-level reports that each participating school received, and explain the organization of results reported in this document.

Research Method

In their review of quality assessment in higher education, Rossman and El-Khawas (1987) note that student evaluations and employment information can provide valuable insights into an institution's strengths and weaknesses. An additional advantage of using student evaluations and a follow-up survey in the case of MAPPS was that the low cost of administering these instruments allowed the project to include all 24 of 26 MAPPS schools willing to participate, and thus generate a comprehensive evaluation of the entire sector.

The method employed in this quality assessment is based on three assumptions. First, that students attending private career schools are capable of making a valid evaluation of the training they receive. Second, that the program completion and labor market success of a school's graduates are valid indicators of the school's quality. Finally, that a quality assessment system must collect uniform data on all private career schools to create a valid standard against which to measure performance.

In addition to these assumptions, MAPPS wanted a comprehensive assessment of private career schools that could provide valid state-wide data on the characteristics and quality of the system in order to inform the public and provide an objective basis for policy making.



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Sample

There are 26 MAPPS schools serving over 10,000 student annually; 24 of the schools participated in the project. MAPPS schools represent approximately 70% of the accredited private career schools enrollment in Minnesota, so this study represents a large majority of the state's private career schools and students. While no data were collected on non-participating schools, a review of school names shows that a large proportion of the non-MAPPS schools were cosmetology schools and a number of others were test preparation schools.

All MAPPS schools are accredited by at least one of the major national accrediting bodies that accredit private career schools, including: Accrediting Commission of Independent Colleges and Schools (ACICS), Accrediting Commission of Trade and Technical Schools (ACTTS), or the National Accrediting Commission of Cosmetology Arts and Sciences (NACCAS).

In Phase I of the project, 4,488 students were surveyed with structured questionnaires that they completed while in school. The Phase II follow-up stratified students by school and randomly selected 2,000 students from the original sample. Table 1 shows the breakdown of the Phase I respondents by type of school, the number sampled for Phase II, and Phase II response rate. While the response rate varied slightly among the different types of schools, the overall response rate of 40.2% represents an excellent response rate for a mail survey with no follow-up.



	TA	ABLE 1		
Sample and Response Rate for Phase II By Type of Schools				
	ACICS	ACTTS	NACCAS	Total
Number of Schools	9	9	6	24
Phase I Respondents	1,561	2,557	370	4,488
Phase II Sample	700	1,140	60	804
Phase II Response Rate	42.4%	39.2%	37.5%	40.2%

Instrument Development

In conjunction with MAPPS, TRC developed a questionnaire (see Appendix E) designed to be mailed to sampled students. The questionnaire gathered data on: programmatic outcomes (whether a student graduated, left or remained in school), labor market outcomes (employment and earnings), work experience (promotions, additional training, unemployment), student evaluations on the school they attended (replicating the same survey item used earlier in Phase I) and student ratings on personal development items (i.e., how better off they considered themselves currently compared to when they enrolled in school).

Data Collection

Questionnaires were mailed to sampled students in May 1991. Responses were



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returned to TRC over the following 90-day period. Due to budget constraints, no follow up was done. Undeliverable questionnaires were replaced with randomly selected subjects from the same school.

Analysis

Data from the Phase II questionnaire was merged with data from the Phase I questionnaire for analysis. The merged data base was analyzed using the SAS statistical package on the mainframe computer at the University of California, Los Angeles (UCLA). The first analysis created school level reports described below. The second analysis, using frequencies, descriptive statistics, cross-tabulations and chi-square analysis produced the results that are described in this report.

School Level Reports

The school reports were delivered to the schools in December 1991. The reports included a guide to help school managers analyze their data. The reports included three separate analyses. The first provided simple frequencies on how a school's student responded. The second provided frequencies for all students enrolled in schools with the same accreditation for the purpose of allowing similar school types to compare its students to the norm. The third report compared subgroups of students with each other; specifically, it compared those students who would recommend their school to friends to those who would not, and students who completed, remained enrolled and left the program with each other.

Remaining sections of this report describe the results of the follow-up (Section III) and outline the report's conclusions (Section IV). Several appendices provide more detailed data on the survey's results by type of schools and by outcome.



III. RESULTS

A. Program Outcomes

The key program outcomes were whether or not students completed the program, and if they did not complete, what became of them a year later: Were they still enrolled? did they transfer to another school? take a leave of absence? or withdraw?

Figure 1 shows that 66% of the respondents had completed their program, 19% were still enrolled and only 9% had withdrawn. Much smaller groups transferred to another school (3%), or took leaves of absence (3%). Looking at these data from another angle, if the percent of students (19%) who remained enrolled were removed from the calculation and one looked only at those students who left school, then the results would read as follows: 81% of the students graduated, 11% withdrew, 4% transferred and 4% took a leave of absence (see Figure 2).

These results compare favorably with a recent national study on proprietary school students who graduated from high school in 1980, which also reported a 66% completion rate (Lyke, Gabe and Aleman, 1991).

Figure 3 shows that the results varied dramatically by type of school: cosmetology students were most likely to have completed their program (92%), followed by trade/technical students (71%) and business students (54%). In part, these rates varied because many more business and trade/technical students (24% and 18% respectively) still remained enrolled in school. As Figure 3 also shows, fewer cosmetology students (8%) left school without completing compared to 11% of trade/technical school students and 22% of business school students.



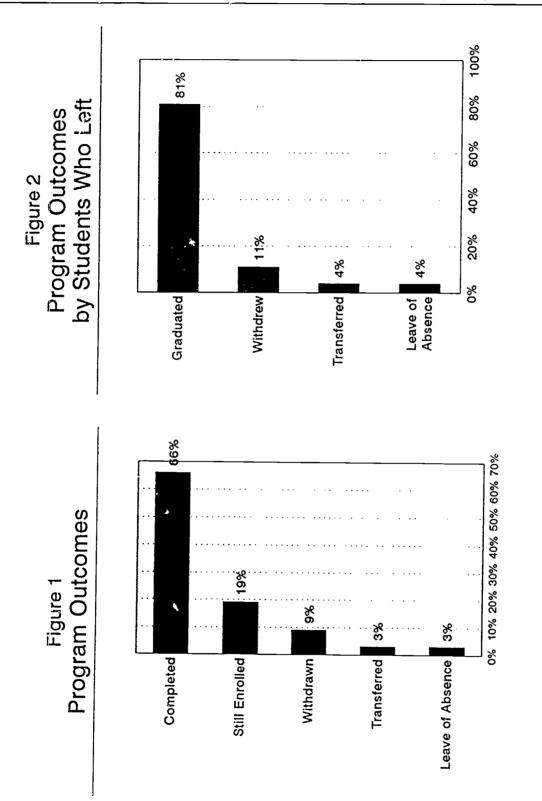




Figure 4
Employment Outcomes
By School Type

Full-Time Employed 2%
Self Employed 2%
Not Employed 2%

Not Employed 17%

Not Employed 17%

Not Employed 2%

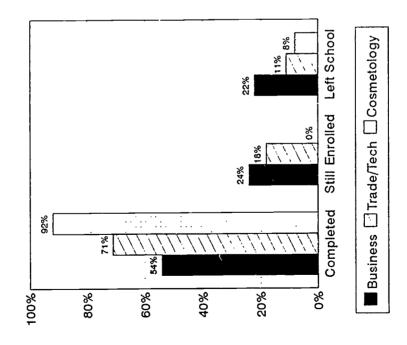
Solf Employed 17%

Not Employed 10%

Solf Employed 10%

Trade/Tech Cosmetology

Figure 3
Program Outcomes
By School Type



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B. Employment Outcomes

Employment outcomes were the second of the outcomes that were examined. Specifically, the questionnaire asked students if they were employed full-time, part-time, self-employed or not employed at all. Further, it asked about their typical monthly earnings, how their current job was related to their training, and whether or not they obtained any license that was required by the occupation in which they were trained.

Figure 4 shows employment outcomes by school type. More cosmetology students were employed full-time than business and trade/technical students; the opposite pattern was true for those students not employed (i.e., more business students were unemployed than other students).

Table 2 on the next page shows more specific employment outcomes by student status (i.e., did they graduate? withdraw? etc.). Overall about two-thirds (67%) of the respondents worked full-time, 17% worked part-time, 14% were unemployed, and 2% were self employed. Monthly earnings were relatively low, with 63% of the students earning a maximum of \$1,224 per month. This is not surprising since most respondents had just graduated and had little time to build up seniority or to gain additional skills. In addition, many respondents were still in school.

When asked to indicate how related their training was to their current job on a one-to-ten scale (one being unrelated, ten being totally related), Table 2 shows that the average score was 6.1. About a third of those who said their occupation required a license had obtained it. There appeared, however, to be some confusion about this item, as many respondents in unlicensed occupations responded that they had not obtained a license.



TABLE 2

EMPLOYMENT OUTCOMES
BY STATUS
(in percent)

	Graduated	Still Enrolled	Withdrew	Transferred	Leave of Absence	Overall
	(N=514)	(N=147)	(N=72)	(N=25)	(N=20)	
Employed	,	(= : = = :)	((11-20)	(14-20)	
T 11 .*						
Full-time	74%	44%	71%	44%	45%	67%
Part-time	13	29	18	32	5	17
Self-Employed	3	1	3	4	5	2
Not Employed	10	26	8	20	45	14
Monthly Earnings						
<625	15	25	17	44	1.5	22
\$625-924	20	16	19	4	15	22
\$925-1,224	18	5	21	4	10	23
\$1,225-1,524	15	5	15	8	10	18
\$1,525-1,824	10	6	8	8	5	15
\$1,825-2,124	5	8	7	8	0	10
\$2,125-2,424	2	4	1		0	7
\$2,425 +	2	1	3	0	0	3
Missing/	13	30	9	0	5	2
No Response	13	50	9	24	55	
Avg Related Score						
(10 point Scale)	6.4	2.2	2.5			
(10 point scale)	0.4	2.2	2.7	2.1	1.9	6.1
% Obtained	46	NA	5	9	0	31
Required License/					ŭ	31
Certificate						
if Required						
·						

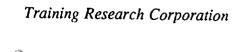






Table 2 also shows employment outcome by program outcome. Not surprisingly, when you look at the outcomes for people who completed they are substantially different from the population as whole.

The most interesting comparison is between those who graduated and those who withe w. Completers were slightly more likely to work full-time and less likely to work part-time. Surprisingly, completers were slightly more likely to be unemployed, possibly because many were still searching for their first job at the time of the survey. Overall there were few differences in earnings between the two groups. Those who withdrew were slightly more likely to report they were in the lowest income category, earning less than \$625 per month.

One dramatic difference that did emerge is that completers were far more likely to report their current job was related to their training, 6.4 average compared to only 2.7 for those who withdrew.

C. Work Experience

The questionnaire also gathered data on the respondents' work experience once they were out of school. We were particularly interested in whether or not respondents had advanced on the job, if the respondents had experienced unemployment or had received additional job related training.

Figure 5 shows that about one in five respondents had been promoted during the follow-up period. Almost half had received a pay raise. About three out ten had experienced some period of unemployment. Over one-third of the respondents reported that they had



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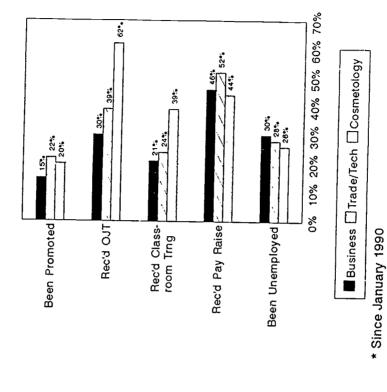
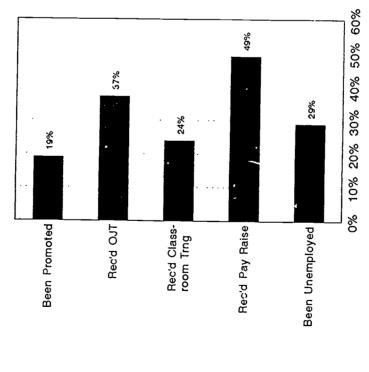


Figure 5 Work Experience *



* Since January 1990





received on-the-job training, and about a quarter had received job related classroom training.

This pattern varies depending on the type of school attended, as indicated in Figure 6. Respondents from trade/technical schools were most likely to have received a pay raise and been promoted; moreover, they were more likely than respondents from business schools but less likely than respondents from cosmetology to have received on-the-job training, classroom training, or been unemployed.

Respondents who attended business schools had experiences similar to trade/technical respondents, although they were slightly less likely to have been promoted, received a pay raise, or received on-the-job or classroom training. They were slightly more likely to have experienced unemployment.

Respondents from cosmetology schools reported a different pattern. These respondents were far more likely to report that they had received on-the-job training, and classroom training. They were slightly less likely to have received a pay raise, or to have been unemployed.

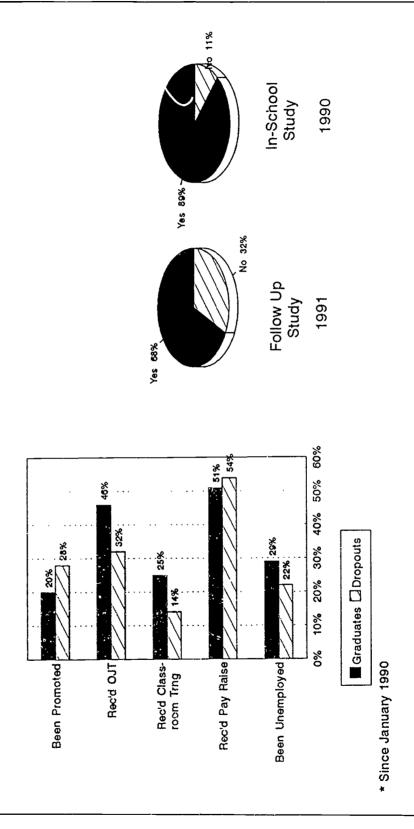
Another comparison that provides some interesting insights is a comparison of the experiences of respondents who graduated and withdrew. Figure 7 indicates that graduates did worse economically immediately after leaving school than dropouts. Respondents who graduated were less likely to have been promoted or to have received a pay raise. This may be because dropouts had been in the labor market longer and thus had longer to receive a promotion or a raise. Conversely, graduates were slightly more likely to have experienced some unemployment. However, graduates were far more likely to receive both on-the-job and



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Figure 7
Work Experience *
Graduates vs. Dropouts

Figure 8
Would Recommend School
To A Friend



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classroom training. These results indicate that employers are more willing to invest in graduates than in dropouts. Thus employers may be more likely to promote and give pay raises to graduates over time.

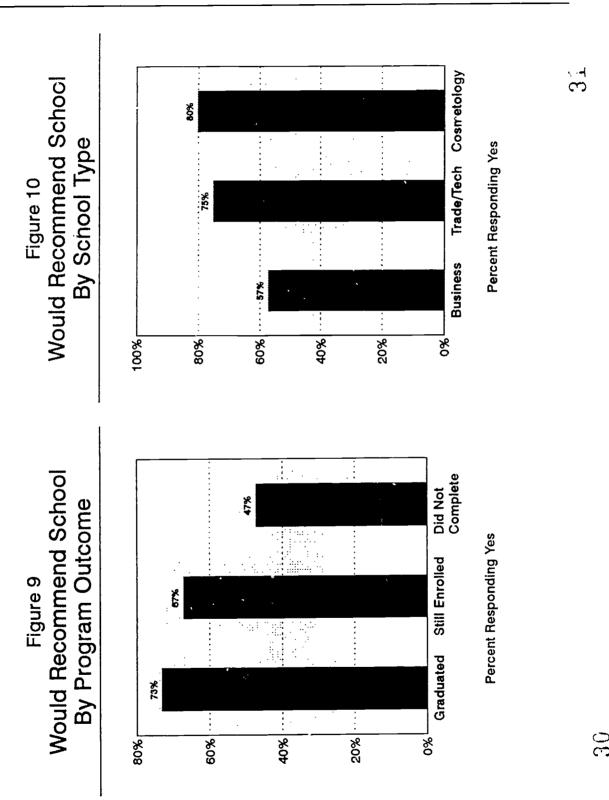
D. Student Satisfaction

Figure 8 shows that overall two thirds of the respondents would recommend their school to a friend, indicating that most respondents were satisfied with their overall experience. It should be noted however that this proportion is substantially lower than the responses to the previous in-school survey, conducted as part of this project, in which 90% of the students reported they would recommend the school to a friend. This decline in satisfaction, however, is consistent with other research that shows similar patterns as students approach graduation.

Figure 9 shows how respondents' willingness to recommend their school varied with their program status. Not surprisingly, respondents who completed their program were far more likely to recommend it than those who failed to complete. Respondents who remained enrolled fell somewhere in the middle.

Figure 10 shows that there were substantial differences between the three types of students. Cosmetology students were most likely to say they would recommend the school to a friend (80%); trade/technical students were next (75%); business students were far less likely to recommend their school to a friend (57%). The reason for this pattern is unclear. It may be that business schools enroll many younger students who are more likely to be satisfied. Or, it may be that business schools raise expectations that they then fail to meet.







Figures 11 and 12 show how the respondents rated various aspects of the school.

Respondents were asked to rate each of these aspects as "excellent," "good," "fair" or "poor."

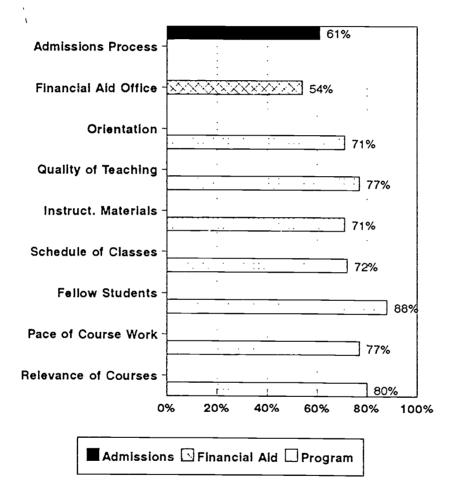
If a respondent rated an item "excellent" or "good" they were categorized as satisfied. If they rated it "fair" or "poor" they were categorized as dissatisfied. Figures 10 and 11 show the percent of respondents categorized as satisfied on each aspect. As a general rule of thumb we have found that items on which 70% of the respondents are satisfied are successful elements of the school; items on which less than 70% of the students rate as satisfied are problematic and warrant investigation.

The results show that student were most satisfied with the instructional program they received, including such particular items as the "quality of teaching" (77%), pace of course work (77%) and fellow students (88%).

They were less satisfied with the quality of services they receive from admissions and financial aid. In addition, respondents also gave lower ratings to quality of facilities. One particular problem area that stood out here was "computer equipment," an item that reflected only a 50% satisfaction rating.



Figure 11 Follow Up Evaluation of Admissions, Financial Aid & Course of Study *



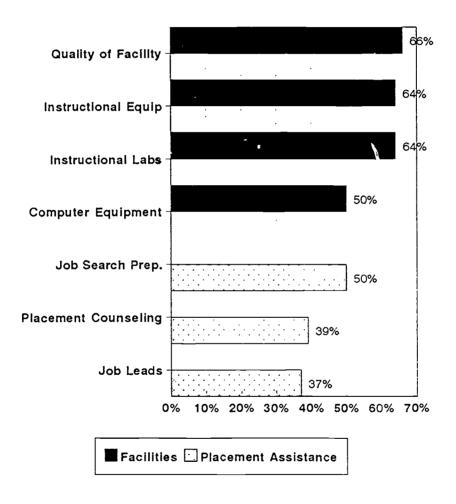
^{*} Percent Responding Good or Excellent



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Figure 12
Follow Up Evaluation of School
Facilities & Job Placement Assistance *



^{*} Percent Responding Good or Excellent



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The placement assistance area received the lowest rating. Only 50% of the respondents were satisfied with job search preparation, 39% were satisfied with placement counseling and 37% were satisfied with job leads. This area is a particular concern, since most students choose a school because of its reputation for job placement. These relatively low ratings may reflect the difficulty students encountered finding related employment during a recession.

Again these levels of satisfaction are substantially lower than those reported in the inschool survey conducted in 1990. The reasons behind these ratings are unclear. (Complete breakdowns for each type of school are included in Appendices B, C and D.)

Another way to analyze the satisfaction of former students is to compare those who would recommend the school to a friend with those who would not. Table 3 shows that those who would recommend their school tended to be older, married people, with some college experience before enrolling and have a personal income over \$12,000 while attending. They were more likely to be independent for financial aid purposes and seeking training because they were unemployed. After leaving school, they were more likely to be self-employed.

Conversely, former students who would not recommend their school tended to be younger, single, hold only a high school education, and have a personal income of less than \$12,000. They were more likely to be dependent for financial aid purposes, and seeking training because they had just graduated from high school. After leaving school they are more likely to be employed part-time or be unemployed.



TABLE 3

PROFILE OF STUDENTS WHO WOULD AND WOULD NOT RECOMMEND SCHOOL TO A FRIEND

	WOULD	WOULD NOT
Age	25+	<25
Gender		
Marital	Married	Single
Education	Some College Assoc. Degrees	H.S. Ed
Personal Income	Over \$12,000	<\$12,000
Family Income		
Financial Aid	Independent	Dependent
Working While Attending School	****	
Attending Other School		
Reason Seeking	Unemployed	Just graduated H.S.
Training	Returning to work after family Military Personal Injury Need Skills to Advance	
Employment	Self-Employed	Part-time



TABLE 4

Students Reporting "Much Stronger" Skills and Abilities: Comparison of Minnesota Proprietary School Students & Students of Public Two-Year Colleges (in percent)

	Minnesota Proprietary Students	Public Two-Year Students
General Knowledge	30%	23%
Analytical & Problem Solving Skills	18	12
Knowledge of particular field or discipline	40	34
Ability to speak & write clearly	14	15 (write) 19 (speak)
Leadership ability	15	10
Ability to work independently	27	27
Interpersonal Skills	18	22
Cultural Awareness and appreciation	12	13
Tolerance of persons with different beliefs	13	19



Developmental Outcomes for Minnesota Proprietary Schools

While most proprietary school claims, as well as most criticism, focus on labor market outcomes, it is important to note that many proprietary schools also claim to provide their students with powerful experiences that help them develop as individuals. Many proprietary school operators boast of being "last chance institutions" that are able to train and motivate students who failed at other public institutions. They claim that their instructional approaches build students' self esteem and give them the confidence they need to succeed in a competitive work place.

We tested this claim for the students who were enrolled in 1990. A national follow-up survey of college students regularly asks students to assess their personal development by comparing how they perceived themselves before the time they enrolled with their current state. We asked the proprietary school students in our survey an identical item. Students were asked to describe whether they were now "much stronger," "stronger," "no change," "weaker," or "much weaker" than when they enrolled. The results (Table 4) compare the percent of Minnesota proprietary students who said much stronger with the national norms for public two year college students (Wingard, Dey, and Korn, 1991).

This analysis is subject to some obvious limits. The proprietary data are from Minnesota students only, who may differ significantly from a national population of proprietary school students, while the public two year college students are a national group. The proprietary population includes only vocational students, while the public two year group includes both academic and vocational students.



With these reservations in mind, the data indicates that Minnesota proprietary students are more likely to report being "much stronger" in areas related to cognitive development such as "general knowledge," "analytical and problem solving skills," and "knowledge of a particular field or discipline." This is interesting considering the greater emphasis public two year colleges put on general education. Public students are more likely to report that they are "much stronger" than proprietary schools in the areas "interpersonal skills" and "tolerance of persons with different beliefs." Proprietaries reported more development in the area of "leadership ability."

These results would seem to indicate that proprietary school students do experience substantial personal development that goes beyond the vocational training they get while enrolled. They report changes in cognitive development equivalent or better than public two year colleges students nationally. However, they report less development in the area of intercultural relations.



IV. CONCLUSIONS

Completing and Dropping Out

Completion rates for Minnesota students compare favorably with national statistics.

Two-thirds of all students had completed their program by the time of the follow-up. If only students who left school are considered the placement rate is 81%. This compares with national figures of about 60%.

Completers appear to be more successful in the labor market than non-completers on several measures. Completers are more likely to work full-time and less likely to work part-time than non-completers. Completers are more likely to find jobs related to training and more likely to receive additional training on-the-job or in the classroom. This all indicates that employers are more willing to invest in completers, which should ultimately lead to higher earnings for the completers.

Conversely, completers are more likely than non-completers to report that they experience some unemployment. Non-completers were more likely to report that they had received a pay raise or been promoted. This may be because they have been out in the labor market longer than completers.

Both groups report relatively low wages, with half the students earning \$1,224 per month or less.

Student Satisfaction

Students report lower levels of satisfaction than in the in-school survey, although most respondents would recommend their school to a friend. This fits with other research that



shows student satisfaction declines the longer students are enrolled.

Not surprising, students who completed reported much higher levels of satisfaction than non-completers. Seventy-three percent of completers reported that they would recommend their school to a friend compared to only 47% of non-completers.

The source of dissatisfaction does not appear to be the instructional program which still received relatively high ratings. Rather students appear to be dissatisfied with other school ervices such as admissions and financial aid. One area that had particularly low levels or satisfaction was placement services, particularly "job leads" and "placement counseling" where less than 40% of the students reported they were satisfied. This is particularly troubling since a schools reputation for job training was major reason many student choose their school. This data suggests that schools are raising expectations for placement that are not being met, although it is important to note that most program completers find employment and rate their jobs as highly related to their training. The dissatisfaction reported here may reflect increased difficulty students encountered finding jobs during the recession.

An analysis of satisfied and dissatisfied students found that dissatisfied student tended to be younger students who had come to their school directly out of high school. Conversely, satisfied students tended to be older and more likely to have attended another post-secondary institution. These differences indicate that older student may have different, perhaps more realistic, expectations than younger students.



Differences Among School Types

This analysis revealed several important differences among the business, trade/technical and cosmetology schools. Cosmetology students were most likely to complete and find full-time employment. Cosmetology students were also the most likely to report that they had received additional training. Although, is important to note the sample of cosmetology students was small and came from only a few schools which may not be representative of the many cosmetology schools that did not participate in the project.

Business students had the lowest completion rate, the highest non-completion rate and the largest group of students who remained in school. Once in the labor market, they were the least likely to work full-time and the most likely work part-time or be self-employed. Business students were less likely than other groups to report that they had received additional training and more likely to report that they had experienced some unemployment. In part, this pattern for business students may be due to the fact that over 20% were still enrolled at the time of the survey.

Trade technical students fell between the cosmetology and business students on most of these measures.

Differences between types of schools on student satisfaction were dramatic. Eighty percent of cosmetology students and 75% of trade/technical schools would recommend their school to a friend, compared to only 57% of business students. These differences may reflect differences in the outcome measures. Cosmetology students who would most likely find full-time employment were also most likely to report they would recommend their school to a



friend. Conversely, business students, who were least likely to find full-time jobs and most likely to still be enrolled, were least likely to report they would recommend their school to a friend. Trade/technical students once again fell between these two groups.



REFERENCES

- Bowdin, W.L. (1981) Profit and non-profit institutions: acrimony or accommodation. Continuing Higher Education, 29, 2-8.
- Carnegie Foundation (1987) Career schools: an overview. Change. January/February, 29-34.
- Lyke, Robert, Gabe, Thomas, and Aleman, Steven R. (1991) <u>Early labor market</u>
 <u>experiences of proprietary school students</u>. Washington, D.C.: Congressional
 Research Service, Education and Public Welfare Division.
- Minnesota Higher Education Coordinating Board (1989) Report of the task force on postsecondary quality assessment. St. Paul, MN.
- Moore, R.W. and Smith E.J. (1988) New York State proprietary schools: an overview. Santa Monica, CA: Training Research Corporation.
- Moore, R.W. and Smith E.J. (1989) Maryland's private career schools: a resource for training and economic growth. Santa Monica, CA: Training Research Corporation.
- Moore, R.W. (1991) Proprietary Schools. <u>AERA Encyclopedia of Educational Research</u>, NY: MacMillian.
- Rossman, J.E. El-Khawas, E. (1987) <u>Thinking about assessment: perspectives for presidents and chief academic officers.</u> Washington, D.C.: American Council on Education and the American Association for Higher Education.
- Sango-Jordon, M. (1989) Positive educational and employment outcomes for private career school attenders: findings of the outcomes comparison research project from high and beyond senior cohort data. Washington, D.C.: Career Training Foundation.
- Wilms, W.W. (1987) Strangers in their own land? Change, January/ February, 10-21.
- Wingard, Tamara L., Dey, Eric L. and Korn, William S. (1991) The American college student 1990: national norms for 1986 and 1988 college freshman. Los Angeles: Higher Education Research Institute, University of California, Los Angeles.



Appendix A:

Frequencies for All Students



Student Follow-Up Questionnaire, 1991 Questionnaire Items

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Graduated from Program

CUMULATIVE PERCENT	34.1
CUMULATIV FREQUENC	266 780
MF1A FREQUENCY PERCENT	266 514
MF 1A	No Yes

Enrolled at Another Institution

MF 1A1	FREQUENCY	PERCENT	CUMULAT IVE FREQUENCY	CUMULATIVE PERCENT
No Response	737	•		
Yes	43	100.0	443	100.0

Why Enrolled at Another Institution?

CUMULATIVE PERCENT	22.0 100.0
CUMULAT IVE FREQUENCY	6 41
PERCENT	22.0 78.0
REQUENCY	739
MF 1A2	

Remained Enrolled in Same School

Student Follow-Up Questionnaire, 1991 Questionnaire Items

Overall

Transferred to Another Institution

1 V E	8.0
CUMUL AT I VE P ERCENT	 96 100
ULATI EQUEN	755
٩	96.8
FREQUENCY	
MF 1C	No Yes

Reason Transferred

IVE CUMULATIVE NCY PERCENT	6 25.0 7 29.2 10 41.7 17 70.8 22 91.7 24 100.0
CUMUL AT I VE FREQUENCY	
PERCENT	25.5 20.2 20.2 80.8
FREQUENCY	756 1 1 2 2 2
MF 1CA	No Response Changed Career Did Not Fit Not Challenged Atmosphere Lower Cost Not Doing Well

Withdrawn

CUMULATIVE PERCENT	100
FIVE	708
CUMULAT	90.8
EQUENCY	708 72
MF 1D FR	No Yes

Why Withdrawn

MF 1DA	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMUL AT I VE P ERCENT
No Response	607	1 	, 	
Changed Career		٦, ٦	• •	. 4
Good Job Offer	· «	7.	- 6	0.00
Personal Probs	10	10.2	- ~	0.02
Financial Probs	2		ט ני	7.0.7
Not Doing Well	?~	, , , «	, r	0.4.6
Not upto Expect	16	22.5	?:	100.0

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Student Follow-Up Questionnaire, 1991 Questionnaire Items

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS

Taken A Leave of Absence

CUMULATIVE PERCENT	97.4 100.0
CUMULATIVE FREQUENCY	780
QUENCY PERCENT	97.4
FREQUENCY	760 20
MF 1E	No Yes

Currently Employed

MF 2	FREQUENCY	PERCENT	AT 1	CUMULATIVE PERCENT
No Response Full Time Part Time Self-Employed Not Employed	516 130 19 108	66.8 16.8 14.0	516 646 665 773	66.8 83.6 86.0

How Many Jobs since Left College

CUMULATIVE PERCENT	62.7 89.0	97.2 100.0
CUMULATIVE FREQUENCY	377 535	584 601
PERCENT	62.	80 80 80
FREQUENCY	179 377 158	17
\$! \$! !	No Response	4 Or More



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MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS
Student Follow-Up Questionnaire, 1991
Questionnaire Items

Overall

Before Tax Monthly Earnings

MF 4	FREQUENCY	PERCENT	CUMULATIVE FREQIFINCY	CUMULATIVE PERCENT
No Response	137	i ! ! ! ! !		
< \$625	138	21.5	138	r.
\$625 - \$924	146	22.7	280) c
8925 - \$1,224	117	18.	101) .
S1.	80	10.07	000	77.7
S1	2 2	, ,	ν η η	0.1.0
, co	0 4	2.0	200	6.78
101 100 101 101	τ. 	0.	610	6.46
7 7 7	61	3.0	659	97.8
32,423 Ur More	14	2.2	643	100.0

How Related Program to Employment

MF5	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
Respo	0.3			
+	165	24.0	165	• 16
-	18	2.6	183	26.6
2	50	2.9	203	20.00
m.	34	6.4	237	25.7. 20.7.
寸 :	30	7.7	267	0.00
ر ر	38	5.5	305	7.77
10	19	2.8	324	47.2
•	45	6.1	366	53.3
x 0 (53	7.7	419	61.0
5	847	7.0	194	68.0
lotally Related	220	32.0	687	100

Grade Average in 1990

CUMULATIVE PERCENT	44.0 93.3 99.7 100.0
CUMULATIVE FREQUENCY	340 720 770 772
PERCENT	44 49.2 6.5 6.5
FREQUENCY	340 340 50 50 50
MF 6	No Response A Or 4 B Or 3 C Or 2 < C Or 2



MinnESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

Over 811

Either Parent Self-Employed

CUMULAT:VE PERCENT	27:5 100:0
CUMULATIVE FREQUENCY	208 757
PERCENT	27.5
FREQUENCY	23 208 549
MF7	No Response Yes No

Changed Employers

CUMUL AT I VE PERCENT	62.9 100.0
35 E	491 780
PERCENT	62.
UENCY	491 289
MF8_1 FREC	No Yes

Been Promoted

CUMULAT I VE PERCENT	81.3 100.0
CUMULATIVE FREQUENCY]
PERCENT	81.3
8_2 FREQUENCY	634 146
MF8_2	No Yes

Changed Jobs with Same Employer

당•	88.3 100.0
JMULATIV FREQUENC	689 780
PERCENT	88. 11.
8_3 FREQUENCY	689 91
MF8_3	Yes



MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

Overal1

Changed Industry

CUMULAT I VE PERCENT	86.8 100.0
CUMULATIVE FREQUENCY	677 779 780
Y PERCENT	
EQUENC	677 103
MF8_4 FRI	No Yes

Received On-The-Job Training

> 4.	62.6 100.0
ш >- 1	488 780
PERCENT	62.6 37.4
FREQUENCY	
MF8_5	

Received Classroom Training

CUMULATIVE PERCENT	75.9
CUMULAT I VE FREQUENCY	592 780
PERCENT	75.9 24.1
FREQUENCY	592 188
MF8_6	No Yes

Received a Pay Raise

	50.9
NCY NCY	397 780
Z i	50.9 49.1
FREQUENCY	3~
MF8_7	No Yes

Been Unemployed

ပ	71.0
ш>-	554 780
PERCENT	7
FREQUENCY	554 226
MF8_8	No Yes



MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

Overal!

Obtained License or Certification

CUMULATIVE PERCENT	30.5
CUMULATIVE FREQUENCY	168 551
PERCENT	30.5 69.5
FREQUENCY	229 168 383
MF9	No Response Yes No

Enrolled in Day/Evening Program

CUMULATIVE PERCENT	76.7 100.0
CUMULATIVE FREQUENCY	58 ⁴ 761
PERCENT	76.7
FREQUENCY	
MF 10	No Response Day Evening

Admissions: Completeness and Accuracy

CUMU	13.4 39.6 81.5 100.0
CUMULATIVE FREQUENCY	11 104 307 632 775
PERCENT	12.0 26.2 41.9 18.5
FREQUENCY	203 203 325 143
MF11A1	No Response NA Poor Fair Good Excellent

Financial Aid: Helpfulness

CUMULATIVE PERCENT	13.7 26.5 46.1 73.8 100.0
CUMULAT I VE FREQUENCY	106 205 357 572 775
PERCENT	13.7 12.8 19.6 27.7 26.2
FREQUENCY	106 99 152 215 203
MF 1182	No Response NA Poor Fair Good Excellent

Student Follow-Up Questionnaire, 1991 Questionnaire Items

Overall

Program: Orientation

MF 11C3	FREQUENCY	۵.	QUE	CUMULATIVE PERCENT
No Response				*
	7		•	•
ΨZ.	22	8.8	22	α
Poor	76) () .) ·
	07	0.0	87	6.2
rair	176	25.6	727	αας
Good	403	ν α	100	
	9	0:-1	170	80.0
Excellent	151	19.4	778	100.0

Program: Quality of Teaching

Response	FREQUENCY 3	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
Poor Fair Good Excellent	34 149 369 224	19.2 17.2 17.2 18.3 18.3	35 184 553 777	23.7 71.2 100.0

Program: Quality of Materials

T I VE	2-20 !
CUMULAT I VE PERCENT	29.1 29.1 79.9 100.0
SE SE	; 58 226 620 620
PERCENT	0.1 7.3 20.8 50.8
FREQUENCY	168 168 1984 156
MF11C5	No Response NA Poor Fair Good Excellent



MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

Overail

Program: Scheduling of Classes

MF 11C6	FREQUENCY	PERCENT	₽₽ OF	$\supset \simeq$
No Response	۳.		1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
VA	. —	0.1		
Poor	64	6.3	20	77.9
Fair	164	21.1	214	27.5
Cood	367	47.2	581	74.8
Excellent	196	25.2	777	100.0

Program: Interaction with Students

CUMULA	0.1 1.8 12.1 54.1 100.0
CUMULAT IVE FREQUENCY	1 14 94 420 776
PERCENT	0.1 10.3 42.0 45.9
FREQUENCY	
MF11C7	o

Program: Pace of Course Work

CUMULATIVE PERCENT	0.1 23.1 76.6 100.0
AT UE	1 44 180 596 778
PERCENT	0.1 17.5 23.5 23.5 4.5 4.5
FREQUENCY	8 1 2 2 3 3 4 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
MF 11C8	No Response NA Poor Fair Good Excellent



Student Follow-Up Questionnaire, 1991 Questionnaire Items

Overall

Program: Relevance of Course Work

MF11C9	FREQUENCY	PERCENT	8.	CUMULATIVE PERCENT
υ ω		0.8 2.2 17.6 49.8 29.6	6 23 159 544 773	20.00 8.00 70.04 0.00

Facilities: Quality

CUMULATIVE PFRCFNT	33.5 80.6 100.0
CUMULAT I VE FREQUENCY	64 261 629 780
PERCENT	8.2 25.3 47.2
FREQUENCY	64 197 368 151
MF 11D10	Poor Fair Good Excellent

Facilities: Equipment

0.6 9.1 7.35.7 7.00.0
5 71 612 778
28 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
207 207 334 166
No Response NA Poor Fair Good Excellent



Student Follow-Up Questionnaire, 1991 Questionnaire Items

Overall

Facilities: Labs

CUMULATIVE PERCENT	36.3 12.1 100.0
CUMULATIVE FREQUENCY	30 28 28 77 77
PERCENT	2000 2000 2000 2000 2000 2000 2000
FREQUENCY	30 64 189 339 157
MF11D12	No Response NA Poor Fair Good Excelient

Facilities: Computers

CUMULATIVE PERCENT	15.5 27.9 49.4 80.8
CUMULATIVE FREQUENCY	120 216 383 626 775
PERCENT	15.5 12.4 31.4 19.2
FREQUENCY	120 96 167 167 243
MF 11D13	No Response NA Poor Fair Good Excellent

Placement: Preparation

CUMULATIVE PERCENT	23.3 3.6.8 50.0 80.8 0.00
CUMULAT I VE FREQUENCY	182 281 382 382 617 764
PERCENT	23.00 133.00 20.28 20.28
FREQUENCY	i
MF11E14	No Response NA Poor Fair Good Excellent

Student Follow-Up Questionnaire, 1991 Questionnaire Items

Overall

Placement: Counseling

MF11E15	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
sponse	18	•		
	217	28.5	217	ה ה
	125	16.4	302	10
	128	16.8	170	61.7
Cood	181	23.8	651	w
lent	111	14.6	762	100.

Placement: Referrals/Leads

CUMULATIVE PERCENT	27.9 45.0 63.3 84.3
CUMULAT I VE FREQUENCY	2 3 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
PERCENT	27.5 17.1 18.3 15.1 15.7
FREQUENCY	222 1330 160 190
MF11E16	No Response NA Poor Fair Good Excellent

Placement: Need/Use?

CUMULAT I VE PERCENT	49.6 100.0
CUMULAT I VE FREQUENCY	352 710
PERCENT	49.6 50.4
FREQUENCY	70 52 58
MF11E17	No Response Yes No

Would Recommend School to a Friend

CUMULATIVE CUMULATIVE FREQUENCY PERCENT	508 68.0 747 100.0
PERCENT	
FREQUENCY	33 508 239
MF 12	No Response Yes No

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire items

Overall

Now: General Knowledge

CUMUL AT I VE PERCENT	0.6 13.5 70.0 100.0
CUMULATIVE FREQUENCY	; 105 544 777
PERCENT	0.6 12.9 56.5 30.0
FREQUENCY	3 100 439 233
MF13_1	No Response Weaker No Change Stronger Much Stronger

Now: Analytical Skills

CUMULAT I VE PERCENT	0 0.0 0.8 100.8 0.00
CUMULATIVE FREQUENCY	239 639 639 777
PERCENT	0.1 0.6 30.0 51.5 17.8
FREQUENCY	233 400 138
MF 13_2	No Response Much Weaker Weaker No Change Stronger Much Stronger

Now: Knowledge of Field

MF 13_3	FREQUENCY	<u>- ا</u>	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
weaker No Change Stronger Much Stronger	2 70 399 307	0.3 51.3 53.3	2 72 471 778	0.3 9.3 100.0

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS
Student Follow-Up Questionnaire, 1991
Questionnaire Items

Overall

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Now: Ability to Speak and Write Clearly

CUMULATIVE PERCENT	0.6 48.3 86.1
CUMULAT I VE FREQUENCY	376 670 670
PERCENT	
FREQUENCY	2 5 371 294 108
MF 13_4	No Response Weaker No Change Stronger Much Stronger

Now: Understand Ethical Issues

CUMULATIVE PERCENT	95.88 90.00 0.00.00
CUMULATIVE FREQUENCY	6 432 703 774
PERCENT	8000
FREQUENCY	6 426 271 71
MF 13_5	No Response Weaker No Change Stronger Much Stronger

Now: Concern about Financial Security

CUMULATIVE PERCENT	0.9 6.3 44.0 77.9
CUMULATIVE FREQUENCY	49 342 605 777
PERCENT	33.7.44 22.33 133.74
FREQUENCY	42 42 293 263 172
MF 13_6	No Response Much Weaker Weaker No Change Stronger Much Stronger

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

Overall

Now: Leadership Abilities

CUMU	0.8 46.3 85.4 100.0
CUMULAT I VE FREQUENCY	361 361 665 779
PERCENT	13.4
FREQUE: 0Y	1 6 355 304 114
MF 13_7	No Response Weaker No Change Stronger Much Stronger

Now: Ability to Work Independently

CUMULATIVE PERCENT	0.5 39.3 73.4 100.0
CUMULAT I VE FREQUENCY	і 306 372 779
PERCENT	0.5 38.8 34.1 26.6
FREQUENCY	302 266 207
MF 13_8	No Response Weaker No Change Stronger Much Stronger

Now: Interpersonal Skills

CUMULATIVE PERCENT	40.0 40.6 82.0 100.0
CUMULATIVE FREQUENCY	3 3 33 638 778
PERCENT	0.4 40.2 41.4 18.0
FREQUENCY	
MF 13_9	No Response Weaker No Change Stronger Much Stronger



Student Follow-Up Questionnaire, 1991 Questionnaire Items

Overal!

Now: Cultural Awareness

MF 13_10	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
No Response	m			
er	. •-		• •	•
	. rc	· v	- v	- a
	450	2.0	15.6	0 t
Stronger	232	.00	α α γ γ	- 1
2000	100	, , ,	10101	0.00.
5	0	·		0.001

Now: Career Committment

FREQUENCY PERCENT 2 2 6 0.8 45 5.8
FREQUENCY 2 2 45

Now: Tolerance

CUMULATIVE PERCENT	74.6 54.6 86.6 100.0
CUMULATIVE FREQUENCY	9 425 675 779
PERCENT	70.60
FREQUENCY	1 9 416 250 104
MF 13_12	No Response Weaker No Change Stronger Much Stronger



MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnrire, 1991 Questionnaire item.

Overall

Now: Academic Confidence

CUMULATIVE PERCENT	0.66 25.33 71.00	
CUMULAT	197 197 1877	2
PERCENT	N ± 0	•
FREQUENCY	2578450 2578450	
MF 13_13	No Response Much Weaker Weaker No Change Stronger Much Stronger	

0.6 22.4 27.3 71.0		CUMULATIVE PERCENT	30.00 4.06 4.06 0.00
197 197 198 198	Now: Motivation for Further Education	CUMULAT IVE FREQUENCY	15 51 236 514 514
0.6 22.9 45.6 29.0	for Furth	PERCENT	3.5.4.1. 3.5.3.4.1. 3.5.3.8.8.8.9.9.
2 114 178 355 266	Motivation	FREQUENCY	3 36 185 278 263
No Response Much Weaker Weaker No Change Stronger Much Stronger	: MON	MF 13_14	No Response Much Weaker Weaker No Change Stronger Much Stronger



Appendix B:

Business Student Norms



MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS
Student Follow-Up Questionnaire, 1991
Questionnaire Items

AICS

Graduated from Program

CUMULATIVE PERCENT	100.0
CUMULATIVE FREQUENCY	137 297
PERCENT	46.1 53.9
FREQUENCY	137 160
MF1A FREC	No Yes

Enrolled at Another Institution

 CUMULAT I VE PERCENT	100:0
CUMULATIVE / FREQUENCY	15.
PERCENT	282 15 100.0
£ .	282 15
MF 1A1	No Response Yes

Why Enrolled at Another Institution?

CUMULAT IVE PERCENT	15.4 100.0
CUMULATIVE FREQUENCY	13
PERCENT	15.4 84.6
FREQUENCY	
MF 1A2	No Response Changed Plans Needed Training

Remained Enrolled in Same School

CUMULATIVE PERCENT	76.1
CUMULAT I VE FREQUENCY	226 297
PERCENT	76.1
QUENCY	226 71
MF18 FRE	No

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

AICS

Transferred to Another Institution

CUMULATIVE PERCENT	95.3
	283 297
PERCENT	95.3 4.7
1C FREQUENCY PERCE	283 14
MF 1C	No Yes

Reason Transferred

CUMUL AT I VE PERCENT	15.4 23.1 30.8 61.5
CUMUL AT I VE FREQUENCY	.0 w + & E
PERCENT	15. 7. 30. 38.
FREQUENCY	1 1 1
MF 1CA	No Response Changed Career Did Not Fit Not Challenged Atmosphere Lower Cost

Withdrawn

CUMULATIVE PERCENT	86.2 100.0
$\supset \square$	256 297
PERCENT	86.2 13.8
NENCY	256 41
MF1D FREC	No Yes

Why Withdrawn

MF1DA	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
No Response	257	t ; ; ; ;		
Changed Career				
Good Job Offer	2		0 0	0.5.0
Personal Probs	- ^	2.5	1⊆	0.00
Financial Probs	- =	7.70	- 6	42.5
Not Doing Up 1	-		82	0.07
Not to the second	,	C. 2	29	72.5
wor mbro Expect	Ξ	27.5	017	100.0

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

AICS

Taken A Leave of Absence

CUMULATIVE PERCENT	96.5
JLAT I VE	287
CUMI PERCENT FRE	
MF1E FREQUENCY	287
MF 1E	No Yes

Currently Employed

CUMULATIVE PERCENT	58.0 79.2 83.3
CUMUL AT 1VE FREQUENCY	170 232 244 293
PERCENT	700 -
FREQUENCY	170 62 62 12 149
MF2	No Response Full Time Part Time Self~Employed Not Employed

How Many Jobs since Left College

MF3	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	$\Sigma \widetilde{\omega}$
No Response 1 2	89 126	9.09	126	60.6
3 4 Or More	100	0.62	178 198 208	85.6 95.2 100.0

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

AICS

Before Tax Monthly Earnings

4 H	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
No Response	63			
Ť	69	29.5	. 04	. 00
•	7,7	23.7	102	7,7
ı		- 0	22.	0.70
١	~ :	0:	091	7.89
ı	34	14.5	161	82,9
ı	23	9.0	215	91.9
77, 25 - 25, 124	=	4.7	526	9.96
1 0	2	0.9	228	4.76
Sc,422 OF MOFE	9	5.6	234	100.0

How Related Program to Employment

MF 5	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATI! T
No Response	5		· · · · · · · · · · · · · · · · · · ·	
Not Related	62	25.3	. 65	25.3
(6	3.7	7.1	200
V ~	~	2.9	78	31.8
n =	19	7.8	16	39.6
→ 1.	13	5.3	110	0 37
Ω ′	20	8.2	130	۱۳
10	_	2.9	137	- (~ - (*)
~ 0	<u>8</u>	7.3	155	63.3
o c	æ ;	7.3	173	30.€
Total In Defector	∞ :	7.3	191	78.0
orally Kelated	54	22.0	245	100.0

Grade Average in 1990

CUMULATIVE PERCENT	38.6 93.2 100.0
CUMULATIVE FREQUENCY	113 273 293
PERCENT	38.6 54.6 6.8
FREQUENCY	113 160 20
MF 6	No Response A Or 4 B Or 3 C Or 2



MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Que;tionnaire, 1991 Questionnaire Items

AICS

Either Parent Self-Employed

CUMULATIVE PERCENT	28.2 100.0
CUMUL AT I VE FREQUENCY	80 284
PERCENT	28.2
FREQUENCY	13 80 204
MF 7	No Response Yes No

Changed Employers

CUMULATIVE PERCENT	65.0
CUMULA FREQU	193 297
PERCENT	
FREQUENCY	193 104
MF8_1	No Yes

Been Promoted

	85.5 100.0
CUMULATIVE FREQUENCY	
PERCENT	85.5 14.5
FREQUENCY	254 43
MF8_2 FRE	No Yes

Changed Jobs with Same Employer

CUMULATIVE PERCENT	88.9 100.0
CUMUL AT IVE FREQUENCY	264 297
PERCENT	88.9
REQUENCY	264 33
MF8_3 F	No Yes



MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire items

AICS

Changed Industry

CUMULATIVE PERCENT	89.6 100.0
CUMULATIVE FREQUENCY	266 297
PERCENT	89.6 10.4
FREQUENCY	266 31
MF 8_4	No Yes

Received On-The-Job Training

CUMULATIVE PERCENT	70.0
CUMULATIVE FREQUENCY	208 297
PERCENT	70.0
QUENCY	208 89
MF8_5 FRE	No Yes

Received Classroom Training

CUMULATIVE PERCENT	78.8 100.0
CUMULATIVE FREQUENCY	234 297
Y PERCENT	78.8 21.2
FREQUENC	234 63
MF 8_6	No Yes

Received a Pay Raise

CUMULATIVE PERCENT	54.5
⋖⊃∣	162 297
PERCENT	54.5 45.5
FREQUENCY	162 135
MF 8_7	No Yes

Been Unemployed

CUMULAT IVE PERCENT	69.7 100.0
CUMULATIVE FREQUENCY	207 297
PERCENT	69.7 30.3
FREQUENCY	20 <i>7</i> 90
MF8_8	No Yes

Minnesota association of PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire items

AICS

Obtained License or Certification

CUMULAT I VE PERCENT	100.0
CUMULATIVE FREQUENCY	20 198
PERCENT	10.1
FREQUENCY	99 20 178
MF9	No Response Yes No

Enrolled in Day/Evening Program

CUMULAT I VE PERCENT	74.6 100.0
CUMULATIVE FREQUENCY	21 ⁴ 287
PERCENT	74.6 25.4
FREQUENCY	10 214 73
MF 10	No Response Day Evening

Admissions: Completeness and Accuracy

CUMULATIVE PERCENT	1; t 18:0 49:3 84:7
LA QU	53 145 249 294
PERCENT	1.4 16.7 3.7.3 3.5.4 15.3
FREQUENCY	400 400 450 450
MF 11A1	No Response NA Poor Fair Good Excellent

Financial Aid: Helpfulness

CUMULAT I VE PERCENT	10.8 46.5 75.8
CUMULATIVE FREQUENCY	32 71 138 225 297
PERCENT	10.8 13.1 22.6 29.3 24.2
FREQUENCY	32 39 67 72
MF 11B2	NA Poor Fair Good Excellent

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

AICS

Program: Orientation

CUMULATIVE PERCENT	3.0 8.1 34.7 86.5
CUMULATIVE FREQUENCY	24 103 257 257
PERCENT	3.0 26.6 13.9 5.13
FREQUENCY	9 15 154 40
MF 11C3	NA Poor Fair Good Excellent

Program: Quality of Teaching

CUMULATIVE PERCENT	0.3	30.7 74.0 100.0
CUMULATIVE FREQUENCY	· · - œ	91 219 296
PERCENT	0.3	24.7 43.2 26.0
FREQUENCY	171	73 128 77
MF 11C4	No Response NA Poor	rair Good Excellent

Program: Quality of Materials

9.1 36.4 84.2	CUMULATIVE PERCENT
27 108 250 250 297	CUMUL AT I VE FREQUENCY
9.1 27.3 47.8 15.8	PERCENT
27 142 47	FREQUENCY
Poor Fair Good Excellent	MF 11C5
27 81 142 47	11C5 FREQUENCY



MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

AICS

Program: Scheduling of Classes

CUMULATIVE PERCENT	10.8 37.0 81.5 100.0
CUMULATIVE FREQUENCY	32 110 242 297
PERCENT	10.8 26.3 44.4 18.5
FREQUENCY	32 78 132 55
MF 11C6	Poor Fair Good Excellent

Program: Interaction with Students

CUMULATIVE PERCENT	2.4 13.8 59.9 100.0
CUMULATIVE FREQUENCY	4.1 17.8 29.7
PERCENT	2.4 46.1 40.1
FREQUENCY	7 34 137 119
MF 11C7	Poor Fair Good Excellent

Program: Pace of Course Work

CUMULATIVE PERCENT	0.3 25.7 81.8 100.0
CUMULAT I VE FREQUENCY	18 18 242 296
PERCENT	0.3 19.7 18.1 18.2
FREQUENCY	17 17 58 166 54
MF 11C8	No Response NA Poor Fair Good Excellent



Student Follow-Up Questionnaire, 1991 Questionnaire Items

AICS

Program: Relevance of Course Work

⊒ <u>_</u>	!					
CUMULATIVE PERCENT	11111111	1.0	3.7	26.8	6.2.6	0.001
ULA EQU	; ; ; ; ; ; ; ; ;	æ		6,00	223	677
PERCENT	•	0.0	22.1	- 87.7	20.00	r . r
FREQUENCY	Q	m	, y	144	72	!
MF 11C9	No Response	P.O.O.	Fair	Cood	Excellent	

Facilities: Quality

CUMULATIVE PERCENT	11.1 42.4 81.1
CUMULAT IVE FREQUENCY	33 126 241 297
PERCENT	31.3 38.7 18.9
FREQUENCY	33 93 115 56
MF11D10	Poor Fair Good Excellent

Facilities: Equipment

CUMULATIVE PERCENT	13.1 40.4 40.4 82.2
CUMULATIVE FREQUENCY	3 39 120 244 297
PERCENT	1.0 12.1 27.3 41.8 17.8
FREQUENCY	36 36 124 53
MF 11D11	NA Poor Fair Good Excellent

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS
Student Follow-Up Questionnaire, 1991
Questionnaire items

AICS

Facilities: Labs

CUMULAT I VE PERCENT		.!	2.7	17.2	45.6	84.1	100.0
CUMULATIVE FREQUENCY		• ‡	- ;	ול	135	546	596
PERCENT	1	ر	· u	· ·	28.4	38.5	15.9
FREQUENCY	-	17	35	7 -	70,	<u> </u>	/ h
MF11012	No Response	٧×	Poor	Fair	,,,,,,	FXCellent	ראכפוופוור

Facilities: Computers

CUMULATIVE PERCENT	42.9 42.9 60.00 0.00
CUMULATIVE FREQUENCY	16 59 127 2337 296
PERCENT	23.00 37.2 19.5 19.9
FREQUENCY	
MF 11013	No Response NA Poor Fair Good Excellent

Placement: Preparation

CUMULATIVE PERCENT	29.3 40.8 53.0 100.0
E.R.	84 117 152 233 287
PERCENT	
FREQUENCY	10 33 33 54 54
MF 11E14	No Response NA Poor Fair Good Excellent

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

AICS

Placement: Counseling

85.28 85.28 85.00 85.00
90 132 177 244 286
31.5 14.7 15.7 23.4
42 42 45 67 67
No Response NA Poor Fair Good Excellent

Placement: Referrals/Leads

MF11E16	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	೧
No Response	12			;
NA	η6	33.0	· ਨੌ	
Poor	, r	100	, ,	33.0
. S. C.	- .	٠. ا ا	145	50.9
- 70	ر ا	17.9	196	68.8
Doos	53	18.6	546	87.4
Excellent	36	12.6	285	100.0
)

Placement: Need/Use?

CUMULATIVE PERCENT	45.5 100.0
	-
CUMULATIVE FREQUENCY	12; 266
PERCENT	45.5 54.5
FREQUENCY	31 121 145
MF11E17	No Response Ves No

Would Recommend School to a Friend

CUMULATIVE PERCENT	56.7
FREQUENCY	165 291
PERCENT	16.7 43.3
FREQUENCY	6 165 126
MF 12	No Response Yes No

Student Follow-Up Questionnaire, 1991 Questionnaire Items

AICS

Now: General Knowledge

Weaker 1 0.3 1 0.3 No Change 48 16.2 49 16.5 Stronger 183 61.6 232 78.1 Much Stronger 65 21.9 297 100.0	MF 13_1	FREQUENCY	<u>- 1</u>	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
48 16.2 49 183 61.6 232 65 21.9 297		_	0	-	•
48 16.2 49 183 61.6 232 65 21.9 297		0.7			s.0
183 61.6 232 65 21.9 297		0,	7.0	617	אר ה
65 21.9 297		183	۲1 ×	, , ,	
62 21.9 297	200			252	
	20.00	60	21.9	297	100.0

Now: Analytical Skills

CUMULATIVE PERCENT	35.0 88.9 100.0
CUMULATIVE FREQUENCY	104 264 297
PERCENT	0.3 34.7 53.9 11.1
FREQUENCY	103 160 33
MF 13_2	Weaker No Change Stronger Much Stronger

Now: Knowledge of Field

CUMULATIVE PERCENT	0.3 10.8 64.6 100.0
CUMULATIVE FREQUENCY	32 192 192 297
PERCENT	0.3 10.4 53.9 35.4
FREQUENCY	
MF13_3	Weaker No Change Stronger Much Stronger

Now: Ability to Speak and Write Clearly

CUMULATIVE PERCENT	0.3 42.4 84.8 100.0
CUMULATIVE FREQUENCY	126 252 297
PERCENT	0.3 42.1 42.4 15.2
FREQUENCY	125 126 126 45
MF 13_4	Weaker No Change Stronger Much Stronger

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS

Student Follow-Up Questionnaire, 1991 Questionnaire Items

AICS

Now: Understand Ethical Issues

CUMULATIVE PERCENT	0.7 56.9 90.2 100.0
CUMULATIVE FREQUENCY	168 266 295
PERCENT	ີ່ໜ້າ
FREQUENCY	
MF 13_5	No Response Weaker No Change Stronger Much Stronger

Now: Concern about Financial Security

CUMULATIVE PERCENT	1.0 5.7 46.5 78.1 100.0
CUMULATIVE FREQUENCY	138 138 232 297
PERCENT	01.100
FREQUENCY	14 121 94 65
MF 13_6	Much Weaker Weaker No Change Stronger Much Stronger

Now: Leadership Abilities

CUMULATIVE PERCENT	0.7 46.5 85.5 100.0
CUMULATIVE FREQUENCY	138 138 254 297
PERCENT	0.7 45.8 39.1 14.5
FREQUENCY	136 116 116
MF 13_7	Weaker No Change Stronger Much Stronger

Now: Ability to Work Independently

CUMULATIVE PERCENT	0.3 39.1 74.4 100.0
CUMULATIVE FREQUENCY	116 221 297
PERCENT	
FREQUENCY	1 115 105 76
MF 13_8	Weaker No Change Stronger Much Stronger

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

AICS

Now: Interpersonal Skills

CUMULATIVE PERCENT	39.7 79.5 100.0
CUMULATIVE FREQUENCY	118 236 297
PERCENT	39.7 39.7 20.5
FREQUENCY	115 118 61
MF 13_9	No Change Stronger Much Stronger

Now: Cultural Awareness

CUMULATIVE PERCENT	0.3 58.1 90.2 100.0
CUMULATIVE FREQUENCY	172 267 296
PERCENT	0.3 57.8 32.1 9.8
FREQUENCY	171 95 29
MF 13_10	No Response Weaker No Change Stronger Much Stronger

Now: Career Committment

CUMULATIVE PERCENT	1.7 7.4 30.3 72.7 100.0
CUMULATIVE FREQUENCY	22 22 23 29 29 29 29
PERCENT	22.9 42.4 27.3
FREQUENCY	17 17 68 126 81
MF 13_11	Much Weaker Weaker No Change Stronger Much Stronger

Now: Tolerance

CUMULAT'VE PERCEN	56.2 89.2 100.0
CUMULATIVE FREQUENCY	2 167 265 297
PERCENT	0.7 33.0 10.8
FREQUENCY	165 98 32 32
MF13_12	Weaker No Change Stronger Much Stronger

Student Follow-Up Questionnaire, 1991 Questionnaire Items

AICS

Now: Academic Confidence

CUMULATIVE PERCENT	26.3 73.4 73.4 100.0
CUMULAT I VE FREQUENCY	2 7
PERCENT	0.7 1.7 23.9 47.1 26.6
FREQUENCY	2 71 140 79
MF13_13	Much Weaker Weaker No Change Stronger Much Stronger

	CUMULATIVE PERCENT	2.0 6.8 33.8 69.6
Now: Motivation for Further Education		200 200 200 200 200 200 200
for Furth	z	2.0 4.7 27.0 35.8 30.4
Motivation	FREQUENCY	14 106 90
: MON	MF 13_14	No Response Much Weaker Weaker No Change Stronger Much Stronger



Appendix C:

Trade/Technical Student Norms



Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Graduated from Program

5-	29.4 100.0
CUMULATIVE FREQUENCY	124 422
Y PERCENT	29.4 70.6
FREQUENC	124 298
MF 1A	No Yes

Enrolled at Another Institution

CUMULAT I VE PERCENT	100:00
UMULA FREQU	22
EQUENCY PERCENT	100.001
<u>F</u>	400 22
MF1A1	No Response Yes

Why Enrolled at Another Institution?

CUMULATIVE PERCENT	9.1
FREQUENCY	۰۳. 2
QUENCY PERCENT	9.1
FREQUENCY	400 2 20 20
MF 1A2	No Response Changed Plans Needed Training

Remained Enrolled in Same School

CUMULAT I VE PERCENT	82.0 100.0
CUMULATIVE FREQUENCY	346 422
PERCENT	82.0 18.0
FREQUENCY	346 76
MF 18	No Yes

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Transferred to Another Institution

Reason Transferred

MF1CA FREQUENCY PERCENT FREQUENCY PERCENT		
FREQUENCY PERCENT FREQUENT 411 4 36.4 2 18.2 3 27.3 18.2 18.2 18.2 1	CUMULATIVE PERCENT	36 54 81 81
1 2 4	CUMULAT IVE FREQUENCY	
1 2 4	PERCENT	36.4 18.2 27.3 18.2
MF1CA No Response Changed Career Not Challenged Atmosphere Not Doing Well	i	1
	IF 1CA	No Response Changed Career Not Challenged Atmosphere Not Doing Well

Withdrawn

0	93.8
AT I VE UENCY	396 1,22
r PERCENT	
REQUENC	396 26
MF 1D F	No Yes

Why Withdrawn

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Taken A Leave of Absence

	97.6
CUMULATIVE CUMULA FREQUENCY PERCE	412 422
_ <u>⊢</u> i	
WF1E FREQUENCY PERCEN	412 10
MF 1E	No Yes

Currently Employed

CUMULATIVE PERCENT	71.4 85.2 86.9 100.0
CUMULATIVE FREQUENCY	300 358 365 420
PERCENT	71.4 13.8 1.7 13.1
FREQUENCY	2 300 58 7 7
MF2	No Response Full Time Part Time Self-Employed Not Employed

How Many Jobs since Left College

CUMULAT IVE PERCENT	65.6	92.0 98.2
CUMUL FREQ	22 1	310 331 337
PERCE		26.4 1.8 1.8
FREQUENCY	221	289 21 6
MF3		3 4 Or More

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Before Tax Monthly Earnings

MF4	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
Response	99	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Ţ	67	13.8	• 01	• ;
•	72	20.3	101	2 · ·
5925 - \$1,224	89	19.2	- 21	24.6
1	19	18.5	253	700
1	17	10.7	200	21.5
1			862	84.2
ı	7 7	٥,	330	93.2
ċ	<u>o</u>	4·5	346	7.76
JACO OF MOLE	∞	2.3	354	

How Related Program to Employment

MF 5	FREQUENCY	PERCE	CUMUL AT I VE FREQUENCY	CUMULATIVE PERCENT
	4.1			
Not Related	95	54.9	• 6	
- (,0	2.4	104	24.7
v ~	15	3.1	116	30.4
n =	5;	3.9	131	34.4
ተ ሆ	9:	4.2	147	38.6
١vc	Σ.	4.7	165	43.3
20	2 6		177	46.5
- α	23	0.9	200	52.5
o 0	32	7.8	232	6.09
Totally poletod	52,	8.9	258	67.7
naisia Kiraa	123	32.3	381	100.0

Grade Average in 1990

CUMULATIVE PERCENT	45.5 92.6 99.5
CUMULAT I VE FREQUENCY	190 387 416 418
PERCENT	45.5 47.1 6.9 0.5
FREQUENCY	190 197 29 29
MF 6	No Response A Or 4 B Or 3 C Or 2 < C Or 2

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Either Parent Self-Employed

CUMULATIVE PERCENT	24.8 100.0
CUMULATIVE FREQUENCY	102 412
PERCENT	24.8 75.2
FREQUENCY	10 102 310
MF 7	No Response Yes No

Changed Employers

CUMULATIVE PERCENT	63.5
V.E	268 422
PERCENT	63.5
FREQUENCY	268 154
MF8_1	No Yes

Been Promoted

CUMULATIVE PERCENT	78.4 100.0
UMULAT I VI FREQUENC	331 422
CENT	8.4 1.6
FREQUENCY	331 91
MF8_2 FI	No Yes

Changed Jobs with Same Employer

O	87.2
MULATIVE REQUENCY	368
_	!
FREQUENCY PERCENT	
MF8_3 FR	No Yes

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Changed Industry

1.1	
0	84.4 100.0
CUMULATIVE FREQUENCY	356 422
PERCENT	84.4 15.6
REQUENCY	356 66
MF8_4 F	No Yes

Received On~The-Job Training

CUMULAT IVE PERCENT	60.9 100.0
CUMULATIVE FREQUENCY	257 422
PERCENT	60.9
FREQUENCY	257 165
MF8_5	No Yes

Received Classroom Training

Received a Pay Raise

CUMUL AT I VE PERCENT	47.6 100.0
CUMULATIVE FREQUENCY	201 422
PERCENT	47.6 52.4
FREQUENCY	201 221
MF 8_7	No Yes

Been Unemployed

CUMULATIVE PERCENT	71.6
CUMULATIVE FREQUENCY	302 422
PERCENT	71.6 28.4
FREQUENCY	302 120
MF 8_8	No Yes

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Obtained Licerse or Certification

CUMULATIVE PERCENT	32.9 100.0
CUMULAT IVE FREQUENCY	96
_ i	32.9 67.1
FREQUENCY	130 96 196
MF 9	No Response Yes No

Enrolled in Day/Evening Program

CUMULATIVE PERCENT	75.6
CUMULATIVE FREQUENCY	313 414
PERCENT	75.6 24.4
FREQUENCY	313 101
MF 10	No Response Day Evening

Admissions: Completeness and Accuracy

MF11A1 FREQUENCY PERCENT FREQUENCY PERCENT No Response 2 7 1.7 7 1.7 Poor 36 8.6 43 10.2 Fair 100 23.8 14.3 34.0 Good 201 47.9 344 81.9 Excellent 76 18.1 420 100.0		
FREQUENCY PERCENT 2	CUMULATIVE PERCENT	10.2 34.0 81.9
FREQUENCY 2 2 3 4 100 201 26 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	CUMULATIVE FREQUENCY	143 143 344 420
i	PERCENT	23.8 47.9 18.1
MF11A1 No Response NA Poor Fair Good Excellent	FREQUENCY	36 100 201 76
	MF 11A1	No Response NA Poor Fair Good Excellent

Financial Aid: Helpfulness

CUMULATIVE PERCENT	16.5 30.6 48.6 74.2 100.0
CUMULATIVE FREQUENCY	:
PERCENT	16.5 14.1 17.9 25.6 25.8
FREQUENCY	4 69 59 75 107
MF 1182	No Response NA Poor Fair Good Excellent

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Program: Orientation

CUMULAT I VE P ERCENT	2.9 2.6.9 7.9.8 100.0
CUMULAT I VE FREQUENCY	12 113 113 420
PERCENT	2.09 20.29 20.29
FREQUENCY	12 12 9 9 2 9 2 8 5 8 5 8 5 8 5 8 5 8 5 8 5 8 5 8 5 8
MF 11C3	No Response NA Poor Fair Good Excellent

Program: Quality of Teaching

CUMULATIVE PERCENT	3.3 19.0 70.5 100.0
CUMULATIVE FREQUENCY	14 80 80 420 420
PERCENT	3.3 15.7 51.4 29.5
FREQUENCY	2 14 66 216 124
MF 11C4	No Response Poor Fair Good Excellent

Program: Quality of Materials

CUMULATIVE PERCENT	0.2 6.7 6.7 1.8.7 100.0
CUMULAT I VE FREQUENCY	28 106 329 418
PERCENT	0.2 6.5 53.3 21.3
FREQUENCY	4 27 27 28 223 899
MF 11C5	No Response NA Poor Fair Good Excellent



Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Program: Scheduling of Classes

•	
	15 73 208 122

Program: Interaction With Students

CUMULATIVE PERCENT	0.2 1.4 10.0 149.8
≥2	45 208 418 418
PERCENT	0.2 1.2 8.6 39.7 50.2
FREQUENCY	2 3 3 5 7 4 E
MF 11C7	No Response NA Poor Fair Good Excellent

Program: Pace of Course Work

CUMULATIVE PERCENT	5.5 20.7 74.8 100.0
CUMULATIVE FREQUENCY	23 87 315 421
PERCENT	24.22 5.22 5.22 5.22
FREQUENCY	23 64 228 106
MF 11C8	No Response Poor Fair Good Excellent

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Program: Relevance of Course Work

CUMULATIVE PERCENT	0.7 2.2 17.0 67.7 100.0
CUMULATIVE FREQUENCY	3 7 71 283 418
PERCENT	0.7 1.4 14.8 50.7 32.3
FREQUENCY	4 3 6 6 12 13 13 13
MF 11C9	No Response NA Poor Fair Good Excellent

Facilities: Quality

CUMULATIVE PERCENT	6.4 29.4 83.2
CUMULATIVE FREQUENCY	27 124 351 422
PERCENT	6.4 23.0 53.8 16.8
FREQUENCY	27 97 227
MF 11D10	Poor Fair Good Excellent

Facilities: Equipment

CUMULATIVE PERCENT	0.5 6.7 34.0 78.0
CUMULATIVE FREQUENCY	28 28 143 331 420
PERCENT	0.5 6.2 27.4 44.8 21.2
FREQUENCY	9 9 9 9 9 9 9 9 9
MF 11D 11	No Response NA Poor Fair Good Excellent

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Facilities: Labs

CUMULATIVE PERCENT	2.6 9.2 31.3 79.4
CUMULATIVE FREQUENCY	32 335 335 452
PERCENT	2.6 6.6 22.0 48.1 20.6
FREQUENCY	28 23 203 87
MF 11D12	NA Poor Fair Good Excellent

Facilities: Computers

CUMULATIVE PERCENT	9.00 0.00 0.00 0.00	
CUMULATIVE FREQUENCY	80 127 214 337 420	
PERCENT	19.0 11.2 20.7 29.3 19.8	
FREQUENCY	80 47 123 83	
MF 11D13	No Response NA Poor Fair Good Excellent	

Placement: Preparation

CUMULATIVE PERCENT	22. 32.6 49.8 60.00
ULAT EQUE	94 148 207 341 416
PERCENT	22. 13.5. 18.0 18.0
FREQUENCY	
MF11E14	No Response NA Poor Fair Good Excellent



Student Follow-Up Questionnaire, 1991 Questionnaire items

NATTS

Placement: Counseling

CUMULATIVE PERCENT	28.2	62.2 86.3 100.0
FREQUENCY	117	258 358 415
PERCENT	28.2 16.9	17.1 24.1 13.7
FREQUENCY	711	100 57
MF11E15	No Response NA Poor	Good Excellent

Placement: Referrals/Leads

CUMULATIVE PERCENT	26.3 43.7 61.8 83.3)
CUMULATIVE FREQUENCY	109 181 256 345 414	
PERCENT	26.3 17.4 18.1 21.5	
FREQUENCY	i	
MF 11E16	No Response NA Poor Fair Good Excellent	

Placement: Meed/Use?

CUMULATIVE PERCENT	55.3 100.0
CUMULATIVE FREQUENCY	213 385
PERC	
FREQUENCY	237
MF 11E17	No Response Yes No

Would Recommend School to a Friend

CUMULATIVE PERCENT	74.6
CUMULATIVE FREQUENCY	296 397
PERCENT	
FREQUENCY	25 296 101
MF 12	No Response Yes No

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Now: General Knowledge

CUMULATIVE PERCENT	0.2 11.7 67.8 100.0
CUMULATIYE FREQUENCY	1 49 284 419
PERCENT	0.2 11.5 32.2
FREQUENCY	235 135 135
MF13_1	No Response Weaker No Change Stronger Much Stronger

Now: Analytical Skills

0.2 1.0 27.2 79.0
11 t t 331 t t 19
0.2 26.3 51.8 51.0
3 1 110 217 88
No Response Much Weaker Weaker No Change Stronger Much Stronger

Now: Knowledge of Field

CUMULATIVE PERCENT	0.25 8.8 60.00
CUMULATIVE FREQUENCY	37 37 252 420
	0.2 8.6 40.0
FREQUENCY	
MF 13_3	No Response Weaker No Change Stronger Much Stronger

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Now: Ability to Speak and Write Clearly

CUMULATIVE PERCENT	0.7 51.3 87.4
CUMULAT I VE FREQUENCY	216 368 421
PERCENT	0.7 50.6 36.1 12.6
FREQUENCY	213 152 53
MF13_4	No Response Weaker No Change Stronger Much Stronger

Now: Understand Ethical Issues

CUMULATIVE PERCENT	1.0 56.2 92.6 100.0
CUMULATIVE FREQUENCY	235 387 418
PERCENT	1.0 55.3 36.4
FREQUENCY	4 4 231 152 31
MF13_5	No Response Weaker No Change Stronger Much Stronger

Now: Concern about Financial Security

CUMULATIVE PERCENT	1.0 7.4 47.1 78.8
CUMULATIVE FREQUENCY	1 3 1 4 4 4 1 3 3 1 4 4 1 3 3 0 6 1 1 3 1 6 1 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1
PERCENT	1,0 6,4 37.7 23.7 2.1.2
FREQUENCY	3 4 27 158 141 89
MF 13_6	No Response Much Weaker Weaker No Change Stronger Much Stronger

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MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Now: Leadership Abilities

CUMULATIVE PERCENT	1.0
CUMULATIVE FREQUENCY	205 369 421
PERCENT	1.0 47.7 39.0 12.4
FREQUENCY	201 164 52
MF 13_7	No Response Weaker No Change Stronger Much Stronger

Now: Ability to Work Independently

CUMULAT IVE PERCENT	0.7 41.6 75.5 100.0
CUMULATIVE FREQUENCY	3 175 318 421
PERCENT	400. 34.
FREQUENCY	172 172 143 103
MF 13_8	No Response Weaker No Change Stronger Much Stronger

Now: Interpersonal Skills

CUMULAT IVE PERCENT	0.7 43.3 85.7 100.0
CUMULAT I VE FREQUENCY	182 360 420
PERCENT	ਕਕੇਜ
FREQUENCY	2 3 179 178 60
MF 13_9	No Response Weaker No Change Stronger Much Stronger

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Now: Cultural Awareness

CUMULATIVE PERCENT	0.22 1.22 100.00
CUMULATIVE FREQUENCY	26.5 3.75 4.20
^ 1	0.2 1.0 61.0 27.1
FREQUENCY	
MF13_10	No Response Much Weaker Weaker No Change Stronger Much Stronger

Now: Career Committment

CUMULATIVE PERCENT	0.2 6.7 32.1 70.5
CUMULATIVE FREQUENCY	28 135 129 120
PERCENT	
FREQUENCY	27 107 161 124
MF 1311	No Response Much Weaker Weaker No Change Stronger Much Stronger

Now: Tolerance

CUMULATIVE PERCENT	1.7 57.7 88.4 100.0
CUMULATIVE FREQUENCY	243 372 421
PERCENT	1.7 56.1 30.6 11.6
FREQUENCY	236 129 49
MF 13_12	No Response Weaker No Change Stronger Much Stronger

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

NATTS

Now: Academic Confidence

CUMULATIVE PERCENT	0.7 2.9 2.9 71.0 100.0
CUMULATIVE FREQUENCY	12 102 298 420
PERCENT	0.7 2.1 21.4 46.7 29.0
FREQUENCY	980 980 980 980
MF 13_13	No Response Much Weaker Weaker No Change Stronger Much Stronger

	CUMULATIVE PERCENT	2.1 7.1 29.0 66.4
Now: Motivation for Further Education	ပ	1230 2728 420
for Furth	PERCENT	2.1 2.1.9 3.7.4 33.6
Motivation	FREQUENCY	
: MON	MF 1314	No Response Much Weaker Weaker No Change Stronger Much Stronger



Appendix D:

Cosmetology Student Norms



MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS
Student Follow-Up Question: 1991
Questionnaire Items

NACCAS

Graduated from Program

CUMULATIVE PERCENT 8.2	100.0
CUMULATIVE FREQUENCY	61
PERCENT 8.2	0
H !	2
MF1A FREG	•

Enrolled at Another Institution

CUMULATIVE PERCENT	100:0
MF1A1 FREQUENCY PERCENT FREQUENCY P	• 9
PERCENT	100.00
FREQUENCY	55
MF 1A1	No Response Yes

Why Enrolled at Another Institution?

CUMULATIVE PERCENT	83.3
CUMULATIVE FREQUENCY	5 83.3 6 100.0
PERCENT	83.3 16.7
FREQUENCY PERCENT	55 5-
MF 1A2	No Response Changed Plans Needed Training

Remained Enrolled in Same School

CUMULATIVE PERCENT 100.0
CUMULATIVE CUMU FREQUENCY PER 61 10
ERCENT
1F1B FREQUENCY F
MF 18

Transferred to Another Institution

CUMULATIVE PERCENT	100.0
CUMULATIVE FREQUENCY	0 61
PERC	100.
FREQUENCY	
MF 1C	No

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NACCAS

Reason Transferred

CUMULATIVE		
CUMULATIVE	 	
PERCENT		,
FREQUENCY	•	
MF 1CA	No Recoonse	osiodon or

Withdrawn

5	91.8
CUMULATIVE FREQUENCY	
PERCENT	
1D FREQUENCY	56
MF 1D	No Yes

Why Withdrawn

CUMULATIVE PERCENT	20.0
CUMULATIVE FREQUENCY	
	20.0 60.0 20.0
FREQUENCY	31 26
MF 1DA	No Response Changed Career Personal Probs Financial Probs

Taken A Leave of Absence

CUMULATIVE PERCENT	100.0
CUMULATIVE FREQUENCY	No 61 100.0 61
PERCENT	100.0
FREQUENCY	61
MF 1E	No



MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

NACCAS

Currently Employed

CUMULATIVE PERCENT	76.7 93.3 100.0
CUMULAT I VE FREQUENCY	7 7 7 8 8 9 9 9 9 9
PERCENT	1 46 76.7 10 16.7 4 6.7
FREQU	10 10 4
MF2	No Response Full Time Part Time Not Employed

How Many Jobs since Left College

CUMULATIVE PERCENT	53.6	98.2 100.0
CUMULATIVE FREQUENCY	30	227 227
ERCE	53.6	14.3
FREQUENCY	201	∞-
MF3	No Response	3 4 Or More

Before Tax Monthly Earnings

36.4 21.8 3.6 1.8

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NACCAS

How Related Program to Employment

MF5	FREQUENCY	PERCENT	CUMULAT FREQUE	CUMULATIVE PERCENT
Not Related	σ	13.1	8	13.1
1 4	_ •	1.6	6	14.8
. ~	- -	9.1	10	16.4
. 00		• • • •	=	18.0
6	n =		7	23.0
Totally Related	÷ <u>~</u>	0 0	£ ;	29.5
200	?	6.0	61	100.0

Grade Average in 1990

CUMULAT I VE PERCENT	60.7 98.4 100.0
CUMULAT I VE FREQUENCY	37 60 61
PERCENT	60.7 37.7 1.6
FREQUENCY	37 23 1
MF 6	A Or 4 C Or 2

Either Parent Self-Employed

	42.6 100.0
CUMULATIVE FREQUENCY	26 61
PERCENT	42.6 57.4
FREQUENCY	26 35
MF 7	Yes No

Changed Employers

CUMULATIVE PERCENT	49.2 100.0
CUMULATIVE FREQUENCY	30 61
PERCENT	
1 FREQUENCY	30
MF8_1	No Yes



MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

NACCAS

Been Promoted

CUMUL AT IVE PERCENT	80.3
CUMUL AT IVE FREQUENCY	49
PERCENT	73
FREQUENCY	49 12
MF8_2	No Yes

Changed Jobs with Same Employer

CUMU	93.4
MUL AT 1 VE REQUENCY	57
PERCENT	93.4
QUENCY	57 4
MF8_3 FRE	No Yes

Changed Industry

CUMULATIVE PERCENT	90.2
CUMULATIVE FREQUENCY	55
PERCENT	90.2
4 FREQUENCY	55 6
MF8_4	No Yes

Received On-The-Job Training

CUMULATIVE PERCENT	37.7
CUMULATIVE FREQUENCY	23 61
PERCENT	37.
FREQUENCY	က္ကထ
MF8_5	No Yes

Received Classroom Training

CUMULATIVE PERCENT	60.7
CUMUL AT IVE FREQUENCY	37 61
ERCENT	60.7
FREQUENCY	
MF8_6	o es

Student Follow-Up Questionnaire, 1991 Questionnaira items

NACCAS

Received a Pay Raise

CUMULATIVE PERCENT	55.7 100.0
	34
PERCENT	55.7
FREQUENCY	34 27
MF8_7	No Yes

Been Unemployed

CUMUL	73.8
CUMULATIVE FREQUENCY	45 61
PERCENT	63
FREQUENCY	45 16
MF8_8 FR	No Yes

Obtained License or Certification

CUMULATIVE PERCENT	85.2 100.0
CUMULAT	52 61
PERCENT	85 14
FREQUENCY	ol o
MF 9	Yes No

Enrolled in Day/Evening Program

CUMULAT I VE PERCENT	95.0
CUMULATIVE FREQUENCY	57 60
PERCENT	95.0 5.0
FREQUENCY	57 3
MF 10	No Response Day Evening



Student Follow-Up Questionnaire, 1991 Questionnaire Items

NACCAS

Admissions: Completeness and Accuracy

CUMULATIVE PERCENT	13.1 31.1 63.9 100.0
CUMULATIVE FREQUENCY	19 39 61
PERCENT	13.1 18.0 32.8 36.1
FREQUENCY	250 250 250
MF11A1	Poor Fair Good Excellent

Financial Aid: Helpfulness

CUMULATIVE PERCENT	8:3 10:0 26.7 61.7
CUMULATIVE FREQUENCY	.2 3 3 60
PERCENT	335
FREQUENCY	- ∓ai
MF 11B2	No Response NA Poor Fair Good Excellent

Program: Orientation

CUMULATIVE PERCENT	1.6 4.9 13.1 57.4
	6 8 8 3 ± 5
PERCENT	
FREQUENCY	1 2 2 2 2 8
MF 11C3	NA Poor Fair Good Excellent



Student Follow-Up Questionnaire, 1991 Questionnaire Items

NACCAS

Program: Quality of Teaching

CUMULATIVE PERCENT	4.9 21.3 62.3 100.0
CUMULAT I VE FREQUENCY	388
PERCENT	16 41 41 37
FREQUENCY	10 25 23
MF 1104	Poor Fair Good Excellent

Program: Quality of Materials

CUMULATIVE PERCENT	4.9 19.7 67.2 100.0
FREQUENCY	12 41 61
PERCENT	4.9 14.8 47.5 32.8
FREQUENCY	50 50 50 50 50 50 50 50 50 50 50 50 50 5
MF 11C5	Poor Fair Good Excellent

Program: Scheduling of Classes

CUMULATIVE PERCENT	3.3 24.6 68.9 100.0
	15 15 61
PERCENT	3.3 21.3 44.3 31.1
FREQUENCY	2 13 27 19
MF 11C6	Poor Fair Good Excellent

Program: Interaction with Students

CUMULATIVE PERCENT	1.6 18.0 55.7 100.0
CUMUL AT 1 VE FREQUENCY	34 34 61
PERCENT	1.6 16.4 37.7 44.3
FREQUENCY	1 10 23 27
MF 11C7	Poor Fair Good Excellent

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Student Follow-Up Questionnaire, 1991 Questionnaire Items

NACCAS

Program: Pace of Course Work

CUMULATIVE PERCENT	4.9 27.9 63.9
I VE NCY	17 17 39 61
PERCENT	4.9 23.0 36.1 36.1
FREQUENCY	22 22 22
MF 11C8	Poo: Fair Good Excellent

Program: Relevance of Course Work

CUMULATIVE PERCENT	5.0 15.0 63.3 100.0
	,
PERCENT	5.0 10.0 48.3 36.7
FREQUENCY	22 22 22 64 7
MF11C9	No Response Poor Fair Good Excellent

Facilities: Quality

CUMULATIVE PERCENT	6.6 18.0 60.7 100.0
CUMULATIVE FREQUENCY	4 11 37 61
PERCENT	6.6 11.5 42.6 39.3
FREQUENCY	24 24 24
MF 11D10	Poor Fair Good Excellent

Facilities: Equipment

CUMULATIVE PERCENT	6.6 24.6 60.7 100.0
CUMULATIVE FREQUENCY	15 37 61
PERCENT	6.6 18.0 36.1 39.3
FREQUENCY	1 1 1 2 2 2 2 4 2 4
MF 11D11	Poor Fair Good Excellent

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NACCAS

Facilities: Labs

MF 11012	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
	Ν.	3,3	~	3,3
	~;	ر د ا	7	9.9
	2 8	19.7	16	. 26.2
2000	22	36.1	38	62.3
1122	23	37.7	61	1001

Facilities: Computers

CUMULAT IVE PERCENT	40.7 50.8 71.2 88.1
CUMULATIVE FREQUENCY	24 30 42 52 59
PERCENT	40.7 10.2 20.3 16.9
FREQUENCY	24 6 12 10 7
MF11D13	No Response NA Poor Fair Good Excellent

Placement: Preparation

CUMULATIVE PERCENT	6.6 26.2 37.7 70.5
CUMULATIVE FREQUENCY	4 16 23 43 61
PERCENT	6.6 19.7 11.5 32.8 29.5
FREQUENCY	4 12 7 20 18
MF 11E 14	NA Poor Fair Good Excellent

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NACCAS

Placement: Counseling

CUMULATIVE PERCENT	16.4 37.7 57.4 80.3
٠ξω	10 23 35 49 61
PERCENT	16.4 21.3 19.7 23.0
FREQUENCY	012245
MF11E15	NA Poor Fair Good Excellent

Placement: Referrals/Leads

CUMULAT I VE PERCENT	14.8 26.2 47.5 77.0
	29 29 47 61
PERCENT	14.8 11.5 21.3 29.5 23.0
FREQUENCY	9 7 7 13 14
MF11E16	NA Poor Fair Good Excellent

Placement: Need/Use?

CUMULATIVE PERCENT	30.5
CUMULATIVE FREQUENCY	18 59
PERCENT	30.5 69.5
FREQUENCY	2 18 41
MF 11E17	No Response Yes No

Would Recommend School to a Friend

CUMULATIVE PERCENT	79.7
AT UE	47 59
PERCENT	1
FREQUENCY	2 47 12
MF 12	No Response Yes No

Student Follow-Up Quertionnaire, 1991 Questionnaire Items

NACCAS

Now: General Knowledge

CUMULAT1VE PERCENT	4.9 11.5 45.9 100.0
CUMULAT I VE FREQUENCY	28 28 61
PERCENT	4. 34. 54.
FREQUENCY	n 1 − ε
MF13_1	Weaker No Change Stronger Much Stronger

Now: Analytical Skills

CUMULAT I VE PERCENT	34.4 72.1 100.0
CUMULAT I VE FREQUENCY	2 1 44 61
PERCENT	32.8 37.7 27.9
FREQUENCY	20 23 23 17
MF 13_2	Weaker No Change Stronger Much Strongar

Now: Knowledge of Field

CUMULAT IVE PERCENT	4.9 44.3 100.0
CUMULATIVE FREQUENCY	27 61
PERCENT	4.9 39.3 55.7
FREQUENCY	3 24 34
MF13_3	No Change Stronger Much Stronger

Now: Ability to Speak and Write Clearly

FREQUENCY PERCENT 1 1.7 33 55.0 16 26.7 10 16.7	CUMULAT I VE PERCENT	1.7 56.7 83.3 100.0
FREQUENCY 1 1 33 16 10	CUMULATIVE FREQUENCY	34
i		
MF 13_4 No Response Weaker No Change Stronger Much Stronger	FREQUENCY	10.0
	MF 13_4	No Response Weaker No Change Stronger Much Stronger

MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

NACCAS

Now: Understand Ethical Issues

CUMULATIVE PERCENT	47.5 82.0
CUMULATIVE FREQUENCY	29 50 51
PERCENT	47.5 34.4 18.0
FREQUENCY	
MF13_5	No Change Stronger Much Stronger

Now: Concern about Financial Security

CUMULATIVE PERCENT	24.6 70.5 100.0
CUMULAT I VE FREQUENCY	433 61
PERCENT	23.0 45.9 29.5
FREQUENCY	
MF 13_6	Weaker No Change Stronger Much Stronger

Now: Leadership Abilities

CUMUL AT I VE PERCENT	29.5 68.9 100.0
CUMULATIVE FREQUENCY	18 42 61
PERCENT	29.5 39.3 31.1
FREQUENCY	18 24 19
MF 13_7	No Change Stronger Much Stronger

Now: Ability to Work Independently

CUMULATIVE PERCENT	24.6 54.1 100.0
CUMULATIVE FREQUENCY	15 33 61
PERCENT	24.6 29.5 45.9
FREQUENCY	ഗരര
MF13_8	No Change Stronger Much Stronger

Student Follow-Up Questionnaire, 1991 Questionnaire Items

NACCAS

Now: Interpersonal Skills

CUMULATIVE PERCENT	26.2
CUMULATIVE FREQUENCY	16 42 42 61
!	26.2 42.6 31.1
FREQUENCY	
MF 13_9	No Change Stronger Much Stronger

Now: Cultural Awareness

CUMULATIVE PERCENT	37.7 75.4 100.0
CUMULATIVE FREQUENCY	23 46 61
PERCENT	37.7 37.7 24.6
FREQUENCY	23 23 15
MF 13_10	No Change Stronger Much Stronger

Now: Career Committment

CUMULATIVE PERCENT	1.6 26.2 60.7 100.0
CUMULATIVE FREQUENCY	16 37 61
PERCENT	1.6 24.6 34.4 39.3
FREQUENCY	
MF13_11	Weaker No Change Stronger Much Stronger

Now: Tolerance

	24.6 62.3
CUMULATIVE FREQUENCY	15 38 38 61
PERCENT	24.6 37.7 37.7
FREQUENCY	15 23 23
MF 13_12	No Change Stronger Much Stronger



MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991 Questionnaire Items

NACCAS

Now: Academic Confidence

CUMULATIVE PERCENT	27.9 59.0 100.0
CUMULAT I VE FREQUENCY	17 36 61
PERCENT	27.9 31.1 41.0
FREQUENCY	
MF 13_13	No Change Stronger Much Stronger

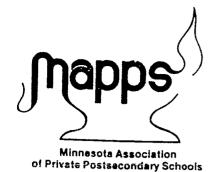
		23.0 47.5 100.0
Now: Motivation for Further Education	IVE CY	1
for Furth	PERCENT	21.3 24.6 52.5
Motivation	FREQUENCY	3573 123 134 134 134 134 134 134 134 134 134 13
Now:	MF13_14	Weaker No Change Stronger Much Stronger



Appendix E:

Questionnaire





MINNESOTA ASSOCIATION OF PRIVATE POSTSECONDARY SCHOOLS Student Follow-Up Questionnaire, 1991

This questionnaire is part of a statewide study of private career schools sponsored by the Minnesota Association of Private Postsecondary Schools and your school. Training Research Corporation of Santa Monica, California will process all the information from the questionnaire. Your responses will be held in the strictest professional confidence.								
Sincerely,								
Richard W. Moore, Project Director								
#1. Since the time you were a student in January 1990 have you: (choose one only: A, B, C, D or E) A.) Graduated from that program? If so, When did you complete? ——————————————————————————————————	Why? (Select most important ONE only) 1. Changed my career plans 2. Didn't feel like I "fit in at my first college 3. I wasn't challenged by my courseword 4. Wanted better school atmosphere 5. Wanted to be closer to home 6. Lower cost 7. Wasn't doing as well academically as had expected D.) Withdrawn?							
(no) (Go to Q# 2) (yes) (Go to A.2) A.2 Why did you enroll at another institution or college? (Select MOST important only) 1. Changed my career plans (Go to Q# 2) 2. Needed additional training (Go to Q# 2) B.) Remained enrolled in same school.	Why? (Select most important ONE only) 1. Changed my career plans2. Wasn't challenged by the coursework3. Wanted to be closer to home4. Had good job offer5. Personal/family problems6. Financial problems7. Wasn't doing as well academically as had expected8. School did not meet my expectations							



Q# 2. Are you currently employed:	Q# 6. Mark the ONE that best describes you
1. Full time? (30 hours a week or more)2. Part time? (1-29 hours)3. Self-employed?4. Not employed? (Go to Q# 5)	grade average at the school you attended in 1990. 1. A or 42. B or 33. C or 2
Q# 3. How many jobs, including self-employment, have you had since you left the college?	4. Less than C or 2
1.	Q# 7. Were either of your parents self-employed?
2. 3. 4 or more.	y es no .
	Q# 8. At any time since January 1990, have your (Check ALL that apply)
Q# 4. What are your typical before tax monthly earnings? 1. Less than \$6252. \$625 - \$9243. \$925 - \$1,2244. \$1,225 - \$1,5245. \$1,525 - \$1,8246. \$1,825 - \$2,124	1. Changed employers2. Been promoted3. Changed jobs with same employer4. Changed industry5. Received on-the-job training6. Received classroom training7. Received a pay raise8. Been unemployed
7. \$2,125 - \$2,424 8. \$2,425 or more	Q# 9. If your program was intended to prepare you for a state license or certification
Q# 5. If you are <u>currently employed</u> or <u>have been</u> <u>employed</u> since leaving the college, how related is/was your job to the program you were enrolled in? (Circle the number on the scale which indicates how related your	have you obtained license or certification? yesno Q# 10. In January 1990 were you enrolled in a
job ls/was.) (not 0 1 2 3 4 5 6 7 8 9 10 (totally	(Select only ONE):
related) related)	1. Day program2. Evening program



Q# 11. Looking back at your experience at the school in which you were enrolled in 1990, how do you rate the following items? Indicate by circling the appropriate number. If you don't have enough information to answer please circle "NA."

	Excellent	Good	Fair	Poor	NA
A. ADMISSIONS					
Completeness and accuracy of infor- mation in the admissions process	4	3	2	1	NA
B. FINANCIAL AID					
2. Helpfulness of financial aid office	4	3	2	1	NA
C. PROGRAM/COURSE OF STUDY					
3. Orientation	4	3	2	1	NA
4. Quality of teaching	4	3	2	1	NA
5. Quality of instructional materials	4	3	2	1	NA
6. Scheduling of classes	4	3	2	1	NA
7. Interaction with fellow students	4	3	2	1	NA
8. Pace of course work	4	3	2	1	NA
9. Relevance of course work	4	3	2	1	NA
D. SCHOOL FACILITIES					
10. Quality of facilities	4	3	2	1	NA
11. Instructional equipment	4	3	2	1	NA
12. instructional labs	4	3	2	1	NA
13. Computer equipment	4	3	2	1	NA
E. JOB PLACEMENT ASSISTANCE					
14. Job search preparation	4	3	2	1	NA
15. Placement counseling	4	3	2	1	NA
16. Job referrals/leads	4	3	2	1	NA
17. Did you need/use job placement?	yes	no			



Q# 12. Would you recommend this school to a friend?

__yes __ no

Q# 13. Compared with when you entered the school you were enrolled in 1990, how would you describe yourself NOW:

	Much Stronger	Stronger	No Change	Weaker	Much Weaker
General knowledge	5	4	3	2	1
2. Analytical and problem-solving skills	5	4	3	2	1
3. Knowledge of a particular field or discipline	5	4	3	2	1
4. Ability to speak and write clearly	5	4	3	2	1
5. Understanding of ethical issues	5	4	3	2	
6. Concern about financial security	5	4	3	2	1
7. Leadership abilities	5	4	3	2	1
8. Ability to work independently	5	4	3	2	1
9. Interpersonal skills	5	4	3	2	•
10. Cultural awareness and appreciation	5	4	3	2	, ,
11. Commitment to a specific career	5	4	3	2	,
12. Tolerance of persons with different beliefs	5	4	3	2	1
13. Confidence in your academic abilities	5	4	3	_	1
14. Motivation for further education	5	4	3	2	1

Thank you for your help. Please return this questionnaire in the envelope provided today. Your responses will help the private career schools of Minnesota meet the needs of their students. All responses are confidential.

