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ABSTRACT

In June 2000, the office of Institutional Research at Northern Alberta Institute of Technology (NAIT) conducted the NAIT Employer Satisfaction Survey. It was a pilot study designed to obtain feedback from employers of 20 full-time programs at NAIT. The survey instrument was comprised of two parts: employer demographics and an assessment of employability skills. Surveys were administered via telephone, mail, and fax. In total, 292 out of 767 organizations responded to the survey for a participation rate of 38%. Highest participation rates (52%) were obtained by phone. For more than half of the organizations surveyed, 76% to 100% of their employees required some level of post-secondary certification. Overall, employers were highly satisfied with the skills and knowledge of NAIT graduates. The survey analyzed employers' level of satisfaction according to 12 different job skills, including technical knowledge, language ability, and ability to learn new skills. 90.3% of employers indicated they were satisfied with graduate employees' technical skills and knowledge needed for the job. The survey also rated satisfaction according to individual program or cluster level. The research was based on employability skills set forth by the Conference Board of Canada and a recent survey conducted by Alberta Learning. Research instruments appended. (NB)

2000 NAIT Employer Satisfaction Survey

THE NORTHERN ALBERTA
INSTITUTE OF TECHNOLOGY

Prepared by NAIT Institutional Research

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Executive Summary

In June 2000, Institutional Research conducted the NAIT Employer Satisfaction Survey. This was a pilot study with the purpose of obtaining feedback from employers of 20 full-time programs at NAIT. The survey instrument was comprised of two parts – employer demographics and an assessment of employability skills – with space for comments at the end. Surveys were administered via telephone, mail, and facsimile from June 12 to July 12, 2000.

In total 292 out of 767 organizations responded to the survey for a participation rate of 38%. Overall, the highest percentage of responses were obtained by telephone followed by mail and facsimile (52%, 33%, and 25% respectively). Results of the employer demographics section revealed that 51% of the organizations surveyed employ 20 or more individuals. Approximately 63% were a primary location or head office. Two-thirds of the organizations were located in Edmonton and another 12% were operating in northern Alberta. For more than half of the organizations surveyed, 76% to 100% of their employees required some level post-secondary certification. The type of industry in which the employers operated varied significantly and depended on the program.

Overall, employers were highly satisfied with the skills and knowledge of NAIT graduates. Most of the organizations surveyed indicated that the graduates they employ were enthusiastic, listened to understand and learn, had the ability to work well in groups, could understand and speak the language of their business, and had the ability to learn new skills and knowledge on the job. Results for the assessment of skills are categorized according to the proportion of satisfied respondents in the table below.

Skill groups by level of satisfaction

Level of Satisfaction	*Skill*
greater than 90%	The technical skills and knowledge needed for the job Understands and speaks the languages in which business is conducted The individual listens to understand and learn The ability to learn new skills and knowledge on the job The ability to work well in a group to achieve a goal Enthusiasm on the job
85% to 89%	The ability to recognize and solve problems that arise on the job The ability to communicate in speech and writing Initiative needed to fully complete tasks Remain accountable for actions taken
80% to 84%	The ability to manage their time while working with little supervision
75% to 79%	The ability to take a "big picture" perspective on the job

In addition to teaching the appropriate skills, most employers indicated that NAIT responds to the needs of their organization by providing an adequate supply of graduates. Almost all of the employers (97%) indicated they would hire a NAIT graduate again if given the opportunity.

The results of the survey support the curriculum currently taught at NAIT and indicate there is an ongoing need to continually update the technology used in the programs. To this end, many employers provided suggestions that would improve the curriculum and help satisfy their needs.

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1.0 Introduction

Since its inception in 1963, the Northern Alberta Institute of Technology has been committed to providing students with employable skills required by specific areas of industry, business, and government. (1963/64 NAIT Calendar) In 1991, the Institute furthered this commitment by incorporating it into the NAIT Mission Statement and the most recent version (1998) states, "To anticipate and meet the needs of students and the economy by combining outstanding applied education with a human touch." Feedback from employers is important as it assists programs with determining whether or not adequate or proper training has been provided to its students. At present, programs at NAIT receive feedback from employers who are members of their Advisory Committees. However, obtaining additional feedback would be advantageous because it may better reflect the prevailing views and experiences of those who employ NAIT graduates.

A survey was developed to ascertain employer opinions about recent (within the last five years) NAIT certificate and diploma graduates. Because this was a pilot project, the pool of survey participants did not include a sample from all programs at NAIT. Instead, a subset of programs was chosen encompassing the broad areas of Information Technology (I.T.) and Health Sciences, as well as four individual programs Construction Engineering Technology, Food Service and Nutrition Management, Forest Technology, and Materials Engineering Technology.

The following sections provide details of the research methods used in administering the NAIT Employer Satisfaction Survey as well as the results of the survey questions. A discussion of these results concludes the paper.

2.0 Research Methods

NAIT Institutional Research developed the Employer Satisfaction Survey based on employability skills set forth by the Conference Board of Canada and a recent employer survey conducted by Alberta Learning. Most of the survey comprised close-ended questions relating to employer demographics and an assessment of employability skills displayed by NAIT graduates. Participants were given an opportunity to express their opinions at the end of the survey in the comments section. The front page of the survey noted which program was under consideration since some employers hired graduates from more than one program. Appendix 1 contains a copy of the survey instrument.

Employer lists were provided by NAIT Career and Placement Services and contained the company name, address, telephone number, and in most cases, a contact person. All duplicates were removed from the initial list to ensure that an organization was contacted only once. The final list comprised 767 organizations representing employers who hired graduates from 20 NAIT programs. Those organizations that included a contact name had the survey administered by telephone; the remaining organizations received a copy of the questionnaire by mail. Whether surveyed by telephone or mail, the intended respondent was a direct supervisor of a NAIT graduate(s).

A class from the NAIT Call Centre and TeleProfessional Training program attempted to survey 446 employers by telephone. Many of the employers (163) either could not be reached or did not want to complete the survey by telephone. A copy of the survey was administered via facsimile to these 163 organizations.

Completed surveys were received until July 12, 2000. Staff at the Institutional Research office entered the survey data into an Access database. Frequency tables were compiled using the software package SPSS.

3.0 Results

A total of 767 surveys were administered via telephone (283), mail (321), and facsimile (163). In total, 292 organizations responded to this survey for a participation rate of 38.1%. Overall, the highest percentage of responses (51.6%) were obtained from the telephone survey, followed by mail and facsimile (33.0% and 24.5% respectively). Comparing the results of the program clusters, Health Sciences had the highest overall response rate at 40.7%. Programs from the I.T. cluster had a combined response rate of 33.0%. For both clusters, telephone contact was the most effective means of obtaining responses (57.1% Health Sciences, 46.5% I.T.). Among the individual programs, Construction Engineering Technology had the highest overall response rate of 48.0%, followed by Food Service and Nutrition Management (42.3%), Forest Technology (39.1%), and Materials Engineering Technology (37.5%). With the exception of Food Service and Nutrition Management, telephone contact was the most successful means of obtaining responses for each of the programs (mail contact was the most effective method of surveying for Food Service and Nutrition Management). Table 1 (see right) contains response rates for the two program clusters (I.T. and Health Sciences) as well as each of the individual programs. Responses are categorized by communication medium.

There were two parts to the close-ended questions. Part A of the survey pertained to employer demographics (i.e. the size of the organization, location, industry type, etc.) and part B contained an assessment of employability skills for NAIT graduates. Results of the employer demographics section revealed that 51% of the organizations surveyed employ 20 or more individuals. Approximately 63% were a primary location or head office. Two-thirds of the organizations were located in Edmonton and another 12% were operating in northern Alberta. For more than half of the organizations surveyed, 76% to 100% of their employees were required to have some post-secondary certification. Appendix 2 provides a more detailed presentation of employer demographics results.

In Part B of the survey, employers were given an opportunity to express their satisfaction with the graduates they hired. Results for each question are provided in tables and categorized according to the two program clusters (I.T. and Health) and the four individual programs (Construction Engineering Technology [CON], Food Service and Nutrition Management [FNM], Forest Technology [FOT], and Materials Engineering Technology [MET]). For each program, cluster, and the group of all respondents, results are given in percentages (a proportion of all responses for that question) as opposed to numerical frequency.

The first question (B1) asked organizations to assess the graduates they employ with regard to 12 skill areas. For the most part, results were positive and are provided in Table 9. In this report, the "very satisfactory" and "satisfactory" results were combined and will be commonly referred to as "satisfactory" (denoted as *Sat* in Table 2). Similarly, the "very unsatisfactory" and "unsatisfactory" results were combined and referred to as unsatisfactory (denoted as *Unsat* in Table 2). Results from an alternative response, "don't know", have not been included in Table 2 because this response was chosen infrequently. Based on random sampling techniques, the results of Question B1 are subject to an average variation of +/- 3.5% (19 times out of 20). This variation would be higher for individual programs or program clusters.

The first skill, "The technical skills and knowledge needed for the job," was given a satisfactory rating by 90.3% of the employers surveyed. On an individual program or cluster level, more than 93% of the employers from the I.T., Construction Engineering Technology, and Forest Technology program areas provided a satisfactory rating for this skill (93.2%, 94.5%, and 94.4% respectively).

Table 1: Response Rate by Communication Medium

Program	Surveys Sent			Surveys Received						
	Phone	Mail	Fax	Phone Contact	% Received	Mail Received	% Received	Fax Received	% Received	% of Total
Information Technology										
Computer Systems Technology	65	75	31	26	40.0%	20	26.7%	6	19.4%	30.4%
Telecommunications Engineering Technology	21	15	11	11	52.4%	5	33.3%	2	18.2%	38.3%
Network Engineering Technology	6	8	1	2	33.3%	2	25.0%	0	0.0%	26.7%
Computer Network Administrator	8	6	4	4	50.0%	1	16.7%	1	25.0%	33.3%
Computer Engineering Technology	16	17	5	10	62.5%	5	29.4%	1	20.0%	42.1%
Bachelor of Applied Information System Technology	11	10	5	6	54.5%	2	20.0%	0	0.0%	30.8%
Total	127	131	57	59	46.5%	35	26.7%	10	17.5%	33.0%
Health Sciences										
Dental Assisting	18	53	16	10	55.6%	20	37.7%	6	37.5%	41.4%
Denturist Technology	6	10	6	3	50.0%	3	30.0%	3	50.0%	40.9%
Dental Laboratory Technology	5	7	2	3	60.0%	3	42.9%	0	0.0%	42.9%
Respiratory Therapy	5	3	5	3	60.0%	0	0.0%	2	40.0%	38.5%
Medical Laboratory Technology	1	11	1	1	100.0%	2	18.2%	0	0.0%	23.1%
Medical Radiologic Technology	9	6	4	6	66.7%	1	16.7%	0	0.0%	36.8%
Cytotechnology	2	4	3	1	50.0%	2	50.0%	1	33.3%	44.4%
Combined Laboratory and X-Ray Technology	16	10	3	11	68.8%	4	40.0%	1	33.3%	55.2%
Emergency Medical Technology - Paramedic	4	3	9	2	50.0%	2	66.7%	2	22.2%	37.5%
Animal Health Technology	18	19	14	8	44.4%	8	42.1%	3	21.4%	37.3%
Total	84	126	63	48	57.1%	45	35.7%	18	28.6%	40.7%
Other Programs										
Materials Engineering Technology	8	14	10	5	62.5%	6	42.9%	1	10.0%	37.5%
Food Service and Nutrition Management	12	9	5	4	33.3%	6	66.7%	1	20.0%	42.3%
Forest Technology	18	18	10	10	55.6%	4	22.2%	4	40.0%	39.1%
Construction Engineering Technology	34	23	18	20	58.8%	10	43.5%	6	33.3%	48.0%
Total	72	64	43	39	54.2%	26	40.6%	12	27.9%	43.0%
Grand Total	**283**	**321**	**163**	**146**	**51.6%**	**106**	**33.0%**	**40**	**24.5%**	**38.1%**

"The ability to recognize and solve problems that arise on the job," was the second skill and 85.2% of the employers gave it a satisfactory rating. Employers of graduates from I.T. and Food Service and Nutrition Management provided the highest percentages of satisfactory ratings (92.2% and 90.0% respectively). Health Science employers provided the lowest proportion of positive responses (81.0% were satisfied).

Close to 93% of all respondents gave a satisfactory rating for the third skill, "Understands and speaks the languages in which business is conducted." With the exception of Materials Engineering Technology, a satisfactory rating was provided by at least 90% of the employers from the individual programs or clusters.

The fourth skill, "The ability to communicate in speech and writing," received a satisfactory rating by 88.9% of all employers. Satisfactory results for the individual programs or clusters ranged from 77.8% (Forest Technology) to 92.7% (Health program cluster).

"The individual listens to understand and learn" and "The ability to learn new skills and knowledge on the job" each received satisfactory ratings from at least 90% of the respondents in the individual programs or clusters. Overall, 95.1% and 96.5% of employers respectively provided a satisfactory rating for these two skills.

More than 90% of the respondents from the individual programs or clusters indicated they were satisfied with the following two skills: "The ability to work well in a group to achieve a goal" and "Enthusiasm on the job." The exception to this was Materials Engineering Technology, in which 66.7% of employers provided a satisfactory rating for the two skills. Overall, these skills received a satisfactory rating by 92.4% and 94.5% from all employers, respectively.

Almost 86% of all respondents indicated that NAIT graduates had the initiative needed to fully complete tasks (skill number 9). More than 90% of the employers from the I.T. and Forest Technology programs indicated they were satisfied with the initiative shown by the graduates they hired. Material Engineering Technology had the smallest proportion of employers who were satisfied with this skill (66.7%).

Results for the tenth skill, "The ability to manage their time while working with little supervision," were lower than for the previous skills. Approximately 83% of employers indicated they were satisfied with this ability shown by the NAIT graduate(s) they hired. Satisfactory results for individual programs or clusters ranged from 66.7% (Materials Engineering Technology) to 90.0% (Food Service and Nutrition Management).

Most of the employers (88.5%) were satisfied with the graduates' ability to "Remain accountable for actions taken." Results for the individual programs or clusters were also positive. The highest proportion of satisfied employers were those who have hired graduates from the Forest Technology program (94.5%) and the lowest proportion were employers of graduates from Materials Engineering Technology (66.7%).

The final skill received the lowest satisfaction rating. "The ability to take a 'big picture' perspective on the job" was rated satisfactory by 75.5% of all employers. Among the various programs or clusters, the percentage of satisfied employers ranged from 60% (Food Service and Nutrition Management) to 83.6% (I.T. program cluster).

Table 2: Rate the following skills of the NAIT graduates you employ:

Skill/Ability	*I.T.*		*Health*		*CON*		*FNM*		*FOT*		*MET*		*All*	
	Sat	*Unsat*	*Sat*	*Unsat*	*Sat*	*Unsat*	*Sat*	*Unsat*	*Sat*	*Unsat*	*Sat*	*Unsat*	*Sat*	*Unsat*
1. The technical skills and knowledge needed for the job	93.2%	6.7%	86.4%	13.6%	94.5%	5.6%	80.0%	20.0%	94.4%	5.6%	91.7%	8.3%	90.3%	9.6%
2. The ability to recognize and solve problems that arise on the job	92.2%	7.8%	81.0%	19.1%	77.8%	22.2%	90.0%	10.0%	83.4%	16.7%	83.4%	16.6%	85.2%	14.8%
3. Understands and speaks the language in which business is conducted	92.3%	7.7%	94.5%	5.5%	91.7%	8.3%	90.0%	10.0%	94.5%	5.6%	83.3%	16.7%	92.8%	7.3%
4. The ability to communicate in speech and writing	89.3%	10.7%	92.7%	7.3%	83.4%	16.7%	90.0%	10.0%	77.8%	22.2%	83.3%	16.7%	88.9%	11.0%
5. The individual listens to understand and learn	99.1%	0.0%	92.7%	7.3%	94.0%	6.0%	90.0%	10.0%	94.4%	5.6%	91.7%	8.3%	95.1%	4.5%
6. The ability to learn new skills and knowledge on the job	99.1%	0.0%	93.6%	5.5%	94.2%	5.7%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	96.5%	2.7%
7. The ability to work well in a group to achieve a goal	96.2%	2.9%	90.0%	9.1%	91.4%	5.7%	100.0%	0.0%	94.4%	5.6%	75.0%	25.0%	92.4%	6.6%
8. Enthusiasm on the job	96.1%	1.9%	95.4%	3.6%	91.6%	8.3%	100.0%	0.0%	100.0%	0.0%	66.7%	33.3%	94.5%	4.5%
9. Initiative needed to fully complete tasks	91.4%	6.7%	81.8%	17.3%	86.2%	11.1%	80.0%	20.0%	94.4%	5.6%	66.7%	33.3%	85.8%	12.8%
10. The ability to manage their time while working with little supervision	87.5%	12.5%	79.1%	20.0%	72.2%	2.8%	90.0%	10.0%	88.8%	5.6%	66.7%	33.3%	83.1%	16.2%
11. Remain accountable for actions taken	91.3%	7.8%	89.0%	10.0%	86.1%	13.9%	80.0%	20.0%	94.5%	5.6%	66.7%	33.3%	88.5%	10.8%
12. The ability to take a "big picture" perspective on the job	83.6%	14.5%	72.7%	24.5%	63.8%	36.1%	60.0%	40.0%	72.3%	22.2%	83.3%	16.7%	75.5%	22.4%

Table 3: Please indicate whether you strongly disagree, disagree, agree, or strongly agree with the following statements:

Response	*I.T.*		*Health*		*CON*		*FNM*		*FOT*		*MET*		*All*	
	Agr	*Disagr*	*Agr*	*Disagr*	*Agr*	*Disagr*	*Agr*	*Disagr*	*Agr*	*Disagr*	*Agr*	*Disagr*	*Agr*	*Disagr*
Providing an adequate supply of graduates	87.0%	7.0%	80.0%	18.2%	83.3%	11.1%	50.0%	20.0%	88.9%	5.6%	83.4%	8.3%	82.5%	12.2%
Providing appropriate skills to graduates	91.0%	7.0%	84.1%	15.0%	86.1%	8.3%	60.0%	20.0%	74.4%	5.6%	91.6%	8.3%	86.9%	10.6%

Question B2 asked employers to indicate whether or not they strongly agree, agree, disagree, or strongly disagree with two statements. Results of this question are provided in Table 3 (on previous page). Within the table, "strongly agree" and "agree" responses are combined and denoted as *Agr*. Similarly, "strongly disagree" and "disagree" responses are combined and denoted as *Disagr*.

The first statement, "NAIT responds to the needs of my company by providing an adequate supply of graduates," was endorsed by 82.5% of all employers (indicating either strongly agree or agree); 12.2% indicated they either disagree or strongly disagree, and 5.3% stated they did not know. Significant levels of dissatisfaction were expressed by employers of Health Science, Construction Engineering Technology, and Food Service and Nutrition Management graduates (18.2%, 11.1%, and 20.0% of respondents indicated they either disagree or strongly disagree).

The second statement, "NAIT responds to the needs of my company by providing appropriate skill to graduates," received a higher proportion of positive responses. Overall, 86.9% of employers either strongly agreed or agreed with this statement. Results for the various programs and clusters were also positive and, in particular, more than 90% of employers for graduates of I.T. programs and Materials Engineering Technology either agreed or strongly agreed with this statement.

The last close-ended question of the survey asked participants, "If you were in a position to do so, would you hire graduates of NAIT in the future?" Responses to this question (provided in Table 4) were very positive. Overall, 97.2% of employers indicated that they would hire NAIT graduates in the future. Furthermore, all of the employers who had hired graduates from Construction Engineering Technology, Food Service and Nutrition Management, Forest Technology, and Materials Engineering Technology responded positively; 98.0% and 94.5% of employers from the I.T. and Health programs (respectively) said they would hire a NAIT graduate again.

Table 4: If you were in a position to do so, would you hire graduates of NAIT in the future?

Hire Future Graduates	*I.T.*	*Health*	*CON*	*FNM*	*FOT*	*MET*	*All*
Yes	98.0%	94.5%	100.0%	100.0%	100.0%	100.0%	97.2%
No	2.0%	5.5%	0.0%	0.0%	0.0%	0.0%	2.8%

4.0 Comments

Nearly half of the respondents provided additional comments at the end of the survey. Details of these comments, which have been grouped according to the program clusters and programs, are provided in Appendix 3. Table 5 shows the overall distribution of comments according to five general realms: positive comments (supportive of NAIT training or the graduates hired), suggested improvements (in NAIT training or in students' skills, attitudes and behaviours), more graduates needed, inquiries, and other.

Table 5: Comment Type

Comment Type	*I.T.*	*Health*	*CON*	*FNM*	*FOT*	*MET*	*All*
Positive comments	48%	38%	31%	14%	60%	50%	42%
Suggested improvements	37%	42%	46%	5%	40%	50%	42%
More graduates needed	0%	11%	0%	0%	0%	0%	5%
Inquiries	4%	0%	0%	0%	0%	0%	1%
Other comments	11%	9%	23%	28%	0%	0%	10%

Overall, 42% of the comments received were supportive and generally related to the positive aspects of a given program, the training received by students in that program, or NAIT as a whole. The following are examples of these comments:

"Forest Technology program is very well run and provides good background for our needs."

"Good understanding of technical concepts. Good initiative and high performance level. Many students have been hired for a summer position and have been kept on."

"NAIT has very good training. Grads come out knowing everything they need to know."

Another 42% of the comments pertained to potential improvements for programs and students, including the addition of particular topic to a program's curriculum, work attitudes or practical skills that should be taught to students.

"More courses in Human Resources and computers."

"Students quite often require a lot of supervision and instruction, so more confidence and initiative would be helpful."

"More maturity and acceptance of what starting at the bottom means. You don't start as CEO."

"More care must be given to improve communication skills of graduates. We have had graduates that cannot spell or write a sentence."

The remaining 16% of comments expressed a need for increased graduates, inquires, or other topics.

"Programs need to expand to meet operational needs."

"When will NAIT have their career fair?"

"Cannot make valuable comments based on one employee."

5.0 Discussion

This section provides a discussion of the results and comments that were previously presented. Since variability increases with smaller sample sizes, the focus of this discussion will pertain mostly to the overall results.

The NAIT Employer Satisfaction Survey was positively received by many of the survey participants. With an overall response rate of 38.1%, the results adequately represented the views of the 767 organizations that were surveyed. Telephone contact was the most successful means of administering the survey, but it should not be considered the only means, as many employers found it inconvenient to respond over the telephone. Most of the employers were located in the Edmonton area or the northern part of the province. Their office was likely a primary or head office, employing 20 or more people, of which 76% to 100% required some level of post-secondary certification. The type of industry in which the employers operated varied significantly and depended on the program under consideration.

Results for the assessment of skills were positive and can be categorized according to the proportion of satisfied respondents (Table 6). Two factors should be considered in evaluating the results: (1) most of the graduates who have been assessed completed their program within the last three years and (2) according to the NAIT Entering Student Questionnaire (1996), 77% of entering students were under 25 years of age. These factors indicate that a large proportion of the graduates hired by the respondents to this survey would be young and recent graduates (for many, this job would be the first in their career) with much of their skills and knowledge fresh in their minds and still current. Therefore, it seems reasonable that more than 90% of organizations would be satisfied with their employees regarding their technical skills and knowledge, ability to speak the language in which business is conducted, ability to learn while on the job, and their capacity to work well in groups and be enthusiastic.

Table 6: Skill groups by level of satisfaction

Level of Satisfaction	*Skill*
greater than 90%	The technical skills and knowledge needed for the job Understands and speaks the languages in which business is conducted The individual listens to understand and learn The ability to learn new skills and knowledge on the job The ability to work well in a group to achieve a goal Enthusiasm on the job
85% to 89%	The ability to recognize and solve problems that arise on the job The ability to communicate in speech and writing Initiative needed to fully complete tasks Remain accountable for actions taken
80% to 84%	The ability to manage their time while working with little supervision
75% to 79%	The ability to take a "big picture" perspective on the job

The remaining skills, those below a 90% level of satisfaction, may develop as the employee spends more time on the job. In particular, the ability to recognize and solve problems, ability to manage time while working with little supervision, and the ability to take a big picture perspective are characteristics of a more mature and experienced employee. However, it is important to note that even with this lower level of satisfaction, almost all of the employers indicated they would hire a NAIT graduate again.

Generally, most employers indicated that NAIT provides an adequate supply of graduates but substantial variation occurred among the programs and program clusters. In particular, employers from Health Sciences, Construction Engineering Technology, and Food Service and Nutrition Management showed the highest level of dissatisfaction. For the first two groups, labour market forecasts provided by the Alberta Learning Information System - OCCINFO support the results and indicate that there is high demand for workers in the fields of Health Science and Construction Engineering Technology. Results for the Food Service and Nutrition Management are less certain. The number of respondents in this group was low (only 10 for this question) indicating diminished confidence in the results. Furthermore, the OCCINFO website does not suggest above average growth in this field.

The comments were a rich source of information with many compliments or suggestions to improve the skills of NAIT graduates. Many of the negative comments were a reflection of the person hired as opposed to the Institute or program itself.

6.0 Conclusions

The NAIT Employer Satisfaction Survey was a pilot project with the purpose of acquiring feedback from the employers of NAIT graduates. Because this was the first time for this survey, various distribution methods were tested to determine which would be the most effective and obtain the highest response rate. From the results, it can be concluded that all three methods (telephone contact, mail, or facsimile) should be used in the future surveys with most of them administered by telephone. The other two methods should be used as an alternative when the contact person cannot be reached by telephone or the name of a contact person is not available.

Responses from the first part of the survey provide general information about the companies or labour market that the graduates of the 20 programs work for. This information pertains to company size, location, educational requirements, number of NAIT graduates hired, and in what type of industry the company operates.

Overall, there was a high level of satisfaction with the skills and knowledge taught to the graduates considered. Most of the organizations surveyed indicated that the graduates they employ were enthusiastic, listened to understand and learn, had the ability to work well in groups, could understand and speak the language of their business, and had the ability to learn new skills and knowledge on the job. If the opportunity were presented again, almost all of the survey respondents would hire a NAIT graduate again. These results support the curriculums currently taught at NAIT and suggest the ongoing need to continually update the technology used in the programs. To this end, many employers provided suggestions that would improve the curriculum and help satisfy their needs.

Appendixes

THE NORTHERN ALBERTA INSTITUTE OF TECHNOLOGY

2000 Employer Satisfaction Survey

"Program Name"

The information on this form is collected under the authority of the Technical Institutes Act, which mandates the provisions of programs and services by Technical Institutes. The purpose of this study is to solicit the opinions of employers of NAIT graduates, throughout the province, about how well the Institute prepares its graduates for employment. Participation in this study is greatly appreciated and all information that you provide will be held in strictest confidence and is protected under the Freedom of Information and Protection of Privacy Act. Results will be aggregated and individual responses will not be released.

The survey takes only a few minutes to finish and should be completed by someone who has had an opportunity to supervise graduates of the Institute. Please fax completed surveys to (780) 471-8496 or return through mail in the prepaid envelope by July 6, 2000.

Demographic Information

A1. How many people does your organization employ in Alberta (NOT including yourself)?

1. 1 to 4 employees
2. 5 to 9 employees
3. 10 to 19 employees
4. 20 or more employees

A2. What type of industry is your organization in?

1. Accommodation, food, and beverage
2. Agriculture/primary industry
3. Business services
4. Construction
5. Education services
6. Finance, insurance, real estate
7. Government services
8. Health and social services
9. Manufacturing
10. Retail trade
11. Transportation, communications, and utilities
12. Wholesale trade
13. Other _____ *(please specify)*

A3. Which of the following best describes your type of business?

1. Primary location/head office
2. Branch
3. Franchise
4. Public sector
5. Home-based business
6. Other _____ *(please specify)*

A4. What is the geographic location of your organization (if more than one branch, which office are you working out of)?

1. Edmonton
2. Calgary
3. Central Alberta (between Edmonton and Calgary)
4. Northern Alberta
5. Southern Alberta
6. Outside Alberta

A5. In general, what percentage of the positions in your organization (including yourself) requires a post-secondary degree, diploma, or program certificate?

1. None
2. 1% to 25%
3. 26% to 50%
4. 51% to 75%
5. 76% to 100%

A6. How many NAIT graduates has your organization hired in the last 5 years? _____

A7. When did your organization last hire a NAIT graduate (indicate a season and a year, for example, Spring, 1999)? _____

Satisfaction With Graduates Hired

B1. The following is a list of various types of skills and personal qualities that graduates may be expected to have. We prefer that you take a generalized or composite approach in framing your opinion. Please try to consider the graduate-employee(s) in terms of their level of preparedness as a new employee rather than one who has worked in the field for a number of years.

Rate the following skills of these NAIT graduates using a scale from 1 to 4 where 1 is "very unsatisfactory," 2 is "unsatisfactory," 3 is "satisfactory," 4 is "very satisfactory," and 8 is "don't know."

1 = very unsatisfactory	2 = unsatisfactory	3 = satisfactory	4 = very satisfactory	8 = don't know

a)	The technical skills and knowledge needed for the job	1	2	3	4	8
b)	The ability to recognize and solve problems that arise on the job	1	2	3	4	8
c)	Understands and speaks the languages in which business is conducted	1	2	3	4	8
d)	The ability to communicate in speech and writing	1	2	3	4	8
e)	The individual listens to understand and learn	1	2	3	4	8
f)	The ability to learn new skills and knowledge on the job	1	2	3	4	8
g)	The ability to work well in a group to achieve a goal	1	2	3	4	8
h)	Enthusiasm on the job	1	2	3	4	8
i)	Initiative needed to fully complete tasks	1	2	3	4	8
j)	The ability to manage their time while working with little supervision	1	2	3	4	8
k)	Remain accountable for actions taken	1	2	3	4	8
l)	The ability to take a "big picture" perspective on the job	1	2	3	4	8

B2. Please indicate whether you strongly disagree, disagree, agree, or strongly agree with the following statements:

1 = strongly disagree	2 = disagree	3 = agree	4 = strongly agree	8 = don't know

NAIT responds to the needs of my company by:

a)	providing an adequate supply of graduates	1	2	3	4	8
b)	providing appropriate skills to graduates	1	2	3	4	8

B3. If you were in a position to do so, would you hire graduates of NAIT in the future?

1. Yes 2. No

B4. Do you have any other comments you would like to make about graduates of the Northern Alberta Institute of Technology?

Final Comments

C1. Periodically, the NAIT Career and Placement Office may wish to contact employers of NAIT graduates. It would be greatly appreciated if you could provide your name and position in your organization, the name of your organization and its mailing address, phone and fax numbers, and e-mail address so that we can update our records.

C2. Results of this study will be available in September, 2000. If you would like to receive a summary of the results, please indicate below.

1. Yes 2. No

Thank you for participating in this survey. Please fax completed surveys to (780) 471-8496 or return through mail in the prepaid envelope by June 30, 2000. If you have any questions about the collection or use of this information, please contact the NAIT Institutional Research Office at (780) 471-7014.

Appendix 2: Employer Demographics

The following presents results of the close-ended questions relating to employer demographics. Results for each question are provided in tables and categorized according to the two program clusters (I.T. and Health) and the four individual programs (Construction Engineering Technology [CON], Food Service and Nutrition Management [FNM], Forest Technology [FOT], and Materials Engineering Technology [MET]). For each program, cluster, and the group of all respondents, results are given in percentages (a proportion of all responses for that question) as opposed to numerical frequency.

Question A1 asked, "How many people does your organization employ in Alberta?" Overall, results for this question (found in Table A1) indicated that about half of the organizations surveyed employ 20 or more people (51%). This result was consistent for the individual programs and program clusters except Health Sciences, where only one-quarter of the organizations employ 20 or more employees. For this cluster of programs, 26.6% of the organizations employ 1 to 4 people, 29.4% employ 5 to 9 people, and 18.3% employ 10 to 19 people.

Table A1: How many people does your organization employ?

Number of Employees	*I.T.*	*Health*	*CON*	*FNM*	*FOT*	*MET*	*All*
1 to 4 employees	6.0%	26.6%	8.6%	0.0%	11.1%	0.0%	14.0%
5 to 9 employees	11.0%	29.4%	8.6%	0.0%	11.1%	16.7%	17.5%
10 to 19 employees	15.0%	18.3%	28.6%	9.1%	16.7%	8.3%	17.5%
20 or more employees	68.0%	25.7%	54.3%	90.9%	61.1%	75.0%	51.0%

The purpose of Question A2 was to determine what type of industry the respondents or organizations belong. Results for Question A2 varied considerably from one program cluster or individual program to the next (Table A2). Overall, the largest proportion of organizations were involved in the health and social services industry (32.5%), followed by business services, construction, and agriculture/primary industries (15.1%, 13.0%, and 10.6% respectively). The top two industries for employers in the I.T. cluster were business services (38.5%) and transportation, communications, and utilities (17.3%). Three-quarters of organizations that employ graduates from the Health cluster were involved in the health and social services industry; 15.3% of organization from this cluster were in the agriculture/primary industry. Construction Engineering Technology had the highest percentage of employers involved in the construction industry (86.1%). About two-thirds of organizations employing graduates from Food Service and Nutrition Management were in the health and social services industry and the remainder were involved in the accommodation, food, and beverage industry. Half of the employers of Forest Technology graduates were in the agriculture/primary industry and a third were in the manufacturing industry. Forty-one per cent of Materials Engineering Technology employers were in the manufacturing industry and one-quarter each were involved in the business services and construction industries.

Table A2: What type of industry is your organization in?

Industry Type	*I.T.*	*Health*	*CON*	*FNM*	*FOT*	*MET*	*All*
Accommodation, food, and beverage	0.0%	0.0%	0.0%	36.4%	0.0%	0.0%	1.4%
Agriculture/primary	3.8%	15.3%	0.0%	0.0%	50.0%	8.3%	10.6%
Business services	38.5%	0.9%	0.0%	0.0%	0.0%	25.0%	15.1%
Construction	2.9%	0.0%	86.1%	0.0%	5.6%	25.0%	13.0%
Education services	9.6%	1.8%	0.0%	0.0%	0.0%	0.0%	4.1%
Finance, insurance, and real estate	1.9%	1.8%	2.8%	0.0%	0.0%	0.0%	1.7%
Government services	9.6%	0.0%	0.0%	0.0%	11.1%	0.0%	4.1%
Health and social services	2.9%	76.6%	0.0%	63.6%	0.0%	0.0%	32.5%
Manufacturing	4.8%	1.8%	11.1%	0.0%	33.3%	41.7%	7.5%
Retail trade	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%
Transportation, communication and utilities	17.3%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%
Wholesale trade	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%
Other	1.0%	1.8%	0.0%	0.0%	0.0%	0.0%	1.0%

When asked to describe their business type (Question A3, Table A3), most of the organizations indicated they were a primary location or head office (62.8%). Other organizations were in the public sector (19.7%) or were a branch office (12.4%), franchise (0.7%), or home-based business (0.3%). Within the particular program clusters or individual programs, the majority of organizations were a primary location or head office except for the employers of Food Service and Nutrition Management graduates. In this case, more than half of the employers were from the public sector.

Table A3: Which of the following best describes your type of business?

Business Type	*I.T.*	*Health*	*CON*	*FNM*	*FOT*	*MET*	*All*
Primary location/ head office	56.3%	64.0%	80.6%	18.2%	64.7%	91.7%	62.8%
Branch	20.4%	5.4%	16.7%	9.1%	11.8%	0.0%	12.4%
Franchise	1.0%	0.0%	0.0%	9.1%	0.0%	0.0%	0.7%
Public sector	17.5%	26.1%	2.8%	54.5%	17.6%	0.0%	19.7%
Home-based business	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Other	3.9%	4.5%	0.0%	9.1%	5.9%	8.3%	4.1%

Table A4 provides the results of Question A4, "What is the geographic location of your organization?" For most of the individual programs or clusters, the majority of employers were located in Edmonton. The proportion of Edmonton organizations ranged from 51.4% of Health employers to 82.4% of I.T. and Construction Engineering Technology employers. The exception to this was Forest Technology in which more than half of the employers were located in Northern Alberta (55.6%).

Table A4: What is the geographic location of your organization (if more than one branch, which office are you working out of)?

Business Location	*I.T.*	*Health*	*CON*	*FNM*	*FOT*	*MET*	*All*
Edmonton	82.4%	51.4%	82.4%	81.8%	22.2%	75.0%	66.4%
Calgary	4.9%	9.2%	0.0%	0.0%	0.0%	16.7%	5.9%
Central Alberta	4.9%	11.9%	5.9%	18.2%	5.6%	8.3%	8.4%
Northern Alberta	3.9%	17.4%	2.9%	0.0%	55.6%	0.0%	11.9%
Southern Alberta	1.0%	2.8%	2.9%	0.0%	5.6%	0.0%	2.1%
Outside of Alberta	2.9%	7.3%	5.9%	0.0%	11.1%	0.0%	5.2%

Question A5 asked what percentage of the positions in the organization require some level of post-secondary education (Table A5). Overall, 56.6% of the employers indicated that 76% to 100% of their employees require post-secondary certification. More specifically, a large percentage of I.T., Health, and Forest Technology organizations indicated that 76% to 100% of their employees require post-secondary education (63.7%, 72.7%, and 47.1% of employers respectively). Conversely, a significant proportion of organizations that employ graduates of Construction Engineering Technology, Food Service and Nutrition Management, and Materials Engineering Technology indicated that 1% to 25% of their employees require post secondary education (47.2%, 70.0%, and 45.5% respectively).

Table A5: In general, what percentage of the positions in your organization (including yourself) requires a post-secondary degree, diploma, or program certificate?

Percentage of Positions	*I.T.*	*Health*	*CON*	*FNM*	*FOT*	*MET*	*All*
None	2.0%	0.9%	5.6%	0.0%	0.0%	0.0%	1.7%
1% to 25%	2.9%	2.7%	47.2%	70.0%	29.4%	45.5%	14.0%
26% to 50%	14.7%	10.0%	13.9%	10.0%	11.8%	18.2%	12.6%
51% to 75%	16.7%	13.6%	13.9%	20.0%	11.8%	18.2%	15.0%
76% to 100%	63.7%	72.7%	19.4%	0.0%	47.1%	18.2%	56.6%

In the last five years, 17.1% of all survey participants hired one NAIT graduate, 17.5% hired two graduates, 15.9% hired three graduates, 11.5% hired four graduates, and 8.3% hired five graduates (Question A6, Table A6). Close to 30% of employers hired more than five graduates over the last five years. Within the individual programs or clusters, the I.T. programs and Materials Engineering Technology had the highest proportion of employers who hired more than five NAIT graduates in the last five years (40.7% and 50.0% respectively). Furthermore, at least three-quarters of the respondents in each of the program areas hired at least one NAIT graduate since the beginning of 1999 (Question A7, Table A7).

Table A6: How many NAIT graduates has your organization hired in the last 5 years?

Number of NAIT Graduates	*I.T.*	*Health*	*CON*	*FNM*	*FOT*	*MET*	*All*
1	17.3%	14.9%	23.5%	28.6%	5.9%	25.0%	17.1%
2	12.3%	20.8%	20.6%	42.9%	11.8%	8.3%	17.5%
3	12.3%	24.8%	5.9%	0.0%	11.8%	8.3%	15.9%
4	11.1%	10.9%	11.8%	0.0%	23.5%	8.3%	11.5%
5	4.9%	8.9%	14.7%	14.3%	11.8%	0.0%	8.3%
More than 5	40.7%	19.8%	23.5%	14.3%	35.3%	50.0%	29.4%

Table A7: When did your organization last hire a NAIT graduate?

Year	*I.T.*	*Health*	*CON*	*FNM*	*FOT*	*MET*	*All*
1995	1.3%	1.0%	0.0%	0.0%	0.0%	0.0%	0.8%
1996	2.5%	2.1%	0.0%	0.0%	0.0%	0.0%	1.7%
1997	7.6%	7.2%	10.3%	14.3%	8.3%	8.3%	8.1%
1998	11.4%	14.4%	13.8%	0.0%	16.7%	16.7%	13.1%
1999	26.6%	44.3%	27.6%	42.9%	16.7%	41.7%	34.7%
2000	50.6%	30.9%	48.3%	42.9%	58.3%	33.3%	41.5%

Appendix 3: Comments

I.T. Programs

- *CNT* • This survey is a good idea.
- *CNT* • Need to teach them more programming outside GUI environment. Desperately need at least one course in scripting (C and Unix scripting, writing batch file). Your graduates come out crippled because they don't know how to do a lot things without a GUI. To much Access, not enough overall programming skills
- *CNT* • When will NAIT be having their career fair?
- *CNT* • Would like more work experience (co-ops work experience programs).
- *CNT* • Experience is gained while on the job, but NAIT grads seem to be quite prepared for the job.
- *CNT* • More spending for equipment, amount of equipment.
- *CNT* • Holding on to good one regarding salary available. Would like to receive survey results.
- *CNT* • More upgrade/update training for the graduate via distance learning/internet course.
- *NET* • More intelligent learning skills required.
- *NET* • NAIT graduates are well trained, I'm a NAIT graduate myself.
- *TET* • Good in theory and intellectual aspect. Don't have enough practical skills. Physical aspect not sufficient. Physical attitudes need to be improved. Other than needing better skills in the physical portion of the job, they are fine, especially their intellectual knowledge.
- *TET* • The information taught lacks or is outdated and must brought up to speed. A module in the course that deals with customer service. (How to deal with servicing, Interaction with customers)
- *TET* • Well trained, good work habits, ambitious and eager.
- *TET* • Too soon to tell.
- *TET* • In our experience here, we feel the students lack a sense of good work ethics. Customer interface seems to need fine tuning. Tech students seem to think they will be locked in a room with no need [to] talk to customers or understand the retail end of their trade. I'm not sure this can be changed but it will help.
- *TET* • Posting 1 position. In March records management spoke to director of program and was told students resources would be send. They were very disappointed not one was received.
- *TET* • Your telecommunications graduates have a strong fundamental base and are prepared for any training we give them. I wish a similar program were available in Ontario.
- *TET* • We have only the one grad, who was hired before I was, so it is difficult for me to make comparisons. I am, however, very pleased with knowledge and skills of the individual.
- *TET* • So far so good.
- *TET* • Problems with hands-on training, on trouble shooting, testing, and mark to score. Not open minded to find way to tackle trouble-shooting problems.
- *TET* • Hard time to get people to move up North, need to update current equipment, NAIT students have the basics, company willing to train on update information.
- *CNA* • Students are up-to-date in what their work is.
- *CNA* • New graduates can have bigger expectations of job related duties than many established companies provide. (Example - we don't "test" ideas on production services) New grads need to understand how careful they need to be with "user" data and user productivity.
- *CST* • Excellent training program; I'm very impressed with the students from NAIT. NAIT is an excellent resource.

CST • The first student was terrible. The second was superb. I think this was the individual as well as the training.

CST • I'm very pleased with the graduate I hired. I'm very pleased with her work.

CST • Focus on programming language visual basic as opposed to access.

CST • Lacking proper software desk practices.

CST • In the past we have hired NAIT students who have had excellent training.

CST • NAIT does a good job of structuring the program so that only the best candidates make it through.

CST • Very well equipped. Only one set of graduates did not have enough communication skills.

CST • Q B2) is not a fair question because most graduates come from the University.

CST • These skills and personal qualities are part of our recruiting/selection criteria. New hires are expected to be at least satisfactory for all attributes.

CST • Very pleased with students. Need to learn more on Mac's and Macintoshes as well as IBM's.

CST • For CST, academics should reflect more on an individual's ability. Two students with similar GPA/ transcript may have big differences in their ability to perform.

CST • To offer a course on how to improve one's soft skills, rather than just focusing on developing the students technical skills.

CST • Provide more on-the-job or apprenticeship experience.

CST • On the whole, most graduates have an excellent ability to learn and adapt to new information and situations.

CST • Generally doing fine.

CST • Some of the recent grads are weak technically.

CST • Good relationship with NAIT.

CST • Good understanding of technical concepts. Good initiative and high performance level. Many students been hired for summer positions and have been kept on.

CST • Good.

CST • Grads tend to look for salaried positions with large plants. We usually lose the grads to salaried positions even though the hourly position with us would have netted them more money in a year.

CST • Would like to receive info on HVAC controls & instrumentation program.

CST • Well prepared student from NAIT. Most grads come from Saskatchewan.

CST • Four years ago two students were exceptional.

CST • I find the Computer Systems Technology program to be the best program for ITO resources.

CST • Some of the students were not accountable enough for the job. Not ready for the job but that is because they were young and inexperienced. However, they were knowledgeable.

BAI • Lots of success with NAIT students. Appreciates NAIT service, good response to recruitment, will continue to hire NAIT students.

BAI • Normally high tech.

BAI • NAIT CST students should learn more than just minor software technologies. Some students are placed directly into advising roles, and they should be more knowledgeable in terms of available and emergency technologies from multiple vendors.

BAI • Need MCSE.

Health Science

DEA • NAIT needs to place more value in the practice management side. Many grads unable to cope with stressful part of Dentistry.

DEA • More dental assistants are required.

DEA • Cannot make valuable comments based on one employee.

DEA • I've had a variety of dental assisting grads from various schools. The NAIT grads are always above average, and the clinical expanded duty skills are exceptional. NAIT instructors cover a lot of ground in a short time, and although more attention is needed in patient education, especially in the area of finance, urban and bridge, its good to see there is some focus in these areas.

DEA • I have found with new graduates that the skills are not lacking, it is the poor attitude that is the problem. The new graduate in Dental Assisting is assuming that she knows more than the dentist and is diagnosing dental problems. This of course causes conflict between the dentist and the dental assistant. The program must emphasize to the grad that they are not in a position to second-guess the dentist and start to question things he or she does. Only the dentist can diagnose. This is what is lacking in the new D. A. grad.

DEA • More practicum please. Need to work more with materials and areas they will be using.

DEA • Some are exceptional and some are very poor students but this probably not a reflection on NAIT but rather the individual. Overall the graduates are much better than from KDM.

DEA • Students quite often require a lot of supervision and instruction, so more confidence and initiative would be helpful.

DEA • For dental assistants, more practical experience would be appreciated by probably doing more/longer job placements.

DEA • Emphasize to your graduates that: Dentistry including dental assisting is a life-long learning process. Not like " I got my diploma, I'm done'! They must learn to evaluate their own work, make adjustments when repeating a job to avoid the same errors. If in doubt, ask questions! I am very satisfied with the performance of all my NAIT grads.

DEA • Most of these things [Question B1] reflect personal character, not job skills that can be impacted by class work.

DEA • Pleased overall.

DEA • Excellent background in basic procedures required for general dentistry office. Education level evident in the employee's ability to learn skills and procedures.

DEA • The graduates that NAIT turn out especially in the area of dental assistants are exceptionally well equipped for the work force both in knowledge and technical skills. The dentists in our practice would not hire anything but a NAIT graduate. We have tried out KDM and some assistant that graduated outside NAIT. We will continue to hire NAIT grads providing that the quality of the teaching doesn't change and that its graduates continue to be top notch (cream of the crop).

DEA • Not sure what these graduates are being taught in school. One thing for sure is they have no problem asking for a top wage with absolutely no experience. Apparently have been told by NAIT that this the wage they should be asking for?

DEA • Likes NAIT Grads - would give priority over other schools.

DEA • The past experience we have had with NAIT dental assistants has not been very positive. The individuals are not in the mind set that the patient is the most important focus that this setting is a healthcare setting. Infection control has been a concern. Dental assisting also includes keeping your lab, counters and sinks clean, your operatory stocked and disinfected, the sterilization area organized, developing x-rays properly – knowing how to correct problems, initiative and motivation – not to just sit in a chair and assist. Being a NAIT grad from 20 years ago, I am in a management position hiring for several practices and have found that the Dental assistants graduating presently are not meeting our basic skill levels, that are equivalent to the NAIT outline of trained duties.

DLT • Need more techs. Very happy with the graduates.

DLT • The graduates generally do a good job. Probably the only thing that they need is experience and speed which will come if the grad perseveres in the trade long enough to get the experience to advance.

DLT • Need to understand what work responsibilities are. They seem to come out to be at work at the company for eight hours rather what they can produce or need to do in a workday.

DLT • Far behind in technology – upgrade their programs. Instructors need to update on the new technology.

DET • I feel that the education I received while at NAIT (1994) was weak compared to the students of the present, but I also feel that NAIT needs to develop a more detailed outline (include TMJ dysfunction) and a solid business program for future business owners)

DET • Value of NAIT graduate is diminished due to attitudes and rules established by Board of Examiners for dentists. Requirement for direct supervision has changed recently requiring employer dentist to be in attendance at all times when intern is working – thereby eliminating value of diploma graduate to the employer.

DET • Very pleased to work with NAIT grads. Looks forward to working with more grads.

DET • A) Skills & knowledge not compatible – should be two different questions. B) These also are two different things. Most can't write to save their soul. C) Do people who hum tunes while listening really "understand?" D) Ability – probably yes, willingness – No. E) Grade 1 attitude: Teacher (in school) is "God" – only "He" is right. I would propose a 5 year program with at least 3 years of internship and more emphasis in school on practical aspects! Unfortunately it's very annoying to have someone "know everything" and not be able to "do" anything. Graduates should have to be taught that there are different ways and techniques to achieve things, learning the right or wrong to experience.

DET • In the denturist profession, the student should be exposed to more procedures, materials, and scenarios that go on in a practicing denturist clinic.

CLX • The CLX program needs change. (need on site training, need more lectures, need better com class)

CLX • CLXT Students only come from NAIT so options are very limited to hire elsewhere.

CLX • Very happy with NAIT grads. Need more grads desperately.

CLX • Training is very short as opposed to what grads should have, overall I am pleased.

CLX • Not enough grads.

CLX • Practical skills need improvement. Quite happy overall.

CLX • Expected to know more, older program had more time, now they are not able to practice much. Seem to be unfamiliar with many things. The manager is disappointed with the new program.

CLX • Would not hire new grads. Needs to see change. Must prepare for "real hospital environment. Just not prepared. Lack of exposure, needs more volume experience.

CLX • Learning too much in too little time.

CLX • Need to know what result will affect patient.

CLX • Please continue upgrading courses for this professional distance learning.

CLX • The 2 graduates I hired were sent to NAIT to retrain in their respective fields. RT Lab Tech – went and took the x-ray program, RT X-ray tech – went and took the lab program. They came back to work and were not qualified in my opinion.

CLX • Graduated '95. Well prepared. Resulting good job. Very good theory and practical skills.

MLT • Program needs to expand to meet operational needs.

MRT • Would like graduates to [complete program] in the spring than in the summer.

MRT • Some lack the hands on skills.

MRT • Some grads are very good while others lack self-confidence in their ability to get the task done, not empowerment.

MRT • Decent but they have lack of initiative. Selection process for the applicants needs improvement. Too rigid in their attitude, should be more flexible and have more than one way of doing things.

CYT • Work ethic – not willing to work hard to be responsible.

AHT • Generally very good quality practicum student and good employees.

• High level of teaching staff who care about the success of their students, esp. Dr. Jocelyn Forseille.

AHT • Very competent.

AHT • Very happy.

AHT • Need to know how to run a business in all aspects from expenses, making it better, suggestions, checking equipment, ordering proper amounts of drugs/pills or supplies, so that it doesn't waste. Basically more business oriented.

AHT • Not aware of salary. What exactly they are doing – every vet does things differently, be more adaptable.

AHT • The Animal Health Technologists are well trained.

AHT • I myself am a NAIT grad and will continue to hire NAIT grads as they are for the most part well prepared to step firmly in to the mainstream of the veterinary profession. The faculty and staff of Animal Health Technology should be commended.

AHT • I have really liked the work ethic and dedication of the two grads I have hired from NAIT. My present AHT is the first really good one (out of 5 or 6) that I have hired – keep 'em coming.

AHT • I have every confidence that the training received by NAIT grads will be in complete alignment with my needs.

EMT • Not nearly enough students.

EMT • Well prepared. Disappointed in 2 grads.

RET • Very well trained. We need more graduates.

RET • Need more information and physical doing procedures like field placements. Student teaching.

RET • There is now a shortage of Respiratory Therapists in Canada. Projections, age studies indicate this will only get worse with current number of graduates. Schools across Canada need to ramp up.

Construction Engineering Technology

- Grads are educated well at NAIT. Very satisfied.
- It would be an advantage for both the employer and employable if there was a job bulletin posting board. I would also like to be able to talk to instructors about their students.
- More maturity and acceptance of what starting at the bottom means. You don't start as CEO.
- Need more skill in business writing.
- Good group of people.
- Students need more on-the-job experience.

- NAIT does not provide an insurance program. The grad's that were hired fit into a specialized area or formal company but the NAIT. Edmonton is only a completed of what is required to work in our industry.
- Longer educational work experience.
- NAIT has very good training. Grads come out knowing everything they need to know.
- Generally happy with grads.
- Graduates require longer study training period, they're not totally ready for the position they search for. Graduate need too know of training period.
- No choice. Trades people have to be certified. Trouble finding space to register students at NAIT trades. NAIT students only know 30% experience is much better than training.
- Many are not as thorough and analytical, as we require. Often young grads seem anxious to "crunch out" the work, which is good, but it is sometimes incomplete.

Food Service and Nutrition Management

- I'm sure we have hired from your institution but currently don't track schools, just certificate, diploma, or degree, not from where.
- More courses in Human Resources and computers.
- Students should have worked in a food service even in a volunteer program, no realistic expectations as to what they are getting into. Quality of students has dropped—not high caliber.
- The younger graduates frequently lack the "real life" view of how things actually are vs. how the book said it should be, however, this is something that comes with experience. If it could be conveyed during training it would alleviate frustration & unrealistic expectations that some grads have.
- Very happy with the quality of staff hired from NAIT.
- Skill level is very low. Unrealistic expectation of industry.
- They place students in appropriate Food Service Fields.

Forest Technology

- Forest Technology program is very well run and provides good background for our needs.
- Greater emphasis should be place/made to prepare grads for the multi functions/facets of a small business. The grad we hires was too concerned over having a "job description" and only wanted to report/work under "1" supervisor. In smaller business we all work together and cover each other's jobs when necessary. She had a problem with that and still does to this day (3 years later).
- Students need to learn to trust their compass when in forest.
- Pretty happy with NAIT grads.
- Grand Prairie Regional college grads seem to have opportunities due to location. More experience is needed.
- Good hard workers.
- Little or no experience in land forestry.
- NAIT has great follow up (which is greatly appreciated).
- Very good overall.
- Continuation of screening prior to accepting students into the programs is very valuable when looking at the end product. Grad and the skills of the Institution have evolved.

Materials Engineering Technology

- Better practical education coming from NAIT over U of A – would always hire NAIT first.
- Happy with graduates, wishes they would stay longer.
- More care must be given to improve communication skills of graduates. We have had graduates that cannot spell or write a sentence.
- Expose Material Mechanical grads to provincial regulations (e.g. safety codes act, pipeline act)
- Expectation of grads not realistic with the real world. Some are good, but some lack maturity.
- In general, we are happy with our NAIT employees.

Blanket on File
Northern Alberta Institute of Technology
Authorizer: J.K. Donnelly, Manager of institutional research
Level 1; 2002

Portland State University/Community College Co-Admission Program Evaluation

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Executive Summary

In 1997 Portland State University (PSU) and Clackamas Community College (CCC) moved to address problems that result from transfer from the community college to the four-year university. The two institutions began a co-admission program for CCC students designed to

- Increase graduation rates
- Prevent the loss of community college credit
- Improve PSU retention
- Coordinate financial aid and
- Improve grade point averages.

The students attended classes at the community college but had access to the advising, library, computer services, and social activities of PSU. The program expanded to include Mt. Hood Community College (MHCC) in 1998 and Portland Community College (PCC) in 2000. Recently, a research group comprised of institutional researchers from each of the colleges began an evaluation of the co-admission program. This is a report of that evaluation.

The evaluation was conducted through four views of the operation and success of the project: a review of the administrative functions, interviews with key staff members, an analysis of student enrollment, and performance data; and a survey of student attitudes and opinions.

Results

The co-admission program was designed similarly in both community colleges. They planned to ease the transition to PSU through the following five actions:

- "Providing multiple entry points for transfer students through joint admissions procedures"
- "Providing coordinated student and academic services for jointly-enrolled students"
- "Joint recruitment, outreach, and orientation efforts"
- "Designing integrated course work that employs inquiry methods"
- "Joint faculty appointments and mutual faculty development opportunities"

The staff at CCC came very close to implementing the program as planned. Their co-admission students make up an identifiable cohort who meet together, receive special services, and take coursework modeled after the coursework at PSU. CCC provides mutual faculty development opportunities in relation to its inquiry classes. The faculty of those classes meets with the FRINQ (freshman inquiry) team at PSU each week to share resources and ideas.

The program at MHCC is much less developed. Other than pre-enrollment at PSU and PSU library and computing center privileges, the services offered to co-admission

students are indistinguishable from those offered to other students who plan to transfer to the university.

The inquiry classes that were planned at both colleges have been implemented at CCC but only piloted at MHCC. PCC does not intend to offer the classes.

Co-admission students were similar to the general student population at both community colleges. However, they were more likely to be attending for a degree, to cite "transfer to a 4-year school" as their general intent in attending community college, and to have a higher GPA than the general student population.

A comparison was made between students who attended CCC during the fall term 1997 and participated in the co-admission program and those who did not. For those students who eventually attended PSU, the two groups of students had indistinguishable grade point averages for each of six terms at PSU, including the initial term. There did not appear to be a "slump" in GPA for either group.

Retention rates for co-admission program students were higher than for their peers. While approximately the same percentage of CCC co-admission students and non co-admission students who attended PSU in fall 1998 also attended in winter 1999 and spring 1999, a significantly higher percentage of co-admission students returned for fall 1999 and subsequent terms. The co-admission program, therefore, appeared to be a factor in retention.

Credit loss was not directly assessable. Co-admission students transferred approximately the same number of credits to PSU as did non co-admission students, but this study did not include a transcript review to determine whether credits were disallowed for either group. In a survey of co-admission program participants responded that the avoidance of credit loss was an important reason for participating in the co-admission.

Overall the co-admission program was beneficial to the survey respondents. Students rated the overall services a 3.9 on a five-point scale from "not beneficial at all" to "very beneficial." PSU advising was the service that was highest rated in the participant survey and was cited as the most beneficial service of the co-admission program.

The preservation of financial aid throughout the transition from community college to PSU was seen as highly beneficial by CCC students but rated lower by MHCC students. Comments by the survey respondents reinforce these ratings. Assistance with financial aid was cited as the most beneficial service by two CCC students and as the part of the program in need of modification by two MHCC students.

Ratings and comments on the overall success of the co-admission program were very positive. Respondents ranked the benefit of the program 3.9 on a five-point scale, higher than they rated any individual service. The final question of the survey asked for "other" comments and almost two-thirds of those comments were positive. There were

differences in survey responses between MHCC students and CCC students that appear related to the differences in the way the program was implemented at the two colleges.

The service that was seen as most beneficial by students was the advising provided by PSU at the community college. Key respondents at every participating institution cited advising as the most important feature of the program. They agreed that the goals for smooth transition to PSU are largely dependent on the communication of accurate and complete information to the community college students.

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Introduction

The route to a baccalaureate degree is often less straightforward than enrolling as a newly graduated freshman and emerging four years later with a degree. In fact, when Portland State University and the area community colleges (Kinnick et al. 1998) looked at a sample of student transcripts they found 74 different patterns of attendance among their 504 students.

Unfortunately, attendance patterns that involve transfer from community college to four-year universities often present problems. The baccalaureate attainment rate among students who begin their post-secondary education at a community college is consistently lower than the rate for students who begin at a four-year institution. Problems that contribute to this lower rate include loss of credits, disruption of financial aid, and "transfer shock" – a decline in academic performance in the first term at the four-year institution (House, 1989).

In 1997 Portland State University (PSU) and Clackamas Community College (CCC) moved to address these problems through a co-admission program. Through this program students may enroll at both their community college and at PSU concurrently. They attend classes at the community college but have access to the advising, library, computer services, and social activities of PSU. The program expanded to include Mt. Hood Community College (MHCC) in 1998 and Portland Community College (PCC) in 2000. Recently, a research group comprised of institutional researchers from each of the colleges began an evaluation of the co-admission program. This is a report of that evaluation.

Methods of the evaluation

The evaluation was conducted through four views of the operation and success of the project. The first view was of the administrative functions. The purpose of this part of the investigation was to determine to what extent the project has been implemented as it was planned. The study involved a review of all agreements, course descriptions, marketing, Web sites, and inter-college correspondence.

Each of the participating community colleges now has a cooperative agreement with PSU. While they list similar goals and services, this report highlights some important differences. Each college has prepared application forms, informative brochures, fact sheets, etc. CCC has initiated a newsletter that goes to the co-admission students.

The second view was through the key persons in the implementation of the project. Staff members responsible for each aspect of the co-admission program were interviewed to determine how closely the activities aligned with the plans, what goals the staff members had for the project, and how successful they thought their actions had been.

Interviews were completed in mid-October of 2000. They included:

PSU

Janine Allen – Vice-Provost and Dean for Enrollment and Student Services
Dan Fortmiller – Director, Information and Academic Center
Sam Collie – Director, Financial Aid
Agnes Hoffman – Director, Admissions and Records
Joan Seely – Coordinator Community College Relations

MHCC

Jean Erickson – Program Coordinator
Spencer White - Academic Advisor

CCC

Cheryl Hollatz-Wisely - Director, Student Information & Access
Sue Metcalfe – Academic Advisor
Bob Keeler – Instructor of Anthropology, University Studies Inquiry Instructor

PCC

Craig Bell - Dean/Student Development

The interviews described three different implementations of the common theme of co-admission. CCC has an active approach to recruitment into the program and utilization of services. The college includes the co-admission students as a group in advising and field trips and offers inquiry courses similar to those they would receive at PSU. MHCC views the program as more of a convenience to students than a unique set of services. PCC plans a middle approach, offering students the pre-admission and administrative services but not duplicating PSU's inquiry classes.

At each of the interviews the respondents were asked what indicators would demonstrate the success of the program. While all agreed that progress toward a four-year degree would be the most important indicator, many included social and behavioral indicators such as "a feeling of belonging" at PSU and "a lack of hassles" with enrollment there. These indicators will be approached in the student survey portion of the study.

The third view of the project was through the academic records of the participants. The entire student record of each of the participants was examined for patterns and was compared with the records of similar students who did not participate. The records review focused on academic progress, retention, and grade point average.

Finally, students were surveyed or interviewed. The survey requested information concerning the perceptions of benefit from each of the services offered by the co-admission project and requested comments on how the project might be improved.

Results

How the project was implemented

CCC and PSU

A cooperative agreement between PSU and CCC was signed in January 1997. That agreement established the first of the co-admission programs and formed the basis for the other agreements. Listed as "core values," the document delineated eleven goals:

- Improved student access to undergraduate education.
- Promotion of appropriate educational choices that best meet the individual student's academic, social, career, and financial needs.
- Improved AAOT and baccalaureate degree completion rates.
- Ease of student movement between and through both institutions.
- Ready access to comprehensive support services for student success, regardless of student location.
- Individualized assistance for students in evaluating career options and designing educational programs.
- Improved efficiency of effort between CCC and PSU to serving shared students.
- Accessibility of information for student success.
- Greater public awareness of connections between the high schools, CCC, and PSU.
- Shared faculty expertise and joint faculty development.
- Successful student learning through sound educational practices.

The agreement listed five initial strategies for accomplishing these goals:

- "Providing multiple entry points for transfer students through joint admissions procedures"
- "Providing coordinated student and academic services for jointly-enrolled students"
- "Joint recruitment, outreach, and orientation efforts"
- "Designing integrated course work that employs inquiry methods "
- "Joint faculty appointments and mutual faculty development opportunities"

The program has operated very much as it was described in the agreement. The college has a staff person coordinating the co-admission program as part of her responsibility. This staff member also provides academic advising for the co-admission students.

A major part of the program for the co-admission students is a series of "Inquiry" classes that are identical to the *University Studies Freshman Inquiry* and *University Studies Sophomore Inquiry* classes offered at PSU. These classes are multi-disciplinary investigations that emphasize critical learning skills (e.g., computer applications, library use, charting, etc.) along with knowledge in subject areas. The classes also model the importance of dialogue and interaction in learning through team-teaching and seminars. The CCC staff believes that the experience in inquiry classes is an important factor in successful transition to PSU.

The CCC staff has attempted to make the co-admission students a cohesive group. They have regular meetings of these students and publish a newsletter specifically devoted to co-admission topics. The college has leveraged a Title III grant to encourage learning communities by creating a co-admission program learning community. This allows them to spend time and other resources on the program that is not otherwise budgeted. Additionally, the co-admission students are grouped into particular sections of the inquiry classes.

The staff at CCC recognized that the transition to a four-year institution often resulted in a loss of financial aid. To remain eligible for financial aid, students must be enrolled full-time at one college or university. The college has developed a guide to assist students in coordinating their financial aid. The guide helps co-admission students avoid the loss of financial aid that results from spreading too many of their credits between the two institutions during a term. The college's Web site also keeps students informed about coordinating financial aid.

MHCC and PSU

A cooperative agreement between PSU and MHCC was signed in September 1998. While the agreement is identical to the agreement between CCC and PSU, it has been implemented differently.

The college takes a more passive role in the co-admission program. MHCC provides information about the co-admission program in their general information materials, and the marketing team brings co-admission information with them to their high school recruitment visits. High school seniors and entering freshmen are informed of the benefits through orientation sessions and written materials. Those students who are interested complete an application to MHCC and are sent materials for application to PSU. After applying for the MHCC co-admission program, a substantial proportion of the students fail to complete the process by applying for admission to PSU.

For students who complete the application process the college shares transcripts with PSU, informs the students of the benefits of the program, and assigns an MHCC advisor who focuses on transfer students. The students are responsible for informing their advisors that they are part of the co-admission program.

The key staff member at MHCC who interacts with the co-admission students does not perceive a significant benefit to the program. MHCC students have access to PSU advising whether they are in the program or not; inter-library loan programs give students access to library services throughout the area; and PSU's regular recruiting and advising visits to the campus are available to all students. In addition, the AAOT program is seen as the solution to credit loss in transferring between programs.

As with CCC, the agreement between PSU and MHCC included the strategy of offering "integrated course work that employs inquiry methods." Such a course was designed and implemented on a pilot basis in spring 1999. It was offered again in spring 2000 but was

cancelled due to poor enrollment. The college is currently seeking ways to market the course to students.

PCC and PSU

The cooperative agreement between PSU and PCC was signed in October 2000. The agreement is similar to those in effect with CCC and MHCC except that the strategies do not include the development of an inquiry class or "joint faculty appointments and mutual faculty development opportunities." The first full class of participants is expected to enroll in fall 2001.

The co-admission agreement with PSU is the third such agreement that PCC has entered into. The college also has agreements with Oregon State University (OSU) and Oregon Institute of Technology (OIT). The OSU connection is reported to be especially strong. That university sends a large team to work with students who plan to transfer each year.

The administration at PCC is particularly concerned with the students who complete coursework at both the community college and PSU concurrently or who alternate terms between the two schools. They report that a large number of students will travel between the two institutions several times during their academic careers.

An aggressive marketing campaign is planned by PCC and PSU. Because there are over 2,300 transfers from PCC to PSU annually, the pool of candidates for co-admission is very large. In the week that the co-admission agreement was signed there were fifty student inquiries about the program.

It is expected that all the services that co-admission students receive at PCC will also be available to students who are not co-admitted. Co-admission students will, however, receive targeted invitations to advising sessions, financial aid seminars, etc. The college plans to track the progress of the co-admitted students through shared records with PSU.

The college elected not to include an inquiry curriculum as part of the agreement. They surmise that the courses would be unpopular and that many students take their initial coursework at PCC just to avoid the courses at PSU.

Who the students were and how they performed

Student records were analyzed to develop a profile of co-admission students and to track their progress through their academic careers. In addition the co-admission students were compared with all other students at their community colleges and with other community college students who went on to PSU.

The analysis was completed for students who

1. Entered CCC in the fall 1997 term or before (1997 CCC Cohort)
2. Entered CCC in the fall 1998 term (1998 CCC Cohort)
3. Entered MHCC in the fall 1998 term. (MHCC Cohort)

Each analysis was independent because the cohorts were not comparable.

How do the first two cohorts of co-admit students compare with other CCC students? ***(Co-admit and non-co-admit students at CCC; data from CCC student files.)***

While there is nothing that unifies the group of co-admission students (other than applying for co-admission status), they tend to be female four-year-degree-seeking students. Most (78% of the 1997 cohort and 85% of the 1998 cohort) listed their general intent as "Transfer to 4 Yr school" while less than 25% of the general student population (excluding co-admission students) listed that intent (Table 1). When asked about their degree intentions almost all of the co-admission students planned on a certificate or degree (Table 2). The 1997 cohort had a higher GPA for the fall 1997 term than non-co-admit students during that term, but the 1998 cohort had a fall term 1998 GPA that was similar to that of the general student population (Table 5). Both cohorts had more cumulative credits than did the general student population.

Table 1: General intent of CCC co-admit and non-co-admit students

	1997 CCC Cohort		1998 CCC Cohort	
General Intent	Non-co-admit students (N=14,522)	Co-admit students (N=133)	Non-co-admit students (N=6,434)	Co-admit students (N=40)
Transfer to 4 Yr school	23.5%	78.0%	19.2%	85.0%
Get a Job	15.4%	12.1%	23.5%	0.0%
Improve Job Skills	20.4%	4.0%	.5%	0.0%
Explore educational options	2.8%	1.7%	17.4%	7.5%
Finish HS or GED	3.9%	0.6%	4.9%	0.0%
Improve 3 Rs	2.1%	0.6%	.0%	0.0%
Learn English	24.9%	2.3%	3.8%	0.0%
Personal Enrichment	25%	2%	18.7%	0.0%
Other	0.0%	0.0%	12.0%	7.5%

Table 2: Degree intent of CCC co-admit and non-co-admit students

	1997 CCC Cohort		1998 CCC Cohort	
Degree Intent	Non-co-admit students (N=15,497)	Co-admit students (N=133)	Non-co-admit students (N=6,409)	Co-admit students (N=40)
Cert/Degree	41.1%	95.2%	46.5%	92.5%
HS Diploma/GED	4.0%	0.8%	5.0%	0.0%
None	47.9%	4.0%	48.2%	7.5%
Undecided	7.0%	0.0%	.3%	0.0%

Table 3: Gender of CCC co-admit and non-co-admit students

	1997 CCC Cohort		1998 CCC Cohort	
Gender	Non-co-admit students (N=14,787)	Co-admit students (N=133)	Non-co-admit students (N=5,992)	Co-admit students (N=40)
Female	50.6%	65.4%	57.5%	50.3%
Male	49.4%	34.6%	42.5%	49.7%

Table 4: Ethnicity of CCC co-admit and non-co-admit students

Ethnicity	1997 CCC Cohort Non-co-admit students (N=12,068)	1997 CCC Cohort Co-admit students (N=129)	1998 CCC Cohort Non-co-admit students (N=4,680)	1998 CCC Cohort Co-admit students (N=39)
Asian	3.9%	4.7%	3.5%	5.1%
Black	0.9%	0.8%	1.2%	0.0%
White	88.3%	87.6%	86.1%	92.3%
Hispanic	5.7%	5.4%	8.2%	2.6%
Indian	1.2%	1.6%	1.0%	0.0%

Table 5: Performance while at CCC of co-admit and non-co-admit students

Performance Measure	1997 CCC Cohort Non-co-admit students (N=12,266)	1997 CCC Cohort Co-admit students (N=130)	1998 CCC Cohort Non-co-admit students (N=6,486)	1998 CCC Cohort Co-admit students (N=40)
GPA for Fall term of initial year	2.63	3.08*	2.58	2.94
Cumulative GPA Fall term of initial year	3.01	3.17	2.68	2.81
Credits for Fall term of initial year	5.20	9.80*	2.6	9.80*
Total Credits thru Fall term of initial year	34.17	60.22*	6.33	14.94*

($p<.01$)

How did co-admit and non-co-admit students who eventually transfer to PSU compare while at CCC? ***(Subset of students from the 1997 CCC cohort above who attended PSU; data from CCC student files.)***

Since the primary purpose of the co-admission program is to ease the transition to PSU, the records of students who made that transition were examined. There are 282 students who:

- Were attending CCC in fall 1997
- Attended PSU beginning in summer 1998 or later
- Transferred at least two terms worth (24) of community college credits (the equivalent of at least two terms of community college work)

Of these students, 66 participated in the co-admission program (i.e., they were in the 1997 CCC cohort) and 231 did not.

First, the records of the two groups of students were examined to determine whether they were similar in the fall term of 1997. A snapshot of these two groups of students in that term shows them to be essentially the same except for the amount of college experience. The co-admission students had taken fewer college credits to that point than had the non-co-admission group (Table 10). The CCC records do not indicate where those credits were earned. While there are minor differences in GPA and educational intentions, none are significant.

Table 6: General intent of students from the 1997 CCC cohort who attended PSU

General Intent	Non-co-admit CCC/PSU students (N=223)	Co-admit CCC/PSU students (N=66)
Transfer to 4 Yr school	83.4%	80.3%
Get a Job	6.7%	10.6%
Improve Job Skills	2.2%	1.5%
Explore educational options	1.3%	4.5%
Finish HS or GED	1.3%	0.0%
Improve 3 Rs	.9%	0.0%
Personal Enrichment	4.0%	3.0%

Table 7: Degree intent of students from the 1997 CCC cohort students who attended PSU

Degree Intent	Non-co-admit CCC/PSU students (N=228)	Co-admit CCC/PSU students (N=66)
Cert/Degree	89.5%	95.5%
HS Diploma/GED	1.3%	0.0%
None	7.0%	4.5%
Undecided	2.2%	0.0%

Table 8: Gender of students from the 1997 CCC cohort who attended PSU

Gender	Non-co-admit CCC/PSU students (N=228)	Co-admit CCC/PSU students (N=66)
Female	62.3%	59.1%
Male	37.7%	40.9%

Table 9: Ethnicity of students from the 1997 CCC cohort who attended PSU

Ethnicity	Non-co-admit CCC/PSU students (N=226)	Co-admit CCC/PSU students (N=63)
Asian	4.0%	4.8%
Black	0.4%	1.6%
White	89.4%	81.0%
Hispanic	4.4%	9.5%
Indian	1.8%	3.2%

Table 10: Performance while at CCC of students from the 1997 CCC cohort who attended PSU

Performance Measure	Non-co-admit CCC/PSU students (N=225)	Co-admit CCC/PSU students (N=66)
Fall 1997 GPA	3.04	3.16
Cumulative GPA Fall 1997	3.09	3.14
Credits Fall 1997	11.67	11.92
Total Credits (all sources) thru Fall 1997*	53.43	42.38

*p<.01

How did CCC co-admit and non-co-admit students compare after enrolling at PSU?

(Two subsets of transfer students from the 1997 CCC cohort—those who entered PSU in fall 1999 and those who entered in fall 1998; data from PSU student files.)

The groups continue to look the same once they transfer to PSU. The group that might be expected to show the most effect from participating in the co-admission program is the group of students who participated for two years. Of the 1997 CCC Cohort, there were 28 co-admission students and 82 non-co-admission students who began classes at PSU two years later in fall 1999. Their GPA's were not significantly different ($p.>.05$) during their first term and remained the same throughout the year (Table 11). During the year both groups averaged the same number of credits per term and had accumulated approximately 36 PSU credits (Table 12). Retention rates (the percentages of students from the fall 1999 term who enroll in each succeeding term) were the much same ($p.>.05$) for the groups (Table 13).

Table 11: Term PSU GPA of CCC co-admit and non-co-admit students who attended PSU after two years of co-admission.

Term	Non-co-admit CCC/PSU students	2-year co-admit CCC/PSU students
Fall 1999	3.10 (N=79)	3.09 (N=28)
Winter 2000	3.13 (N=72)	3.29 (N=27)
Spring 2000	3.20 (N=65)	3.03 (N=25)

Table 12: Course load of CCC co-admit and non-co-admit students who attended PSU after two years of co-admission.

Term	Non-co-admit CCC/PSU students	2-year co-admit CCC/PSU students
Fall 1999	12.31 (N=79)	12.32 (N=28)
Winter 2000	12.72 (N=72)	12.56 (N=27)
Spring 2000	12.98 (N=65)	14.60 (N=25)

Table 13: Retention of CCC co-admit and non-co-admit students who attended PSU after two years of co-admission.

Term	Non-co-admit CCC/PSU students (N=82)	2-year co-admit CCC/PSU students (N=28)
Winter 2000	94%	93%
Spring 2000	92%	96%

A somewhat smaller group began classes at PSU one year after the start of the co-admission program. These 19 co-admission students and 78 non-co-admission students were also similar in their GPA and course loads. A striking difference was in the retention rate of these students. A high percentage of the co-admission group (89%) was still enrolled in spring 2000 (Table 16).

Table 14: GPA of CCC co-admit and non-co-admit students who attended PSU after one year of co-admission

Term	Non-co-admit students	1-year co-admit students
Fall 1998	2.67 (N=77)	3.00 (N=19)
Winter 1999	2.85 (N=68)	2.86 (N=18)
Spring 1999	3.05 (N=60)	2.99 (N=16)
Fall 1999	3.07 (N=57)	2.94 (N=18)
Winter 2000	3.09 (N=56)	3.17 (N=18)
Spring 2000	3.20 (N=54)	2.98 (N=17)

Table 15: Course load of CCC co-admit and non-co-admit students who attended PSU after one year of co-admission

Term	Non-co-admit students	1-year co-admit students
Fall 1998	11.93(N=77)	11.89 (N=19)
Winter 1999	12.34 (N=68)	13.00 (N=18)
Spring 1999	13.50 (N=60)	12.88 (N=16)
Fall 1999	13.70 (N=57)	13.44 (N=18)
Winter 2000	13.79 (N=56)	13.56 (N=18)
Spring 2000	13.52 (N=54)	11.94 (N=17)

Table 16: PSU retention of CCC co-admit and non-co-admit students who attended PSU after one year of co-admission

Term	Non-co-admit students (N=78)	1-year co-admit students (N=19)
Fall 1998	100%	100%
Winter 1999	88%	95%
Spring 1999	81%	84%
Fall 1999	75%	89%
Winter 2000	75%	95%
Spring 2000	73%	89%

There were only four co-admission students from the 1998 CCC Cohort who took classes at PSU. No analysis was done because of the low number.

How does the MHCC cohort of co-admit students compare with other MHCC students? *(Co-admit and non-co-admit students at MHCC; data from MHCC student files.)*

The MHCC co-admit students are similar to the general student population in most aspects. As would be expected, their intent to transfer to a four-year institution is the most distinguishing characteristic (Table 17). The differences in ethnic composition, gender, and degree intent were not significant. The co-admit students had a significantly higher GPA (Table 21) and had taken more credits than general students at MHCC.

Table 17: General intent of MHCC co-admit and non-co-admit students

General Intent	Non-co-admit students (N=12,364)	Co-admit students (N=31)
Transfer to 4 Yr school	28.0%	74.2%
Get a Job	14.6%	6.5%
Improve Job Skills	13.2%	3.2%
Explore educational options	7.6%	12.9%
Finish HS or GED	3.6%	0.0%
Improve 3 Rs	1.1%	0.0%
Learn English	8.2%	0.0%
Personal Enrichment	17.1%	0.0%
Other	6.8%	3.2%

Table 18: Degree intent of MHCC co-admit and non-co-admit students

Degree Intent	Non-co-admit students (N=10,714)	Co-admit students (N=34)
Cert/Degree	47.7%	76.5%
HS Diploma/GED	5.5%	0.0%
None	28.4%	20.6%
Undecided	18.4%	2.9%

Table 19: Gender of MHCC co-admit and non-co-admit students

Gender	Non-co-admit students (N=15,657)	Co-admit students (N=45)
Female	55.5%	62.2%
Male	44.5%	37.8%

Table 20: Ethnicity of MHCC co-admit and non-co-admit students

Ethnicity	Non-co-admit students (N=14,525)	Co-admit students (N=43)
Asian	6.7%	18.6%
Black	2.3%	2.3%
White	81.6%	69.8%
Foreign	.6%	4.7%
Hispanic	7.5%	4.7%
Indian	1.3%	0.0%

Table 21: Performance of MHCC co-admit and non-co-admit students while at MHCC

Performance Measure	Non-co-admit students (N=15,799)	Co-admit students (N=34)
Fall 1998 GPA*	2.6	2.9
Cumulative GPA Fall 1998	2.7	3.0
Credits Fall 1998*	3.7	10.6
Total Credits thru Fall 1998*	27.8	70.8

* $p<.01$

How did the students benefit?

Co-admitted students from both colleges (regardless of whether or not they transferred to PSU) were asked to respond to questions about their reasons for entering the program and their perceived benefits from the program (Appendix A). Surveys were sent to CCC students who were admitted to the program in the fall 1997 and to CCC and MHCC students who were admitted in fall 1998. Students were mailed a cover letter (Appendix B) explaining the purpose of the survey and were asked to return the survey by mail or to complete the survey on-line. Follow-up postcards were sent after two weeks.

Because response to the mailed survey was light, students who did not respond to the survey were telephoned and asked to participate through an oral interview. Over a two-week period, interviewers attempted to contact co-admit students who had not yet responded to the survey mailing. When someone answered the phone call, the interviewer asked to speak to the co-admit student by name. If the co-admit student was unavailable to take the call or was unable to answer questions, the interviewer attempted to schedule a time to call back. If the interviewer was able to make contact and the co-

admit student declined to answer the questions, then the call ended and the co-admit student was not called back. If the interviewer was able to make contact and the co-admit student agreed to answer the questions, then the interview began. In general, interviewers took about 15 minutes to complete the interviews. They entered the co-admit students' responses on-line as the interview proceeded.

Eighty-one students (32%) responded to the survey. The students who responded did not differ significantly from those who did in gender, age, or ethnicity. The percentage responding from each community college was also similar.

Table 22: Rates of response to participant survey

	All	CCC	MHCC
Number Surveyed	219	166	53
Number Responded	81	64	17
Response Rate	37%	39%	32%

Why did students enroll in the co-admission program?

At both community colleges the most important reason cited for enrolling in the co-admission program was insurance against losing credits in transferring to PSU. On a five-point scale the respondents ranked protection against credit loss as 4.4. Other reasons for entering the program were closely grouped in importance. Student rankings of reasons for enrolling did not vary with gender, age, or ethnicity.

Table 23: Reasons for enrolling in co-admission program

	Overall	CCC	MHCC
Get better advising	3.4	3.4	3.2
Save money	3.3	3.2	3.6
Make sure I don't lose credits when I transfer	4.4	4.4	4.4
Enroll jointly in both institutions	3.6	3.7	3.2
Use PSU facilities while attending CC	3.0	2.9	3.2
Earn my degree more quickly	3.7	3.7	3.5

When asked how they heard about the co-admission program, over half (54%) mentioned advisors at their community college and 19% mentioned either pamphlets or other advertising. Several students (7%) stated that they heard about it from their community college but did not specify how. Only one student cited PSU as the source of information and one student cited a high school counselor. None reported hearing about it through a Web site. All responses are listed in Appendix C.

Were the services used?

Most students (93%) reported receiving advising about the co-admission program services from their community college, and 80% also received printed information from

their community college. Seventy percent of students used advising from PSU while at their community college and 63% used printed information from PSU.

The students did not tend to use services on the PSU campus if they entailed an extra cost. The least used services were the use of the computer labs (36%) and access to PSU events (31%). Travel to PSU did not seem to be a prohibitive factor since over half of the respondents used the PSU library. Table 24 shows the percentage of respondents who reported using each of the co-admission program services.

As might be expected, students who entered the program in 1998 were less likely to have used many of the services than those who entered in 1997.

Table 24: Co-admission program service used

	All (N=81)	CCC 1997 (N=53)	CCC 1998 (N=11)	MHCC (N=17)
Coordination of financial aid	43%	38%	55%	47%
Advising from PSU while at Community College	70%	72%	64%	76%
Use of the PSU library while attending Community College	53%	53%	55%	47%
Use of PSU computer labs while attending Community College	36%	38%	18%	29%
Access to PSU events while attending Community College	30%	32%	9%	24%
Co-admission information on PSU's Web site	44%	47%	18%	41%
Printed co-admission information from PSU	63%	66%	36%	65%
Co-admission information on your Community College's Web site	48%	49%	27%	53%
Printed co-admission information from your Community College	80%	81%	73%	76%
Advising about co-admission from your Community College	93%	91%	100%	94%

How beneficial were the services?

The students' overall rating of the co-admission program was higher at 3.9 than the rating for any one service (Table 25). The respondents from CCC were significantly more likely ($x^2 = 19.8$ $p < .01$) to give the program a high rating than were MHCC respondents. Only 38% of the MHCC students rated the program above the midpoint compared with 72% of the students from the same cohort at CCC.

Table 25: Perceived overall benefit of co-admission program

		All (N=81)	CCC 1997 (N=53)	CCC 1998 (N=11)	MHCC (N=17)
Average rating		3.9	4.1	3.9	2.9
Not at all beneficial	1	4%	2%	0%	13%
	2	5%	2%	0%	19%
	3	23%	20%	27%	31%
	4	34%	32%	36%	38%
Very beneficial	5	34%	44%	36%	0%

As shown in Table 26, advising from PSU while at the community college was rated the most beneficial service (3.8) while access to PSU events was rated the least beneficial (2.3). MHCC students generally rated the services less beneficial than did CCC students with their overall assessment of the co-admission program (2.9) below the midpoint on the five-point scale.

Table 26: Perceived benefit of each co-admission program service

	All (N=81)	CCC 1997 (N=53)	CCC 1998 (N=11)	MHCC (N=17)
Participation in the co-admission program overall	3.9	4.1	3.9	2.9
Coordination of financial aid	3.5	3.8	3.6	2.8
Advising from PSU while at Community College	3.8	4.1	3.8	3.1
Use of the PSU library while attending Community College	3.6	3.7	4.3	3.4
Use of PSU computer labs while attending Community College	3.1	3.1	3.7	3.0
Access to PSU events while attending Community College	2.3	2.3	4.0	1.5
Co-admission information on PSU's Web site	3.4	3.7	4.7	2.3
Printed co-admission information from PSU	3.5	3.8	3.6	2.5
Co-admission information on your Community College's Web site	3.0	3.2	4.3	2.3
Printed co-admission information from your Community College	3.4	3.6	3.3	2.9
Advising about co-admission from your Community College	3.7	3.9	3.8	3.0

Because respondents from the 1997 cohort had more experience with the program, their answers might be expected to differ from those of the 1998 CCC cohort and the MHCC students. In fact, the difference between the community colleges was a more important factor than the difference between the cohort years.

Students were asked the open-ended question *"What PSU service has been most helpful to you in advancing through your program?"* Table 27 shows the percentage of students who cited each of the PSU services as "most helpful."

Table 27: Most helpful PSU service

Service	Percent (N=81)
Counseling/Advising	32%
Library	21%
Computer lab	8%
Information and Academic Support Center	7%
Financial aid	4%
Other	5%

Similarly, students were asked *"What Community College service has been most helpful to you in advancing through your program?"* Table 28 shows the percentage of students who cited each of the Community College services as "most helpful."

Table 28: Most helpful community college service

Service	Percent (N=81)
Counseling/Advising	52%
Library	4%
Computer lab	4%
Financial aid	2%
Other	7%

A key to whether students benefited from the co-admission program is whether they would recommend the program to others. Students were asked to react to the statement *"I would recommend that other students consider participating in this program"* on a five-point scale from "Strongly disagree" to "Strongly Agree." Table 29 shows that CCC students agreed with the statement significantly ($p. < .05$) more strongly (4.5) than did MHCC students (3.8) although agreement was high for both groups.

Table 29: Willingness to recommend co-admission program to others

	All (N=81)	CCC 1997 (N=53)	CCC 1998 (N=11)	MHCC (N=17)
I would recommend that other students consider participating in this program	4.3	4.5	4.1	3.8

What would participants change?

In an open-response question students were asked *"What parts of the program should be modified or dropped?"* Thirty-seven students gave suggestions for modifying the program. The greatest number suggested better advising (both at PSU and at the community college) and better protection against credit loss. No students recommended that a service be dropped. A tally of the issues is shown in Table 30 and the text of the suggestions is included as Appendix F.

Table 30: Aspects of the co-admission program that respondents would change

Issue	Number of responses
Advising	13
Transfer of credits	6
Transition to PSU	5
Marketing of co-admission program	4
Financial aid	4
Communication between PSU and community college	3
Admission to PSU	3
PSU services while at community college	3

Finally, students were asked the open-ended question *"Do you have anything else you'd like to tell us about your experience in the co-admission program?"* Over half of the students volunteered additional information or opinions. These responses tended to be about advising or the transfer of credits and are included as Appendix G. Table 31 shows the distribution of positive and negative comments by community college.

Table 31: Nature of additional comments

	All (N=52)	CCC (N=40)	MHCC (N=12)
Positive	64%	76%	22%
Negative	31%	21%	67%
Neutral	5%	3%	11%

Conclusions

The primary goal of the co-admission program is to ease the transition from community college to Portland State University. Historically, a difficulty with transition has been manifested in depressed initial PSU grade point averages, lower retention at PSU, a loss of community college credits, and interruption of financial aid.

The co-admission program has been implemented through a Memorandum of Understanding between PSU and each of the community colleges. At both MHCC and CCC the Memorandum of Understanding planned for

1. joint admission,
2. coordinated student and academic services,
3. joint recruitment,
4. integrated coursework, and
5. joint faculty appointments and mutual faculty development opportunities.

Both colleges have implemented the joint admission procedures and actively recruit students into the program both individually and with PSU. While both colleges offer student advising from PSU at the campus, CCC offers some PSU advising as an exclusive co-admission program benefit and MHCC offers all PSU advising as a benefit available to co-admission students or general education students equally. Only CCC has

implemented the integrated coursework and mutual faculty opportunities that were planned. Neither college has a program of joint faculty appointments.

A comparison was made between students who attended CCC during the fall term 1997 and participated in the co-admission program and those who did not. For those students who eventually attended PSU, the two groups of students had indistinguishable grade point averages for each of six terms at PSU, including the initial term. There did not appear to be a "slump" in GPA for either group.

Retention rates for co-admission program students were higher than for their peers. While approximately the same percentage of CCC co-admission students and non co-admission students who attended PSU in fall 1998 also attended in winter 1999 and spring 1999, a significantly higher percentage of co-admission students returned for fall 1999 and subsequent terms. The co-admission program, therefore, appeared to be a factor in retention.

Credit loss was not directly assessable. Co-admission students transferred approximately the same number of credits to PSU as did non co-admission students, but this study did not include a transcript review to determine whether credits were disallowed for either group. Avoidance of credit loss was the primary reason cited for participating in the co-admission program and satisfaction rates were high for the program. PSU advising at the community college was the service that was highest rated in the participant survey and was cited as the most beneficial service of the co-admission program.

The preservation of financial aid throughout the transition from community college to PSU was seen as highly beneficial by CCC students but rated lower by MHCC students. Comments by the survey respondents were not conclusive in that assistance with financial aid was cited both as the most beneficial service and as a part of the program in need of modification.

Ratings and comments on the overall success of the co-admission program were very positive. Respondents ranked the benefit of the program a 3.9 on a five-point scale, higher than they rated any individual service. The final question of the survey asked for "other" comments and almost two-thirds of those comments were positive.

The service that was seen as most beneficial by students was the advising provided by PSU. Key respondents at every participating institution cited advising as the most important feature of the program. They agreed that the goals for smooth transition to PSU are largely dependent on the communication of accurate and complete information to the community college students.

Before concluding whether the co-admission program is effective, the question of what the program is must be answered. In the two community colleges that currently offer co-admission, students experience quite different programs. While both colleges offer the administrative advantage of pre-admission to PSU, they differ in many other aspects. CCC students receive a coordinated set of services tailored for co-admission students.

They take inquiry classes that are identical to the required PSU freshman and sophomore inquiry classes, meet frequently and receive a newsletter. PSU advisors who come to the campus meet with the co-admission group.

In a survey of CCC students, Liebelt and Hollatz-Wisely (1999) found results similar to those in the present study. "Make transfer easier," was the overwhelmingly most important reason for co-admission program participation, with "Take classes from both schools," "Save money," and "Use services from both schools" grouped below. The overall rating for the program was 4.2 (adjusted for difference in the scale) compared with 4.1 for the same group in the present study.

In contrast, at MHCC the co-admission program is primarily administrative. After enrolling at PSU, the students do not receive any services that are not offered to MHCC students at large. The inquiry classes that were planned at the college have not been implemented and advising is no different than the advising all transfer students receive. Differences in survey responses between MHCC students and CCC students appear related to the differences in the programs that students encounter.

Appendix A: Portland Area Co-admission Program Participant Survey

How important were the following in your decision to participate in the co-admission program between PSU and your Community College?

	Not at all important				Very Important
Get better advising	☐	☐	☐	☐	☐
Save money	☐	☐	☐	☐	☐
Make sure I don't lose credits when I transfer	☐	☐	☐	☐	☐
Enroll jointly in both institutions	☐	☐	☐	☐	☐
Use PSU facilities while attending Community College	☐	☐	☐	☐	☐
Earn my degree more quickly	☐	☐	☐	☐	☐
Other (please specify)	☐	☐	☐	☐	☐

How beneficial were each of the following services?

	Never Used	Not at all beneficial				Very beneficial
Coordination of financial aid	☐	☐	☐	☐	☐	☐
Advising from PSU while at Community College	☐	☐	☐	☐	☐	☐
Use of the PSU library while attending Community College	☐	☐	☐	☐	☐	☐
Use of PSU computer labs while attending Community College	☐	☐	☐	☐	☐	☐
Access to PSU events while attending Community College	☐	☐	☐	☐	☐	☐
Co-admission information on PSU's Web site	☐	☐	☐	☐	☐	☐
Printed co-admission information from PSU	☐	☐	☐	☐	☐	☐
Co-admission information on your Community College's Web site	☐	☐	☐	☐	☐	☐
Printed co-admission information from your Community College	☐	☐	☐	☐	☐	☐
Advising about co-admission from your Community College	☐	☐	☐	☐	☐	☐
Participation in the co-admission program overall	☐	☐	☐	☐	☐	☐

Please rate the following statements from strongly disagree to strongly agree:

	Strongly Disagree				Strongly Agree
The program helped me (or is helping me) make a smooth transition to PSU	☐	☐	☐	☐	☐
I would recommend that other students consider participating in this program	☐	☐	☐	☐	☐

How long do you anticipate it will take before you complete your bachelor's degree? _____years.

How did you hear about the co-admission program between PSU and your Community College?

What PSU service has been most helpful to you in advancing through your program? (☐ Never used PSU services)

What Community College service has been most helpful to you in advancing through your program?

What parts of the program should be modified or dropped?

Do you have anything else you'd like to tell us about your experience in the co-admission program?

Appendix B: Cover Letter to Survey Recipients

Dear [Co-Admit Student]:

As one of the first participants in the co-admission program between Portland State University and [NAME] Community College, you can guide us in the services you and future students need. Please take a few minutes to fill out the enclosed survey. It asks about the types of services you have used and your satisfaction with those services.

Please use a #2 pencil to complete the survey, and return your response within the next 10 days, using the enclosed postage-paid envelope.

We will use the information to evaluate what has been useful and to change what has not. Your responses are confidential. Only summaries of total responses will be reported. We have put a code number on the form because this allows us to know who has returned the survey and to link your responses to the courses you have taken and to your progress through the university system. No one will ever be able to identify you in any reports that are created from the data and no one who is not involved with the evaluation will ever see your answers.

Participating in this survey is voluntary. Your willingness or unwillingness to participate will not affect decisions regarding your course grades or other evaluations of your course work, or your relationship with Portland State University or [NAME] Community College. If you have any questions about the survey, or wish to have your name removed from our mailing list, please call the Portland State University Office of Institutional Research and Planning at 725-3432 (E-mail: stoeringj@pdx.edu).

Your response is very important to us; the information you provide will help in our efforts to improve the student experience at PSU. Thank you for your helping improve the co-admission program for all students.

Sincerely,

Daniel O. Berstine
President of Portland State University

[Name]
President of [Name] Community College

If you have concerns or questions about this study, please contact the Chair of the Human Subjects Research Review Committee, Office of Research and Sponsored Projects, 111 Cramer Hall, Portland State University, 503-725-8182.

Appendix C: How students learned about program

Institution	How student learned
CCC	A classmate at CCC.
CCC	A friend
CCC	Advertising
CCC	Advising at clackamas
CCC	Advising at Community College
CCC	Advisor
CCC	Advisor at cc
CCC	Advisor at cc
CCC	Advisor at clack
CCC	Advisor at Clackamas Community College
CCC	Advisor at community college
CCC	Advisor at community college
CCC	Advisor at community college
CCC	Advisor from Clackamas
CCC	Advisor from Clackamas
CCC	Advisor said it would be free.
CCC	Advisors
CCC	Advisors at CCC
CCC	CC advisor
CCC	CC flyer
CCC	CCC advisor
CCC	CCC Advisor
CCC	CCC advisors
CCC	Clackamas
CCC	Clackamas
CCC	Community college advisor
CCC	Community college pamphlets
CCC	Community College Second year
CCC	Community college-Clackamas
CCC	Community college flyer
CCC	Councilor
CCC	Counseling
CCC	Counselor @ CCC
CCC	Counselor at Clackamas
CCC	Counselor at community college
CCC	Counselor
CCC	Counselor
CCC	Fellow student
CCC	Flyer
CCC	Flyer from cc
CCC	Flyer, friend
CCC	Friend

Institution	How student learned
CCC	Friend who was involved in the program.
CCC	From a student advisor in the help center.
CCC	From Clackamas Comm. College advisors.
CCC	From Community college advisor
CCC	Husband
CCC	I don't remember.
CCC	Instructor and advisors at Clackamas Community College.
CCC	Instructor at CC
CCC	Met one of the advisors-community college
CCC	Open meeting at CC
CCC	Pamphlet at CC
CCC	Poster at CC
CCC	PSU advisement at CCC
CCC	PSU lit at CC
CCC	PSU transfer day
CCC	Read about it in the school newspaper.
CCC	reading materials at community college
CCC	Through Clackamas advising
CCC	Through my advisor at CCC.
MHCC	Advising
MHCC	Advising office at Mt. Hood.
MHCC	Advisor at Mt Hood
MHCC	Advisor at MHCC.
MHCC	Community College
MHCC	Community college advisors
MHCC	Counselor @ MHCC
MHCC	Counselors
MHCC	Friend
MHCC	From advising at MHCC.
MHCC	From advisor at Mt. Hood
MHCC	Her community college
MHCC	High school counselor
MHCC	International student office advisor (Jeri Anderson)
MHCC	MHCC Pamphlet
MHCC	Mt. Hood counselor
MHCC	Saw a sign and was told in advising about it my first term at MHCC.

Appendix D: PSU Service most helpful

Community College	PSU Service
CCC	Admission, IASC, OSA
CCC	Advising
CCC	Advising
CCC	Advising
CCC	Advising about co-admit
CCC	Advising at business school and orientation.
CCC	Advising, Library, Computer labs
CCC	Advisors
CCC	Advising
CCC	Career center
CCC	Career advising
CCC	Computer lab
CCC	Computer labs
CCC	Counseling
CCC	Don't know
CCC	Everything
CCC	Financial aid
CCC	Financial aid, comp labs, library, degree req's, transportation, veterans affairs, cafeteria
CCC	General Requirement Counselors
CCC	IASC
CCC	IASC
CCC	IASC
CCC	Internet access
CCC	Library
CCC	Library
CCC	Library
CCC	Library
CCC	Library
CCC	Library
CCC	Library
CCC	Library and advising
CCC	Library, computer lab. counseling
CCC	Library, computer labs, advising,
CCC	Library
CCC	NONE!
CCC	one on one advising
CCC	Professor recommended from my instructor at Community College.
CCC	PSU advising, esp. regarding transferring.
CCC	PSU Advisors
CCC	School of business counselors
CCC	The advising
CCC	The ISAC center and student services.
CCC	WRITING CENTER, LIBRARY, COMPUTER LAB
MHCC	Advising and department heads.
MHCC	Advisors
MHCC	It was no help at all! The advisors at both institutions couldn't seem to agree and it cost me more.
MHCC	Library
MHCC	Library
MHCC	Library
MHCC	Library, counseling, cafeteria,

Community College	PSU Service
MHCC	PSU advising was confusing at first. It's unclear at first as to what to do.
MHCC	Transfer advising

Appendix E: Community College Service most helpful

Community College	Community College Service
CCC	Academic advising
CCC	Academic Counseling
CCC	Advice from instructors and advisor.
CCC	Advising
CCC	Advising
CCC	Advising
CCC	Advising
CCC	Advising
CCC	Advising
CCC	Advising
CCC	Advising
CCC	Advising
CCC	Advising
CCC	Advising
CCC	Advising
CCC	Advising
CCC	Advising
CCC	Advising at Clackamas was very good
CCC	Advising from counselors
CCC	Advisors
CCC	Advisors
CCC	Advisors
CCC	ADVISORS WERE GREAT, LIBRARY, COMPUTER LAB
CCC	Advisors, answered questions when you have them
CCC	Advisors, Help Center
CCC	Advising
CCC	Assistance from counselors (ensuring that all credits were fulfilled and paperwork was fill out correctly).
CCC	Computer lab
CCC	Computer labs
CCC	Counseling
CCC	Counseling
CCC	Counseling
CCC	Counseling
CCC	Counselor
CCC	Doesn't apply
CCC	Don't know
CCC	DUO ENROLLMENT WITH COMMUNITY COLLEGE AND PUBLIC UNIVERSITY
CCC	Financial aid
CCC	Financial aid
CCC	LCOP program at C.C

Community College	Community College Service
CCC	Library
CCC	Library
CCC	Library
CCC	Math and computer lab
CCC	On hand advisers
CCC	Profs.
CCC	Spanish counseling
CCC	Talking to Professors/Advisors
CCC	The 1997 Catalog, and advising/counseling
CCC	The advising center.
CCC	Transferring of credits
MHCC	Advising
MHCC	Advising
MHCC	Advisor
MHCC	Advisors
MHCC	Classes
MHCC	Computer labs
MHCC	None--I had to figure it all out by myself!
MHCC	Poor Advising :(
MHCC	Teacher
MHCC	The advising dept. at MHCC is great. They are thorough and helpful.
MHCC	Transfer advising (Spence White). He knows (almost) everything! He is very helpful!
MHCC	Website

Appendix F: Respondent suggestions for modification

Responses to the question: *What parts of the program should be modified or dropped?*

Institution	Modifications
CCC	Advising at CC was terrible. [Personal comment on staff]
CCC	Advising at CC
CCC	CC advising should be made better. Should be better marketed to CC and high school students
CCC	Didn't get to transfer all the credits-- shouldn't be a limit
CCC	Didn't need to meet advisors every term; can already see them all the time anyway
CCC	Have counselors be more knowledgeable
CCC	I think it is a good program; my limited access does not have a good opinion. Better communication about what is available like library or computer labs. Tying up resources and making it knowledgeable to co-admissions student.
CCC	It did what I needed it to do. Didn't really looked at info
CCC	Keep advising a big part of the program.
CCC	Let people know more about the services, classes, etc. that were offered at PSU
CCC	Little difficulty to get counselor at community college. Couldn't get advisor at PSU for co-admissions
CCC	More advertising of the program to students entering community college.
CCC	More credit availability
CCC	More PSU counselors
CCC	More publicity
CCC	Need to help with the transition, no one available in Portland State.
CCC	Need to let PCC students in on this.
CCC	Need tours of university for transferring students
CCC	Preview day should be modified. There should be more helpful information, such as
ormation on transfer credits. A brief overview of the general credits which will	
	transfer and how they will transfer.
CCC	PSU web site is hard to navigate and transfer equivalency was all text on web site and not easy to navigate
CCC	The advising departments of both schools are lacking.
CCC	There was more involvement from PSU than Community college, advising was more available.
CCC	They should track it better, like people contact while in the program. Just talked to advisors when needed help
CCC	Transcripts/credits should transfer more easily (had to bring transcripts to get into restricted classes)
CCC	Was admitted to PSU through program, at Clackamas there was one person who he had to deal with that what made it better. At PSU there were lots of people giving different answers.
CCC	When people transfer over to PSU from a community college there should be a class that transfer students should be required to take. Such as some type of advising, getting to know PSU, something more than just a half day orientation.
CCC	When transfer to PSU you should get 4 credits for classes not 3
CCC	While I was attending Community College I was able to use the library service but I was not able to check out any books. Having access to checking out books would improve the program
MHCC	Admission process needs work
MHCC	Both PSU and MHCC admissions workers need to know the program well, so it would be processed more quickly and easily. I had trouble registering at PSU.
MHCC	Financial aid in terms of scholarships. I found that my MHCC foundation

Institution	Modifications
	scholarship would not apply to PSU tuition. I thought this ridiculous since I was a co-admit.
MHCC	More advising on what is expected at the University level.
MHCC	More help with academic advising
MHCC	Not considered a full time student at either college so no benefits of a full time (e.g.-- no parking)
MHCC	Problems with credits not transferring or not being needed
MHCC	See above
MHCC	Should be better 'advertised'
MHCC	The advisors should know how the program works. They should also know about financial aid considerations.

Appendix G: General Comments

Responses to the question: *Do you have anything else you'd like to tell us about your experience in the co-admission program?*

Institution	Modifications
CCC	Best thing is the advisors.
CCC	FRUSTRATION, WITH FINANCIAL AID PROCESS,
CCC	Glad to be a part of it. Transition was smooth. Dan Fortmiller was great.
CCC	GOOD OPPORTUNITY FOR STUDENTS AT COMMUNITY COLLEGE.
CCC	Good partnership
CCC	Good program
CCC	Good program
CCC	Good transition
CCC	Helpful in transition
CCC	I have been at PSU for 2 years. I transferred from CCC in Fall 98 to PSU. I never had a chance to use the web site but am sure it will be helpful to others.
CCC	I really enjoy this program and recommend it to others.
CCC	It was a very smooth admission to PSU when I recently had my credits transferred. The CCC Counseling Center did all the rest after I filled out _one_ paper.
CCC	It was fun.
CCC	It was great!
CCC	It was wonderful to be able to take courses at both schools and have my tuition covered by financial aid. Thanks!
CCC	It worked very well. However, I was not aware that I could use the PSU facilities while attending Clackamas Community College. It has been a great experience.
CCC	It works
CCC	Kept me on track very helpful
CCC	Loved Clackamas and transition was smooth due to program
CCC	Made you feel more comfortable
CCC	More info about the transfer--easy transition, took classes didn't need, wasted some time that way--at both schools
CCC	Overall it has been excellent. I would recommend it to everybody
CCC	Should know more about transferring international credits
CCC	Slow process, when got to Portland state lost a year because took classes during sophomore year at community College that didn't apply at PSU.
CCC	This program is very helpful because I did not have to fill any registration forms at PSU and pay a fee. There was no gap in my education.
CCC	Thought it was a great program
CCC	Thought that the transition was smooth, credits transferred, had good experience when he did have to transfer to PSU.
CCC	Transfer information was kind of faulty
CCC	Was a good program
CCC	Wasn't notified, about certain services like the computer labs, library services, and parking information. She wished someone had told her about them. She is a Art major.
CCC	Worked in the co-admission program. The most important part of the program is the advisors at PSU, because the advice that I get will determine my future.
CCC	Worked very well for me--very solid program--very happy
CCC	Yeah, CCC and PCC advisors have no idea what they are talking about. When they talk to transfer students, CCC advisors told me to take a bunch of credits I didn't need, and as a result I am graduating a year behind some of my friends I learned with at CC

Institution	Modifications
MHCC	Didn't really think it helped--was a hassle actually, also got some incorrect information regarding admission acceptance probably better now that the kinks are worked out
MHCC	Even though I was co-admitted I ended up going full time at MHCC on 1/2 time aid because I was told that I could not get aid at both institutions.
MHCC	Good overall but we need more information on transition. Possibly going into a PSU class for the day. More information on clubs and classes.
MHCC	It would be a great help if international students are informed at the beginning since PSU does not charge non-resident tuition for taking less than 8 credits. International students _must_ take 12 credits at least to maintain the visa (F-1). At MHCC, 1
MHCC	More advising at cc
MHCC	Need better organization; she said people didn't know what they were doing??
MHCC	Never went through program
MHCC	Not being able to buy parking at PSU because not considered a full time student
MHCC	Thanks for a _real_ opportunity at university!
MHCC	Tuition remission was "so cool"

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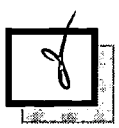

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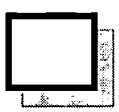

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