In 1991, a survey was mailed to Arrowhead Community College Region (Minnesota) students who had graduated during the 1985-86 academic year. Of the 750 graduates that year, 213 responded. Survey findings, based on this 28.4% response rate, included the following: (1) 44.6% of the respondents had earned a bachelor's degree, 4.2% had earned a master's degree, and one graduate was pursuing doctoral studies; (2) 52.1% had earned additional higher education credits since they graduated; (3) more than three-quarters of the responding graduates worked 40 or more hours per week, while another 18.4% worked 20 to 39 hours per week, together accounting for 95% of all respondents; (4) monthly gross pay was between $1,000 and $1,999 for 46% of the respondents and between $2,000 and $2,999 for 30% of the respondents; (5) among graduates whose highest degree was an associate degree or one-year certificate, those who earned more than $3,000 per month were employed in the fields of accounting and registered nursing; (6) graduates with a bachelor's degree, earning more than $3,000 per month, were working in consulting or computing, or were self-employed, with computer programming and computer engineering garnering the highest salaries (more than $6,000 per month); (7) at the master's degree level, no graduates indicated they were earning more than $3,000 per month; (8) 89% of the graduates indicated that they went to work for their current employer after they graduated from an Arrowhead college; (9) 65% indicated that their community college education was either directly or closely related to their present job; and (10) 75% said they did not use college job placement services. The questionnaire is attached.
THE FIVE-YEAR FOLLOW-UP REPORT

November 1991

A SURVEY OF 1985 - 1986 GRADUATES

Stephen C. Von Wald
Director
The

FIVE-YEAR FOLLOW-UP

Report

A Survey of 1985 - 1986 Graduates

November, 1991

Prepared by the
ARROWHEAD COMMUNITY COLLEGE REGION
Office of Institutional Research
Stephen C. Von Wald, Director
INTRODUCTION

A study of Arrowhead Community College graduates was conducted during the late summer and early fall of 1991. The study took the form of a survey which was mailed to Arrowhead students who had graduated during the 1985-1986 academic year. Of the 750 graduates from that year, 213 responded to the survey. That is a response rate of 28.4 percent.

The graduates were asked to provide some basic information about their educational backgrounds and current employment status. They were also asked to assess the value of the education they received at the community college in continuing their educations and in their current employment.

During the 1985-1986 academic school year, 427 students graduated from Arrowhead's five colleges with an Associate in Arts degree, 192 earned Associate in Applied Science degrees and 131 earned one-year occupational certificates.

EDUCATIONAL ACHIEVEMENTS

In the Fall of 1986, Arrowhead Community Colleges conducted a follow-up survey of their 1985-86 graduates. The study showed that 77.7 percent of those who graduated with an Associate in Arts degree were continuing their education and they were currently enrolled in an institution of higher education.

In the 1991 follow-up survey, graduates were asked to indicate the highest educational level they had achieved. Of the 213, 44.6 percent have gone on to earn bachelors degrees, 4.2 percent have earned...
masters degrees. While none of the 1986 graduates earned a PhD, one of the graduates is currently pursuing doctoral studies. The distribution of degrees among the Arrowhead graduates is shown in Figure 1.

![Chart showing the distribution of degrees among Arrowhead graduates: 44.6% Bachelor's, 44.6% Associate, 4.2% Master's, 1.9% Professional, and 4.7% No Response.]

FIGURE 1 The Highest Educational Level Achieved thus Far.

The graduates were also asked to indicate the major field of study for which they earned their degree. The majors for the 95 bachelor and 9 master degrees are listed in Figure 2. There were four 1986 graduates who identified themselves in the professional category. Two are doctors of chiropractic and two are registered nurses.

When asked if they were currently a student, 19 indicated that they were continuing their education at this time. Figure 3 shows the list of all the institutions they are currently attending and the majors and degrees they plan to earn. When provided, the credit load for each student is also presented. These nineteen graduates represent 8.9 percent of the survey respondents who are

BACHELOR'S DEGREE
Accounting ........................................ 3
Aquatic Biology ................................... 1
Aviation Technology .............................. 1
Biology ............................................ 1
Business ........................................... 5
Business Administration ........................ 8
Communications .................................. 3
Computer Engineering ........................... 1
Computer Science ................................ 1
Criminal Justice ................................... 4
Criminology ....................................... 1
Dietetics .......................................... 2
Economics ......................................... 1
Electrical Engineering ........................... 1
Elementary Education ............................. 15
English ............................................ 3
History ............................................ 3
Industrial Technology ............................ 2
Management, Financial .......................... 1
Manufacturing Engineering Technology ...... 1
Marketing .......................................... 4
Mathematics ....................................... 5
Mechanical Engineering .......................... 1
Medical Technology .............................. 1
Occupational Therapy ............................ 1
Office Management ............................... 3
Pastoral Ministries ............................... 1
Pharmacy ........................................... 1
Physical Education ............................... 3
Physical Therapy .................................. 1
Political Science ................................... 1
Psychology ......................................... 3
Secondary Education .............................. 1
Social Studies, Secondary Education .......... 1
Social Work ....................................... 5
Sociology ........................................... 1
Sports & Recreation Management .............. 2
Technical Illustration & Graphic Design ...... 1
Vocational Rehabilitation ....................... 1

TOTAL 95

MASTER'S DEGREE
Aerospace Engineering (M.S.) ................... 1
Business Administration (M.B.A.) .............. 3
Communication Disorders (M.A.) .............. 1
Education (M.A.Ed.) ............................... 1
Industrial Safety .................................. 1
Social Work ....................................... 1
Sociology ......................................... 1

TOTAL 9

FIGURE 2 Major of Highest Degree Earned.
The Five-Year Follow-Up of 1985-1986 Graduates

<table>
<thead>
<tr>
<th>Institution</th>
<th>Major</th>
<th>Degree</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>American University</td>
<td>Sociology &amp; Justice</td>
<td>PhD</td>
<td>-</td>
</tr>
<tr>
<td>Bemidji State University</td>
<td>Business Administration</td>
<td>B.A.</td>
<td>-</td>
</tr>
<tr>
<td>Bemidji State University</td>
<td>Criminal Justice</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Bemidji State University</td>
<td>Kindergarten Endorsement</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Brown Institute</td>
<td>Computer Programming</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>College of St. Scholastica</td>
<td>Business Management</td>
<td>B.A.</td>
<td>-</td>
</tr>
<tr>
<td>College of St. Scholastica</td>
<td>Chemistry</td>
<td>B.A.</td>
<td>18</td>
</tr>
<tr>
<td>College of St. Scholastica</td>
<td>Human Resources Management</td>
<td>M.A.</td>
<td>7</td>
</tr>
<tr>
<td>College of St. Scholastica</td>
<td>Management</td>
<td>M.A.</td>
<td>4</td>
</tr>
<tr>
<td>Itasca Community College</td>
<td>Spanish</td>
<td>B.A.</td>
<td>5</td>
</tr>
<tr>
<td>Rainy River Community College</td>
<td>Liberal Arts</td>
<td>A.A.³</td>
<td>-</td>
</tr>
<tr>
<td>University of Minnesota</td>
<td>Fisheries &amp; Wildlife</td>
<td>B.A.</td>
<td>5</td>
</tr>
<tr>
<td>University of Minnesota</td>
<td>English as a Second Language</td>
<td>B.A.</td>
<td>-</td>
</tr>
<tr>
<td>University of Minnesota, Duluth</td>
<td>Education (English &amp; Spanish)</td>
<td>B.S.</td>
<td>18</td>
</tr>
<tr>
<td>University of Minnesota, Duluth</td>
<td>Education (P.E., Health, Life Science)</td>
<td>B.S.</td>
<td>16</td>
</tr>
<tr>
<td>University of Minnesota, Duluth</td>
<td>Master of Education</td>
<td>M.Ed.</td>
<td>3</td>
</tr>
<tr>
<td>University of Minnesota, Duluth</td>
<td>Social Work</td>
<td>B.A.</td>
<td>-</td>
</tr>
<tr>
<td>University of Minnesota (I.T.)</td>
<td>Aerospace Engineering</td>
<td>B.A.</td>
<td>7</td>
</tr>
<tr>
<td>University of North Dakota</td>
<td>Business Administration</td>
<td>B.A.</td>
<td>-</td>
</tr>
</tbody>
</table>

1. A one-year certificate career program.
2. Earning additional credit before transferring to a four-year institution.

Figure 3 Nineteen 1986 Graduates Who Are Currently Continuing Their Educations.

Currently continuing their education.

The second question on the survey questionnaire asked the graduates to indicate the approximate number of credits they have earned since they graduated from an Arrowhead College. More than half, 52.1 percent, stated that they had earned additional higher education credits since they graduated. Figure 4 shows the distribution of credits earned as a percentage of all the graduates who responded to the question. These figures would appear to be consistent with the number of respondents who had earned or who are pursuing bachelor, master and other degrees.

Figure 4 Credits Earned by 1986 Graduates Since They Left Their Arrowhead College.
CURRENT EMPLOYMENT

The fourth and final question on the survey questionnaire is actually a group of questions pertaining to the graduates' employment, condition of employment and employment status. The respondents were also asked to assess the value of the education they received while at their community college in relationship to their job and their continuing education, if applicable.

As shown in Figure 5, more than three-quarters of the responding graduates work 40 hours a week or more while another 18.4 percent of them work 20 to 39 hours a week. This accounts for 95 percent of all the graduates in the survey.

As shown in Figure 6, 8 percent were employed on a temporary basis and 6.1 percent classified themselves as seasonally employed.

Interestingly, when the graduates were asked to state the name of their employers, the result was that there were very few recurring names that appeared on the list. In fact the list of employers is very diversified. While one might suspect that the larger employers in the area such as Blandin Paper, USX, LTV Steel or Boise Cascade might employ a large number of our graduates, the fact is that within this group of graduates, only two or three

<table>
<thead>
<tr>
<th>Industry Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>8</td>
<td>3.8%</td>
</tr>
<tr>
<td>Education</td>
<td>24</td>
<td>11.3%</td>
</tr>
<tr>
<td>Finance, Insurance &amp; Real Estate</td>
<td>13</td>
<td>6.1%</td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>6</td>
<td>2.8%</td>
</tr>
<tr>
<td>State</td>
<td>9</td>
<td>4.3%</td>
</tr>
<tr>
<td>Local</td>
<td>22</td>
<td>10.3%</td>
</tr>
<tr>
<td>Health Care</td>
<td>34</td>
<td>16.0%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>10</td>
<td>4.7%</td>
</tr>
<tr>
<td>Mining</td>
<td>11</td>
<td>5.2%</td>
</tr>
<tr>
<td>Services</td>
<td>31</td>
<td>14.6%</td>
</tr>
<tr>
<td>Transportation</td>
<td>3</td>
<td>1.4%</td>
</tr>
<tr>
<td>Wholesale &amp; Retail Trade</td>
<td>24</td>
<td>11.3%</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>2.8%</td>
</tr>
<tr>
<td>No Response</td>
<td>13</td>
<td>6.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>213</td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

FIGURE 7 Employment Distribution of 1985-1986 Graduates Within industry Categories.
respondents stated that they were employed by any one employer.

The responding graduates were also asked to indicate their gross earnings. Since three-quarters of the graduates in the survey stated that they were permanently employed and work 40 hours a week or more, it is useful to know the configuration of the wage distribution within this group. Figure 8 illustrates this distribution based on gross monthly earnings. To get a clearer picture of the distribution of salaries and perhaps gain some insight into what influence, if any, the level of education has on the salaries earned by the respondents, their monthly wages were distributed based on their highest level of education. Figures 9a, 9b and 9c shown the results of this breakdown.

Figure 9a shows the distribution of salaries among graduates whose highest degree was an associate degree or one-year certificate. Those who earned $2,000 to $3,000 were predominantly working in the fields of law...
enforcement, natural resources, specialized secretarial or skilled trades. Those earning more than $3,000 a month were in the fields of accounting and registered nursing.

Those with bachelor's degrees who earned $2,000 to $3,000 a month were employed in the medical services, accounting, teaching and skilled trades. Those who earned more than $3,000 a month were working in consulting, computing and self-employment with computer programming and computer engineering (more than $6,000 a month) garnering the highest salaries.

At the master's level, those working in education, management, engineering or a specialty in their profession earned $2,000 to $3,000 a month. No one with a master's degree indicated that they were currently earning more than $3,000 a month.

Eighty-nine percent of the graduates in the survey indicated that they went to work for their current employer after they graduated from an Arrowhead college. However, 4 percent said they were working for their employer before they started college. Eight percent indicated that they started working for their employer while attending college.

Asked to assess the relationship between their present job and their community college education, 65 percent said that their education was either directly or closely related. Figure 10 illustrates the responses to this question.

Then graduates were asked to assess the helpfulness or value of their community college education with respect to their work and their continuing education. The results are shown in Figure 11. It could be argued that all education is always helpful, whether in the work place or education. Generally, while that is true, the thrust of these two questions addressed the graduate's assessment of the value of their education in their work and learning lives. The response to both questions was obviously quite positive.

How Valuable Has Your Education Been...

How Closely Related Is Your Present Jobs To Your Community College Education?
Finally, addressing the question of placement assistance, referring to Figure 12, the graduates were asked to assess how helpful the college was in finding a job.

There may be several reasons why 75 percent of the graduates did not take advantage of community college job placement services. For many, they had transferred to other institutions and they used the services of those schools. As shown earlier, 12 percent of respondents were already employed when they graduated. However, some of the respondents to this survey stated that they were not aware that such a service existed at the college.

WRITTEN COMMENTS

At the end of the questionnaire, the survey participants are invited to make comments or suggestions about the college they had attended. Virtually without exception, the comments and suggestions were very positive and encouraging.

Three areas of the colleges were singled out by the graduates: the college environment, the quality of education and the faculty and staff of the colleges. The graduates expressed very positive remarks about each of these areas. For the most part, they felt they had received a quality education at Arrowhead Community Colleges.

The areas in which the respondents were either critical or made specific suggestions for improvement were counseling and advising. In all cases, their recommendations were constructive and affirming.

SUMMARY

As we continue to follow-up our Arrowhead graduates in the coming years, we will be able to build on the information which we have begun with this survey. It is our hope to expand and clarify many of the concerns facing Arrowhead colleges and higher educations in general.

Many questions are being asked about college graduates. Where are they now? What are they doing now? Has their education made a difference in their lives? Do we help make that difference? What can we do to improve the institution and aid students in achieving their academic goals? We hope this report has begun to answer some of these questions.
THE FIVE-YEAR FOLLOW-UP OF 1985-1986 GRADUATES


2. This figure does not include twenty-two Associate of Applied Science graduates who also earned Associate in Arts degrees.

3. This figure does not include two One-Year Occupational Certificate graduates who also earned Associate in Arts degrees.


5. A list of all the employers who were named in this survey is available upon request.

6. A complete list of all job titles are available upon request.

7. A complete list of the comments for each college have been given to the respective college provosts. A copy may be requested with their permission.
FIVE YEAR FOLLOW-UP PLACEMENT SURVEY

This survey is sent to all graduates of the College. A confidential summary is prepared from it, and used to inform current students about the job market as well as to discover what our graduates are doing and what they have achieved. Your participation in this survey is appreciated. Please write-in or mark your replies to the following questions and mail the form back to the college as soon as you can.

1. What is the highest educational level you have achieved thus far?
   - Associate (2-year) degree (Degree __________ Major ___________________)
   - Bachelor’s (4-year) degree (Degree __________ Major ___________________)
   - Master’s degree (Degree __________ Major ___________________)
   - PhD degree (Degree __________ Major ___________________)
   - Professional degree (such as MD, DDS, LLB) (please specify which: __________________)

2. Approximately how many credits have you earned since you graduated from the College?

3. If you are currently a student:
   a. What is the name of the school you currently attend or plan to attend? __________________
   b. What is your major field of study? __________________ Degree type? __________
   c. How many credits are you taking this term? __________

4. And/or if you are currently employed:
   a. What is the name of your employer? __________________
   b. What is your job title? __________________
   c. How many hours a week do you work? __________
   d. What is the condition of your employment?
      - Temporary  ___ Permanent  ___ Seasonal
   e. What are your present wages before deductions, either per hour, week or month?
      $___ per hour or $___ per week or $___ per month
   f. When did you begin working for your present employer?
      - Before attending the College.
      - While attending the College
      - After leaving the College.

[OVER]

Arrowhead Community College Region
THE FIVE-YEAR FOLLOW-UP OF 1985-1986 GRADUATES

---

g. Is your present job related to the education you received at the College?
   - Yes, directly related.
   - Yes, closely related.
   - No, not related.

h. How helpful (valuable) has the education you received at the College been in your work?
   - Very helpful
   - Helpful
   - Not helpful
   - Not applicable

i. How helpful (valuable) has the education you received at the College been in your continuing education?
   - Very helpful
   - Helpful
   - Not helpful
   - Not applicable

j. Was the job placement assistance you received from the College helpful in finding employment?
   - Very helpful
   - Helpful
   - Not helpful
   - Did not use any assistance

You are welcome to make any comments or suggestions about the College below.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

If your address has changed and you would like to update your records, please add the information below:

NAME:______________________________________________________________

ADDRESS:__________________________________________________________

CITY:________________________ STATE:______ ZIP:____________________

THAT'S IT! THANKS AGAIN FOR PARTICIPATING IN THE SURVEY.

[ OFFICE USE ONLY: __________________ / __________________ / __________ ]