

Linda L. Casenhiser
 EDU 511 - Course Project
 December 1994

OUTLINE FOR RESEARCH FIELD STUDY

GRADUATE FOLLOW UP STUDY
 ASSOCIATE DEGREE IN APPLIED SCIENCE
 MANUFACTURING TECHNOLOGY (MFG)
 (A RESTRICTED DEGREE PROGRAM FOR DANA CORPORATION EMPLOYEES)

SECTION I: DEFINING THE PROBLEM / RESEARCH PURPOSE

1. Introduction and Background of the Problem

- ✓ Increasingly business ^{exact from AACC} and industry are turning to community colleges to assist with training and retraining their employees. The (1,200+) community colleges in the United States are uniquely positioned to respond to this demand. 90% of future jobs ...

Programs offered by community colleges are expected to respond to the needs of their surrounding communities. Vocational programs are guided by advisory committees comprised of knowledgeable experts working in each program area. Community colleges are affordable (tuition is significantly less than that charged by local public four year colleges or universities) and accessible (due to open door policies with regard to admissions, and because community colleges are usually conveniently located).

Community colleges responding to the needs of corporate America face many challenges. Businesses want college staff who will listen, and who are willing to assess the company's needs. They want courses and programs that are specific-- using their equipment, their software, and reflecting their management style. Further, they want these deliverables at times and locations convenient for them. Flexibility is a key issue.

corporate philosophy

This thesis will focus on a training partnership between Dana Corporation and Oakland Community College which was developed to provide advanced technical education for manufacturing engineers.

Dana Corporation, an automotive supplier, was founded in 1904. Today it is the largest independent supplier of vehicular components in North America and third largest in the world. More than 55,000 people work at almost 700 facilities in 27 countries. (footnote- Dana: Serving Customers Around the World, pg. 2) Sales in 1993 were \$5.46 billion. (footnote- Dana 1993 Annual Report).

In 1983, Dana Corporation conducted an internal survey and discovered that only 25% of their "manufacturing engineers" had formal education beyond high school. (Footnote-AACJC 1991 presentation paper) A task force visited seven colleges and universities in the Midwest to assess faculty, curriculum, facilities, and flexibility of delivery. Based upon these site visits, Oakland Community College, Auburn Hills Campus, was chosen to develop a restricted, customized Associate Degree in Applied Sciences, Manufacturing Technology (MFG), for the employees of Dana Corporation.

Oakland Community College opened in the Fall of 1965. Today OCC serves over 30,000 students at five campuses and several extension centers. The Auburn Hills Campus (Auburn Hills, Michigan) is located on a site near the intersection of I-75 and M-59, adjacent to the Oakland Technology Park, one of the fastest growing research and development parks in the nation. Technology programs are housed in the Advanced Technology Center (constructed in 1984) and in the adjoining Earl M. Anderson Vocational Building.

2. Statement of the Problem Situation or Statement of Need

Oakland Community College first offered the Manufacturing Technology degree program for Dana Corporation employees in the Spring of 1985. Seventeen students were enrolled in that first session. During the latest session, Fall of 1994, 45 students were enrolled. Over 100 participants have completed the program to earn either a Dana Certificate (after completion of the ten core courses) or the Associate degree (upon completion of all graduation requirements), or both.

OCC's Office of Institutional Research conducts a Graduate Follow-up Survey of all graduates nine months after graduation. The MFG students are surveyed at that time. However, the experiences and backgrounds of these students differ vastly from those of our regular credit students.

Services--such as recruitment, admissions, counseling, tutoring--are specially arranged. Courses are scheduled differently--in three week blocks, twice per year. Tuition is paid directly by the employer, Dana Corporation. Faculty and students have unique opportunities to interact. Administration monitors the program closely during each three week session. The demographics of the students differ from our regular population: less minority students, less women, older, employed full-time.

The Manufacturing Technology program with Dana Corporation is one of the college's longest running restricted degree programs. By studying the factors involved in the program's longevity and apparent success from the students' perspectives, much is to be learned. Information gathered and

employers perspective too

~~AS 6~~
data
Degrees ~~too~~
graph = Sue

data book

Planning & Analysis

OCC's

analyzed will be used to make improvements in the MFG program, and to help the college develop additional successful restricted, customized programs for business and industry.

3. Purpose of the Study

The researcher proposes to conduct a Graduate Follow-up Survey of the 111 program completers. (Program completers are those students who have completed either the ten core courses to earn a Dana Certificate, or the requirements for the Associate degree, or both.)

The purpose of the study is to determine the effectiveness of the training in meeting the stated objectives. Measures of effectiveness ("having the intended or expected effect; serving the purpose") will be based on the students' level of satisfaction ("fulfillment or gratification of a desire, need, or appetite").

4. Statement of Hypotheses or Questions to be Answered

According to Dana Corporation literature, the purpose of the program is to:

"formally educate/train and re-educate/re-train employees in applied manufacturing technology"
(from AACJC 1991 Convention handout)

Research Questions to be answered include:

- (1) What is the ^{demographic} profile of the participant?
- (2) What is the perceived adequacy of the training?
- (3) What is the perceived value of the course content?
- (4) Which aspects of the program contribute most to its success?
- (5) What aspects of the program need revised and/or improved?
- (6) Is there a difference between satisfaction with the program and length of time since completion of the program?
- (7) Is there a difference between perceived adequacy of the training and selected demographic variables?

control for
time out

SECTION II: REVIEW OF RELATED LITERATURE

5. Literature Related to the Research Problem

ERIC

~~Tom Haag~~ Ann @ AH

SECTION III: METHODOLOGY OR PROCEDURES

6. Description of Research Methodology or Approach

Planning & Analysis

With the cooperation of OCC's Office of Institutional Research and Dana Corporation's Dana University Technical School, a Graduate Follow-up Survey (see draft attached) will be mailed to all program completers in January 1995. In February 1995, non-respondents will be contacted by phone to solicit their responses to the survey.

Data will be inputted in February and March 1995, and the final report will be prepared by early April 1995.

7. Research Design

This thesis will be based on nonexperimental, descriptive research. The results will include an investigation of relationships between some of the variables.

8. Pilot Studies

The survey instrument will be pilot tested with three currently enrolled trainees.

9. Selection of Subjects

All current employees of Dana Corporation who completed either the Dana Certificate or OCC Manufacturing Technology degree will be surveyed.

10. Instrumentation

A draft copy of the questionnaire is attached.

It will be / has been reviewed by knowledgeable staff of both OCC and Dana Corporation:

Oakland Community College Staff

Marty Orlowski, Director of Institutional Research
Richard Saunders, Campus President
Bill Rose, Dean of Manufacturing and Technological Services
Jan Harp, Career Education Coordinator

Dana Corporation Staff

Roger Harnishfeger, Dean of Dana University Technical School
Royce West, Manager of Quality
Rick Whitman, Manager of Education

target response of X will be sought in order to obtain a 95

N=?

=?

P&A

11. Field, Classroom or Laboratory Procedures

A draft of the letter to Dana employees to be ~~included in~~ the ~~study~~ is attached. *sent with questions*

The study has been endorsed by both OCC and Dana Corporation.

12. Analysis

The following statistics will be used to analyze the data from this research:

- means
- frequencies
- percentages
- charts/graphs
- chi square

DANA
MANUFACTURING TECHNOLOGY STUDENT FOLLOW-UP SURVEY
Feb. 1995

Purpose of the Study

The researcher proposes to conduct a Follow-up Survey of the 162 program participants in the restricted degree program created for Dana Corporation, the Associate Degree in Applied Science in Manufacturing Technology.

The purpose of the study is to determine the effectiveness of the training in meeting the stated objectives. Measures of effectiveness ("having the intended or expected effect; serving the purpose") will be based on the students' level of satisfaction ("fulfillment or gratification of a desire, need, or appetite"). Other indicators of effectiveness will include:

*program longevity (10 years)

*growth (162 participants to date. Initial class was held in May 1985 with 17 students; the most recent class was held in Fall 1994 with 45 students.)

*outcomes / impact or result of participation

4. Statement of Hypotheses or Questions to be Answered

According to Dana Corporation literature, the purpose of the program is to:

"formally educate/train and re-educate/re-train employees in applied manufacturing technology"
(from AACJC 1991 Convention handout)

Research Questions to be answered include:

- (1) What is the profile of the participant?
- (2) What is the perceived adequacy of the training? (Did the training satisfy the objectives?)
- (3) What is the perceived value of the program? (Did the program have worth, merit, utility?)
- (4) Which aspects of the program contribute most to its success?

- (5) What aspects of the program need revised and/or improved?
- (6) Is there a difference between satisfaction with the program and length of time since completion of the program?
- (7) Is there a difference between perceived adequacy of the training and selected demographic variables?
- (8) Is there a difference between level of education upon entering the program and perceived value?



MANUFACTURING TECHNOLOGY
GRADUATE FOLLOW-UP SURVEY
1995

Our records indicate that you completed either a Dana Certificate (10 core courses), or the Associate degree in Manufacturing Technology, or both.

This year marks the tenth anniversary of the program. We are soliciting your opinions in an effort to ascertain if the program is meeting Dana Corporation's objectives, and how OCC might further improve the program.

Please take a few minutes now to fill out this questionnaire and return it in the envelope provided. If you have any questions, contact Linda Casenhiser at (810)340-6617. Thank you!

Roger Harnishfeger
Dean, Dana University Technical School

Richard Saunders
President, OCC Auburn Hills
Campus

* * * *

Instructions: Place an "x" on the line that corresponds with your response unless instructions indicate otherwise.

PART I: PARTICIPANT PROFILE

Fill in information in items 1-4:

1. Last Name: First Name: Middle Initial:

2. Address (at Dana Corporation):

3. Telephone Number (at Dana Corporation):

4. Student Number: (same as Social Security Number)

5. What is your sex? Male Female

6. How old are you?
under 25 years
25-35 years
36-45 years
46-55 years
56-65 years
over 65 years

label
label

HRD
OCC
OCC
OCC

OCC

- 7. How do you describe yourself?
 - American Indian or Alaskan Native
 - Asian, Pacific Islander, or Filipino
 - Black or Afro-American
 - Hispanic, Chicano, or Spanish-speaking American
 - White or Caucasian
 - Other

HRD

- 8. How long have you been employed by Dana Corporation?
 - under 5 years
 - 5-10 years
 - 11-15 years
 - 16-20 years
 - 21-25 years
 - over 25 years

- 9. How did you find out about the Manufacturing Technology program? (Check one main category, and one subcategory)

- word of mouth
 - supervisor
 - program participant or graduate
 - co-worker
 - other? who?

Narrative?

possibly same



- written materials
 - from Dana Corporation
 - from Oakland Community College

HRD

- 10. Which did you complete? (Please check only one.)
 - Dana Certificate
 - Associate Degree in Manufacturing Technology
 - both

Not yet

OCC

- 11. How long did it take you to complete the program?
 - 2 - 2 1/2 years
 - 3 - 3 1/2 years
 - 4 - 4 1/2 years
 - over 4 years

OCC

- 12. When did you graduate?

<input type="checkbox"/> 1988	<input type="checkbox"/> 1992
<input type="checkbox"/> 1989	<input type="checkbox"/> 1993
<input type="checkbox"/> 1990	<input type="checkbox"/> 1994
<input type="checkbox"/> 1991	

- 13. If you completed an Associate degree, please skip this question. If you earned a Dana Certificate, but NOT an Associate degree, why did you choose not to earn the degree? (Please select only one answer.)
 - I am planning on returning to earn the degree.
 - I already have a degree from another institution.
 - I feel the Dana Certificate courses cover what I need to know on my job.
 - Personal reasons--unable to continue schooling.
 - Other (please specify:)

PART II: PROGRAM INFORMATION

- in the OCC Dana program

14. The following is a list of the ten core courses. Please rank order them with "1" being of MOST value to you on your job to "10" being of LEAST value to you on your job:

- _____ Engineering Materials
- _____ Computer Aided Design
- _____ Electronics
- _____ Robotics and Automated Systems
- _____ Plant Operation Networking
- _____ Electronic / Mechanical Instrumentation and Transducers
- _____ Advanced Machining Applications
- _____ Programmable Logic Controllers
- _____ Computer Integrated Manufacturing
- _____ Numerical Control Programming

Not at All
↑ 2 3

Very Important

Value also

15. If you did not complete the Associate degree, please skip this question. The following is a list of the general education classes. Please rank order them with "1" being of MOST value to you on your job to "6" being of LEAST value to you on your job:

- _____ Communications/English
- _____ Fine Arts/Humanities
- _____ Mathematics/Science
- _____ Social Science
- _____ Political Science
- _____ Physical Education

1 2 3

16. How satisfied were you with the following at OCC:
 (Please circle one number for each item based on the following scale:)

Does Not Apply. Very Satisfied. Satisfied. Neutral. Dissatisfied. Very Dissatisfied
 0 1 2 3 4 5

Admissions procedures	0	1	2	3	4	5		
Counseling	0	1	2	3	4	5		
Tutoring	0	1	2	3	4	5		
Facilities:								
classrooms	0	1	2	3	4	5		
laboratories	0	1	2	3	4	5		
Instructional content of:								
core courses	0	1	2	3	4	5		
general ed courses		0	1	2	3	4	5	
Faculty-teaching methods			0	1	2	3	4	5
Instructional materials								
(textbooks/supplies)	0	1	2	3	4	5		
Communication:								
from OCC	0	1	2	3	4	5		
from Dana	0	1	2	3	4	5		
Coordination between OCC & Dana	0	1	2	3	4	5		

Does Not Apply
+
8
8
8

17. *Narrative?*

The following are various aspects of the program which we believe might be contributing to its success. Please select what you believe are the TOP THREE and rank order them (1-3) with #1 being the one you think MOST contributes to its success.

- program is Dana specific
(used same equipment, software, style)
- curriculum is evolving/adjustable
- emphasis on teamwork
- emphasis on students' strengths
- debriefing sessions at end of first and third week
- OCC's acceptance of transfer credit
- assignment of counselors specifically for Dana employees
- assignment of OCC contact person
(Career Education Specialist)
- assignment of Dana contact person
(Manager of Education)
- instruction
- content of courses
- immersion in academic environment for three week blocks
- leave from work to attend school full-time
- opportunity to network with other Dana employees
- provision of study room at the hotel
- field trips
- guest speakers
- other (please specify:)

18. *Narrative?*

How do you recommend we schedule these courses in the future? (Select only one.)

- as is (three week blocks, twice per year)
- two week blocks, three times per year
- one six week block, once per year
- other (please specify:)

What would be the best scheduling

19. Spring sessions are traditionally scheduled in April/May and Fall sessions are traditionally scheduled in September/October. Should we continue to schedule classes during these months?

- yes
- no

If no, why?

Which months are better for Spring?

Which months are better for Fall?

20. Where/how do you recommend we deliver classes in instances when we have a choice? Rank order with #1 being MOST preferred to #6 being LEAST preferred?

Yes No
1 0
0 0
0 0
0 0

- on site at OCC (Auburn Hills, Michigan)
- on site at Dana University Technical School (Ottawa Lake, Michigan)
- over compressed video (interactive T.V.) between Dana and OCC
- via videotape (tapes to be shown at students' sites)
- via correspondence
- other (please specify:)

21. If you had it to do over again, would you enroll in this program?
yes no

If no, why not?

22. If you had the power to change one thing about the program, what would it be?

.....
.....
.....

HRD

23. Which position did you hold when you ENTERED the program?

- technician
- process engineer
- area manager
- plant manager
- other (please specify:)

HRD

24. What is your CURRENT position?

- technician
- process engineer
- area manager
- plant manager
- other (please specify:)

25. Overall how well did the program prepare you for the work you are now doing?

- Excellent preparation
- Good preparation
- Adequate preparation
- Inadequate preparation
- Does not apply

26. Has your participation in the program affected any of the following:
(Check all that apply)

Yes No
1 0
1 0
1 0
1 0
1 0

- your interest in learning about new technology
- your ability to learn new technology
- your decision to implement new technology on the job
- your comfort with using new technology
- your desire to stay current on the latest technology

Y 27
1 0
1 0
1 0

How are you keeping current in your field:

- reading journals, professional magazines
- attending conferences, workshops, seminars
- enrolling in additional classes
 - credit non-credit
- on-the-job training
- other? (please specify:)

28. How can Oakland Community College further serve you?
(Check all that apply.)

Y N
1 0
1 0

- add you to our mailing database to be notified of Advanced Technology Center events (demonstrations, conferences, seminars)
- publish a networking directory of program completers for your use
- offer one week or less intensive training updates in topics of interest to you.
(Circle any of the following which are of interest to you: virtual manufacturing, sterolithography, CAD/CAM, other:)
- offer an additional customized degree:
 - for you
 - for your subordinates
 in what?
- collaborate with a four year institution to offer a bachelors degree in the same format as the OCC program.

If yes, which degree would you be most interested in pursuing?

- Bachelors of Applied Science in Manufacturing
- Bachelors of Arts in Business Administration
- Bachelors of Arts in Management
- Bachelors of Science in Engineering
- other (please specify:)

other (please specify:)

THANK YOU! PLEASE RETURN SURVEY TODAY.

5. Concerning the position you currently hold at Dana, would you say that you are a:

- 1 _____ technician
- 2 _____ process engineer
- 3 _____ area manager
- 4 _____ plant manager
- 5 _____ or do you hold a different position at Dana? (*probe*)

_____ (*other position*)

9 _____ *No response*

6. Is this the same position that you held when you first entered the OCC program?

- 1 _____ *Yes, (skip to question #9)*
- 0 _____ *No, (go to question #7)*
- 9 _____ *No response*

7. What position did you hold when you first entered the Manufacturing Technology Program? Were you a:

- 1 _____ technician
- 2 _____ process engineer
- 3 _____ area manager
- 4 _____ plant manager
- 5 _____ or did you hold a different position at Dana? (*probe*)

_____ (*other position*)

- 8 _____ *Does not apply*
- 9 _____ *No response*

8. Do you think that your involvement in the OCC Manufacturing Technology Program had a major impact, minor impact, or no impact at all on you obtaining the position you currently hold?

- 3 _____ *Major impact*
- 2 _____ *Minor impact*
- 1 _____ *No impact at all*
- 8 _____ *Does not apply*
- 9 _____ *No response*

9. Would you say that participating in the OCC program has been very helpful, helpful, or not at all helpful in terms of your day-to-day job responsibilities?

- 3 _____ *Very helpful*
- 2 _____ *Helpful*
- 1 _____ *Not at all helpful*
- 9 _____ *No response*

10. Now I am going to read you a list of the core courses which comprise the OCC Manufacturing Technology Program. For each course that you have completed, please tell me if it was very valuable, somewhat valuable or not at all valuable in terms of your job responsibilities.

	Very Valuable	Somewhat Valuable	Not at all Valuable	Does not Apply
Engineering Materials (<i>ATM 850, Metallurgy</i>)	3	2	1	8
Computer Aided Design (<i>CAD 100 or 110, Fundamentals of Engineering Graphics</i>)	3	2	1	8
Electronics (<i>EEC 127, Basic Electronics</i>)	3	2	1	8
Robotics and Automated Systems (<i>ROB 150, Introduction to Robotics Technology</i>)	3	2	1	8
Plant Operation Networking (<i>CIM 210, Plant Networking and Computer Systems Applications</i>)	3	2	1	8
Electronic-Mechanical Instrumentation and Transducers (<i>ROB 166, Sensor Technology</i>)	3	2	1	8
Advanced Machining Applications (<i>ATM 110, Introduction to Machine Tools</i>)	3	2	1	8
Programmable Logic Controllers (<i>ROB 204, Programmable Controller Applications</i>)	3	2	1	8
Computer Integrated Manufacturing (<i>CIM 110, Introduction to Computer Integrated Manufacturing</i>)	3	2	1	8
Numerical Control Programming (<i>ATM 210, Basic Numerical Control Programming</i>)	3	2	1	8

11. In terms of your experience at OCC, please tell me if you are very satisfied, satisfied, dissatisfied, or very dissatisfied with each of the following.

	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Does not Apply
Coordination/administration of the program	4	3	2	1	8
Academic counselling form OCC staff	4	3	2	1	8
Faculty instruction in core courses	4	3	2	1	8
Faculty instruction in general education courses	4	3	2	1	8
Equipment in the classrooms and laboratories	4	3	2	1	8
Instructional materials (<i>texts, supplies</i>)	4	3	2	1	8
Computer software applications	4	3	2	1	8

12. Now I am going to read you a few statements concerning the Manufacturing Technology Program. Please tell me if you strongly agree, agree, disagree, or strongly disagree with each statement.

	Strongly Agree	Agree	Disagree	Strongly Disagree
Participation in the OCC program has improved my ability to work as a team member	4	3	2	1
Three week blocks of intensive classroom instruction is adequate for the core technical courses	4	3	2	1
Dana and OCC staff work together effectively	4	3	2	1
When appropriate I seek advice from other program participants regarding job related issues	4	3	2	1
The program would be more valuable if it included a requirement to complete a project directly related to each participants facility	4	3	2	1

13. Has your ability to use new technology been increased, decreased, or has it remained the same as a result of your participation in the OCC program?

3 Increased
 2 Remained the same
 1 Decreased
 9 No response

14. Has your desire to stay current on the latest technology been increased, decreased, or has it remained the same as a result of your participation in the OCC program?

3 Increased
 2 Remained the same
 1 Decreased
 9 No response

15. Please tell me if your participation in the OCC program resulted in any of the following:

	Yes	No	DNA
a. Reduction in inventory levels	1	0	8
b. Quality improvement	1	0	8
c. Machine up-time	1	0	8
d. Reduction in unplanned down-time	1	0	8
e. Reduction in set-up time	1	0	8

16. Are there any other improvements you have made as a result of your participation in the OCC program?
(Probe ... what has been the results of these improvements?)

17. What did you like most about the program?

18. If you could change one thing about the program, what would it be?

19. Thinking back on your experience in the Manufacturing Technology Program, would you recommend the program to other Dana employees?

- 1 Yes, skip to question #21
0 No, ask question #20
9 No response

20. Why wouldn't you recommend the program?

21. Would you like to make any final comments?

Thank you very much for your time and assistance.

Interviewer Signature: _____

Date: _____

Set More=off.

Title 'Dana Corporation MFG survey'.

Data List Fixed /ID 1-3 YEARS 4-5 YEARS2 6-7 STATUS 8 DONOT 9-10
TITLE 11 SAME 12 TITLE2 13 IMPACT 14 HELPFUL 15 CORE1 16 CORE2 17
CORE3 18 CORE4 19 CORE5 20 CORE6 21 CORE7 22 CORE8 23 CORE9 24
CORE10 25 SATISFY1 26 SATISFY2 27 SATISFY3 28 SATISFY4 29
SATISFY5 30 SATISFY6 31 SATISFY7 32 STATE1 33 STATE2 34 STATE3 35
STATE4 36 STATE5 37 USETECH 38 CURRENT 39 RESULT1 40 RESULT2 41
RESULT3 42 RESULT4 43 RESULT5 44 LIKE 45-46 CHANGE 47-48 SUGGEST 49
WHYNOT 50-51.

Variables Labels

ID 'Respondents ID number'
/YEARS 'Years employed by Dana?'
/YEARS2 'Years employed when first entered program?'
/STATUS 'Current status in the Manufacturing Technology Program?'
/DONOT 'Why dont you intend to obtain a degree/cert?'
/TITLE 'Position currently held at Dana'
/SAME 'Same position?'
/TITLE2 'Position did you hold?'
/IMPACT 'Impact on obtaining currently position?'
/HELPFUL 'Helpful in terms of day-to-day job'
/CORE1 'Engineering Materials'
/CORE2 'Computer Aided Design'
/CORE3 'Electronics'
/CORE4 'Robotics and Automated Systems'
/CORE5 'Plant Operation Networking'
/CORE6 'Electronic, Mechanical Instrumentation/Transducers'
/CORE7 'Advanced Machining Applications'
/CORE8 'Programmable Logic Controllers'
/CORE9 'Computer Integrated Manufacturing'
/CORE10 'Numerical Control Programming'
/SATISFY1 'Coordination/administration of the program'
/SATISFY2 'Academic counselling form OCC staff'
/SATISFY3 'Faculty instruction in core courses'
/SATISFY4 'Faculty instruction in general education'
/SATISFY5 'Equipment in classrooms/laboratories'
/SATISFY6 'Instructional materials'
/SATISFY7 'Computer software applications'
/STATE1 'Improved ability to work as a team member'
/STATE2 'Three week blocks are adequate'
/STATE3 'Dana/OCC staff work together effectively'
/STATE4 'Seek advice from other participants'
/STATE5 'Requirement, pproject related to facility'
/USETECH 'Ability to use new technology'
/CURRENT 'Desire to stay current'
/RESULT1 'Reduction in inventory levels'
/RESULT2 'Quality improvement'
/RESULT3 'Machine up-time'
/RESULT4 'Reduction in unplanned down-time'
/RESULT5 'Reduction in set-up time'
/LIKE 'Like most about the program?'
/CHANGE 'Change one thing, what would it be?'
/SUGGEST 'Would you recommend the program to other Dana employees?'
/WHYNOT 'Why wouldnt you recommend the program?'

Value Labels

YEARS YEARS2
99 'No response'
/STATUS

1 'Completed with an OCC degree'
2 'Completed with a Dana cert'
3 'Partially, intend OCC degree/Dana cert'
4 'Partially, no intent OCC degree/Dana cert'
9 'No response'
/DONOT
88 'Does not apply'
/TITLE TITLE2
1 'Technician'
2 'Process engineer'
3 'Area manager'
4 'Plant manager'
5 'Different position'
8 'Does not apply'
9 'No response'
/SAME
0 'No'
1 'Yes'
9 'No response'
/IMPACT
3 'Major impact'
2 'Minor impact'
1 'No impact at all'
8 'Does not apply'
9 'No response'
/HELPFUL
3 'Very helpful'
2 'Helpful'
1 'Not at all helpful'
9 'No response'
/CORE1 To CORE10
3 'Very valuable'
2 'Somewhat valuable'
1 'Not at all valuable'
8 'Does not apply'
9 'No response'
/SATISFY1 TO SATISFY7
4 'Very satisfied'
3 'Satisfied'
2 'Dissatisfied'
1 'Very dissatisfied'
9 'No response'
/STATE1 TO STATES
4 'Strongly agree'
3 'Agree'
2 'Disagree'
1 'Strongly disagree'
9 'No response'
/USETECH CURRENT
3 'Increased'
2 'Remained the same'
1 'Decreased'
9 'No response'
/RESULT1 TO RESULT5
0 'No'
1 'Yes'
8 'Does not apply'
9 'No response'
/LIKE
99 'No response'

/CHANGE
99 'No response'
/SUGGEST
0 'No'
1 'Yes'
9 'No response'
/WHYNOT
88 'Does not apply'
99 'No response'.

Missing Values

YEARS YEARS2 (99)
/STATUS (9)
/DONOT (99)
/TITLE TITLE2 (9)
/SAME (9)
/IMPACT (9)
/HELPPFUL (9)
/CORE1 TO CORE10 (9)
/SATISFY1 TO SATISFY7 (9)
/STATE1 TO STATES5 (9)
/USETECH CURRENT (9)
/RESULT1 TO RESULT5 (9)
/LIKE (99)
/CHANGE (99)
/SUGGEST (9)
/WHYNOT (99).

Begin Data.

00

End Data.

Save Outfile='D:\DRIVE-I\DANA\DANA.SYS'.

Set More=off.

Title SIS data on Dana students.

Data List Fixed File='I:/DANA/DANAMAIN.DAT' /SSN 1-9 LAST 10-25 (A)
FIRST 26-40 (A) GENDER 41 RACE 42 BIRTH 43-48 YY 43-44 MM 45-46 DD 47-48
FSESSION 49-51 FYEAR 49-50 FTERM 51 LSESSION 52-54 LYEAR 52-53 LTERM 54
DEGREE 55 CUMGPA 56-60 (3) CREDITS 61-65 (1) TCREDITS 66-68 COLLEGE1 69-72
COLLEGE2 73-76 COLLEGE3 77-80 COLLEGE4 81-84 RESPONSE 85.

Variables Labels

SSN 'Student ID number'
/LAST 'Last name'
/FIRST 'First name'
/GENDER 'Students gender'
/RACE 'Students race'
/BIRTH 'Birthdate'
/YY 'Year of birth'
/MM 'Month of birth'
/DD 'Day of birth'
/FSESSION 'First session ever at OCC'
/FYEAR 'First year at OCC'
/FTERM 'First term at OCC'
/LSESSION 'Last session at OCC'
/LYEAR 'Last year at OCC'
/LTERM 'Last term at OCC'
/DEGREE 'Receive OCC degree'
/CUMGPA 'Cumulative GPA'
/CREDITS 'Credits earned at OCC'
/TCREDITS 'Total transfer credits'
/COLLEGE1 'Transfer college 1'
/COLLEGE2 'Transfer college 2'
/COLLEGE3 'Transfer college 3'
/COLLEGE4 'Transfer college 4'
/RESPONSE 'Response to survey?'

Value Labels

GENDER
0 'Female'
1 'Male'
9 'Missing'
/RACE
1 'White'
2 'African American'
3 'Self-Amer Indian'
4 'Asian'
5 'Hispanic'
6 'Foriegn'
7 'Other'
8 'Cert-Amer Indian'
9 'Missing'
/FTERM LTERM
1 'Winter'
2 'Spring'
4 'Summer'
5 'Fall'
/DEGREE
0 'No'
1 'Yes'
/COLLEGE1 TO COLLEGE4
0011 'Auburn University'
0036 'Snead State Junior College'

0048 'Troy State University'
0055 'Patrick Henry State Junior College'
0057 'Auburn University of Montgomery'
0076 'George C Wallace State Community College'
0081 'Lurleen B Wallace State Junior College'
0103 'Northland Pioneer College'
0114 'Arkansas Technical University'
0116 'Arkansas State University'
0117 'Arkansas State University Beebe Branch'
0194 'Linn Technical College'
0200 'Dale Carnegie-Ralph Nichols Corp.'
0509 'Pikes Peak Community College'
0632 'Goldey Bbeach College'
0653 'Skilled Trade Certificate'
0741 'Manatee Junior College'
0812 'Devry Institute of Technology'
0822 'Georgia Mmilitary College'
1014 'De Vry Institute of Technology'
1018 'Elgin Community College'
1028 'Governors State University'
1035 'Illinois Central College'
1040 'Illinois Institute of Technology'
1048 'Joliet Junior College'
1067 'Illinois Eastern Community college'
1176 'Ball State University'
1177 'Indiana Vocational Technical College'
1191 'Indiana Vocational Technical College Northeast'
1192 'Fort Wayne Bible College'
1195 'Indiana Vocational Technical College'
1198 'Grace Theological Seminary & College'
1208 'Indiana Institute of Technology'
1206 'Indiana State Univeristy Main Campus'
1210 'Indiana University at Bloomington'
1216 'Indiana University East'
1217 'Indiana University at Fort Wayne'
1222 'Manchester College'
1225 'Indiana University at South Bend'
1226 'Marion College'
1230 'Purdue University -main Campus'
1234 'Purdue University At Fort Wayne'
1236 'International Business College'
1238 'Saint Francis College'
1248 'Taylor University'
1250 'Tri-State University'
1251 'Indiana Vocational Technical College Northwest'
1315 'Faith Baptist Bible College'
1362 'Waldore College'
1569 'University of Kentucky'
1681 'Cecil Community College'
1858 'Massachusctts Institute of Technology'
1990 'Eastern Michigan University'
2006 'Henry Ford Community College'
2011 'Journeyman Card UAW/GM'
2014 'Jackson Community College'
2020 'Lawrence Institute of Technology'
2033 'Oakland University'
2039 'Monroe County Community College'
2054 'Macomb Community College'
2068 'Wayne County Community College'
2093 'Anoka-Ramsey Community College'

2123 'Normandale Community College (southwest Metro)'
2156 'University of Minnesota-Minneapolis Saint Paul'
2281 'Columbia College'
2303 'Jefferson College'
2332 'Moberly Area Junior College'
2548 'College Entrance Examination Board'
2561 'Gloucester County College'
3081 'Central Piedmont Community College'
3164 'North Carolina State University At Raleigh'
3173 'Western Piedmont Community College'
3240 'Bowlinggreen State University'
3242 'Capital University'
3261 'Columbus Technical Institute'
3264 'Defiance College'
3269 'Davis Junior College'
3295 'Wright State University'
3323 'Owens Technical College (penta Technical)'
3344 'University of Toledo'
3356 'Northwest Technical College'
3359 'Lima Technical College (allen County Technical)'
3378 'Western Oklahoma State College-Altus Jr College'
3379 'Dana University'
3424 'Oklahoma State University'
3425 'Oklahoma State Univeristy at Oklahoma City'
3431 'South Oklahoma City Junior College'
3541 'Community College of Allegheny County'
3630 'Messian College'
3656 'Pennsylvania State University'
3710 'Mansfield State College'
3718 'Reading Area Community College'
3738 'Ursinus College'
3867 'Midlands Technical College'
3880 'University of South Carolina'
4051 'Community College of The Air Force'
4124 'Concordia Lutheran College'
4132 'Midwestern State University'
4242 'Vernon Regional Junior College'
4342 'Bridgewater College'
4349 'Dabney Lancaster Community College'
4366 'Longwood College'
4433 'Virginia Highlands Community College'
4566 'Blackhawk Technical Institute'
4584 'Gateway Technical Institute at Elkhorn'
4656 'University of Wisconsin-Madsion'
4690 'University of Wisconsin-Parkside'
7022 'Baker College'
9990 'United States Air Force Experiences'
9991 'United States Army Experiences'
9992 'United States Coast Guard Experiences'
9993 'United States Marine Experiences'
9994 'United States Navy Experiences'
9996 'United States Private Schools'
9998 'Foreign Universities And Colleges'
8888 'Does not apply'
9999 'Missing'

/RESPONSE

2 'Completed survey'
0 'Dana, no response'
1 'OCC no response'.

Missing Values

GENDER RACE (9)

/BIRTH (999999)

/YY MM DD (99)

/COLLEGE1 TO COLLEGE4 (9999).

Save Outfile='I:\DANA\DANAMAIN.SYS'.

Question #18

- 1 Unable to respond/time factor
- 2 More course emphasis on...
- 3 Less course emphasis on...
- 4 Lengthen program/schedule OR *change the pace*
- 5 Location
- 6 ~~Improve~~ equipment / *PREPARATIONS / FACILITIES / RECORD KEEPING*
- 7 Instructors expectations of students
- 8 Improve instruction / *COURSES /*
- 9 More information before entering program and during *offer* the program
- 10 Nothing
- 11 Focus of program / *SELECTION OF PARTICIPANTS / PRE REQUISITES* (025)
- 12 More involvement from Dana
- 13

Question #20

- 1 No impact, no promotion
- 2

Summaries of AGE AGE ON DAY OF GRADUATION
By levels of GRADDATE DATE OF GRADUATION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			40.9245	6.4177	53
GRADDATE	1	1988-89	37.5000	5.7184	6
GRADDATE	2	1989-90	44.4667	5.3701	15
GRADDATE	3	1990-91	38.6364	5.6440	11
GRADDATE	4	1991-92	39.6923	5.7211	13
GRADDATE	5	1992-93	42.0000	8.6023	8
Total Cases =		53			

Summaries of GPACUM CUMULATIVE OCC GPA
By levels of GRADDATE DATE OF GRADUATION

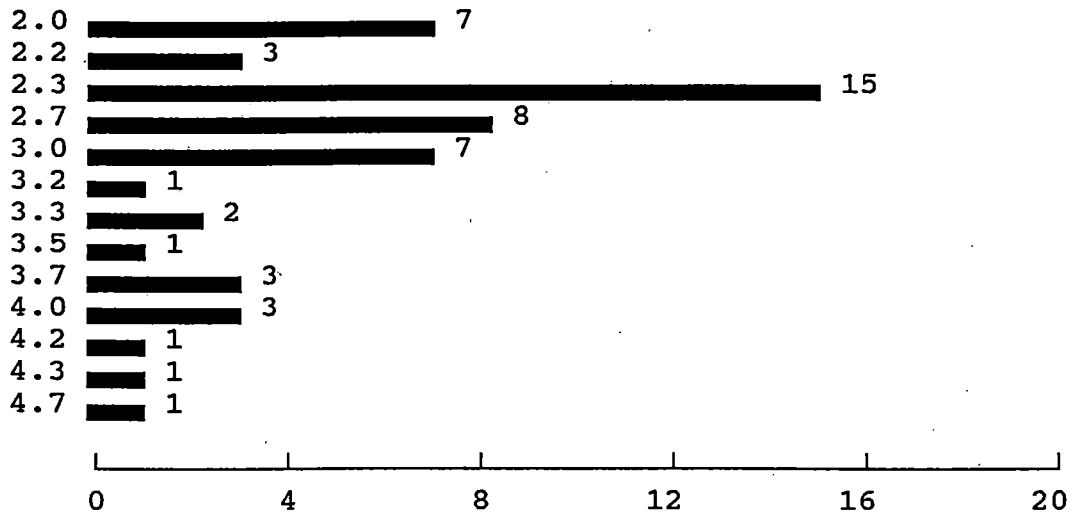
Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			3.79842	.14090	53
GRADDATE	1	1988-89	3.84967	.14205	6
GRADDATE	2	1989-90	3.78307	.16756	15
GRADDATE	3	1990-91	3.82682	.13323	11
GRADDATE	4	1991-92	3.83700	.07637	13
GRADDATE	5	1992-93	3.68700	.14344	8
Total Cases =		53			

Summaries of SALARY YEARLY SALARY
By levels of GRADDATE DATE OF GRADUATION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			39738.8889	6191.1834	18
GRADDATE	2	1989-90	39500.0000	6094.4940	8
GRADDATE	3	1990-91	41116.6667	6755.8617	6
GRADDATE	4	1991-92	38150.0000	6867.0712	4
Total Cases =		53			
Missing Cases =		35 OR 66.0 PCT.			

YEARS NUMBER OF YEARS TO GRADUATE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2.0	7	13.2	13.2	13.2
	2.2	3	5.7	5.7	18.9
	2.3	15	28.3	28.3	47.2
	2.7	8	15.1	15.1	62.3
	3.0	7	13.2	13.2	75.5
	3.2	1	1.9	1.9	77.4
	3.3	2	3.8	3.8	81.1
	3.5	1	1.9	1.9	83.0
	3.7	3	5.7	5.7	88.7
	4.0	3	5.7	5.7	94.3
	4.2	1	1.9	1.9	96.2
	4.3	1	1.9	1.9	98.1
	4.7	1	1.9	1.9	100.0
	Total	53	100.0	100.0	



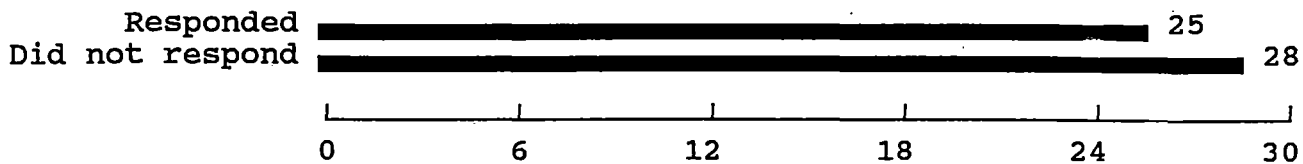
Valid cases 53 Missing cases 0

Summaries of YEARS NUMBER OF YEARS TO GRADUATE
By levels of AGE AGE ON DAY OF GRADUATION

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			2.7792	.6984	53
AGE	2	26 to 35	2.7000	.4770	9
AGE	3	36 and older	2.7955	.7389	44
Total Cases =		53			

RESPONSE METHOD OF RESPONDING

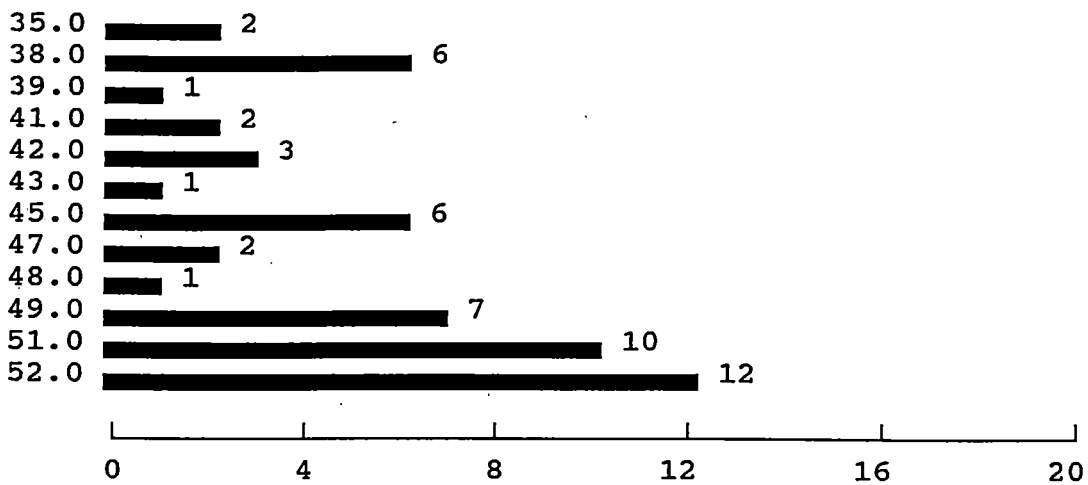
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Responded	A	25	47.2	47.2	47.2
Did not respond	N	28	52.8	52.8	100.0
		-----	-----	-----	
	Total	53	100.0	100.0	



Valid cases 53 Missing cases 0

ATTEMPT ATTEMPTED CREDITS AT OCC

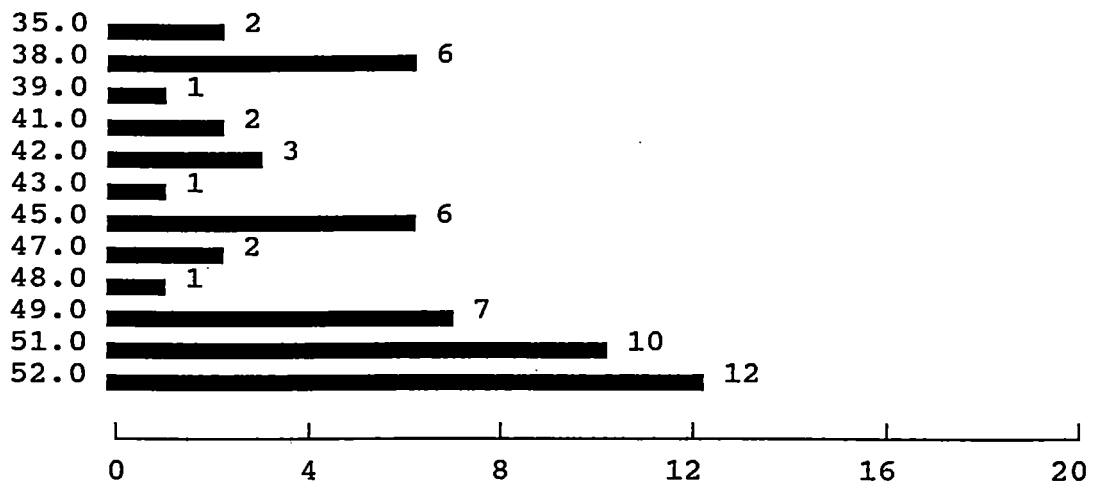
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	35.0	2	3.8	3.8	3.8
	38.0	6	11.3	11.3	15.1
	39.0	1	1.9	1.9	17.0
	41.0	2	3.8	3.8	20.8
	42.0	3	5.7	5.7	26.4
	43.0	1	1.9	1.9	28.3
	45.0	6	11.3	11.3	39.6
	47.0	2	3.8	3.8	43.4
	48.0	1	1.9	1.9	45.3
	49.0	7	13.2	13.2	58.5
	51.0	10	18.9	18.9	77.4
	52.0	12	22.6	22.6	100.0
	Total	53	100.0	100.0	



Valid cases 53 Missing cases 0

EARNED EARNED CREDITS AT OCC

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	35.0	2	3.8	3.8	3.8
	38.0	6	11.3	11.3	15.1
	39.0	1	1.9	1.9	17.0
	41.0	2	3.8	3.8	20.8
	42.0	3	5.7	5.7	26.4
	43.0	1	1.9	1.9	28.3
	45.0	6	11.3	11.3	39.6
	47.0	2	3.8	3.8	43.4
	48.0	1	1.9	1.9	45.3
	49.0	7	13.2	13.2	58.5
	51.0	10	18.9	18.9	77.4
	52.0	12	22.6	22.6	100.0
	Total	53	100.0	100.0	

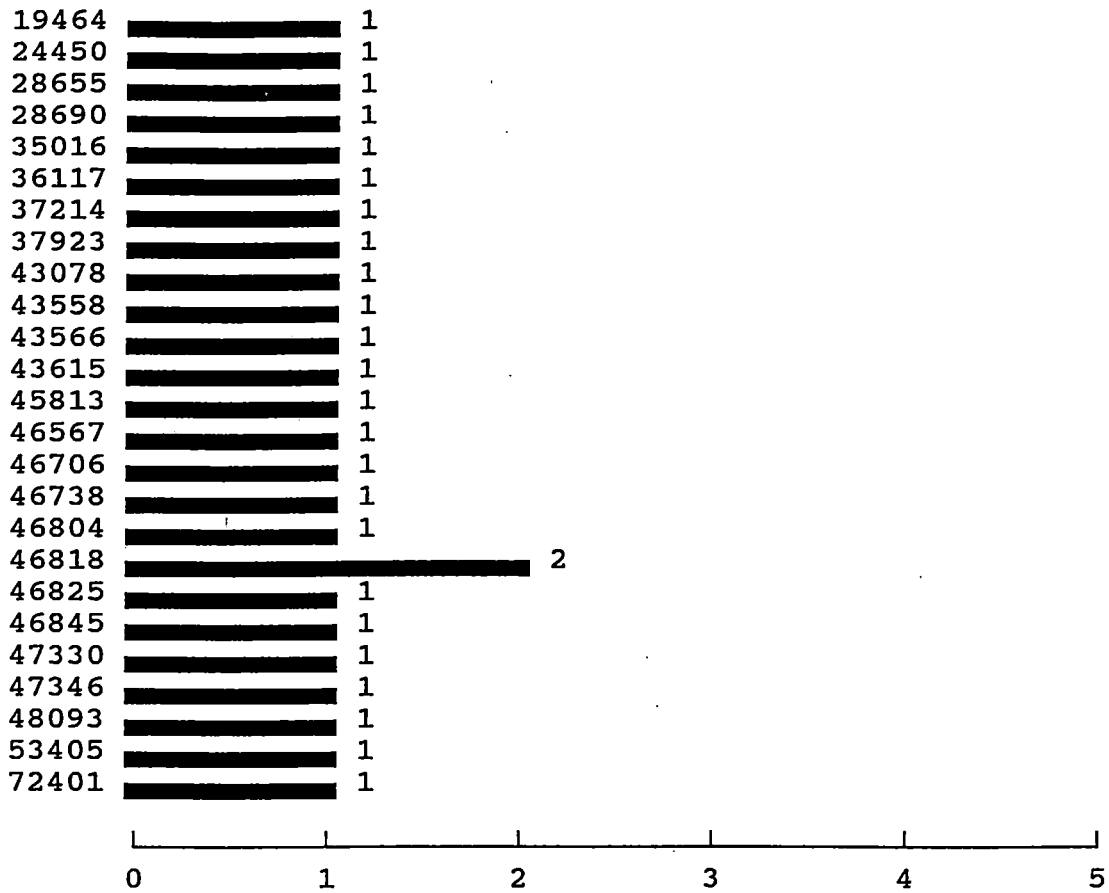


Valid cases 53 Missing cases 0

ZIP ZIP CODE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	19464	1	1.9	3.8	3.8
	24450	1	1.9	3.8	7.7
	28655	1	1.9	3.8	11.5
	28690	1	1.9	3.8	15.4
	35016	1	1.9	3.8	19.2
	36117	1	1.9	3.8	23.1
	37214	1	1.9	3.8	26.9
	37923	1	1.9	3.8	30.8
	43078	1	1.9	3.8	34.6
	43558	1	1.9	3.8	38.5
	43566	1	1.9	3.8	42.3
	43615	1	1.9	3.8	46.2
	45813	1	1.9	3.8	50.0
	46567	1	1.9	3.8	53.8
	46706	1	1.9	3.8	57.7
	46738	1	1.9	3.8	61.5
	46804	1	1.9	3.8	65.4
	46818	2	3.8	7.7	73.1
	46825	1	1.9	3.8	76.9
	46845	1	1.9	3.8	80.8
	47330	1	1.9	3.8	84.6
	47346	1	1.9	3.8	88.5
	48093	1	1.9	3.8	92.3
	53405	1	1.9	3.8	96.2
	72401	1	1.9	3.8	100.0
	99999	27	50.9	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	

ZIP ZIP CODE



Valid cases

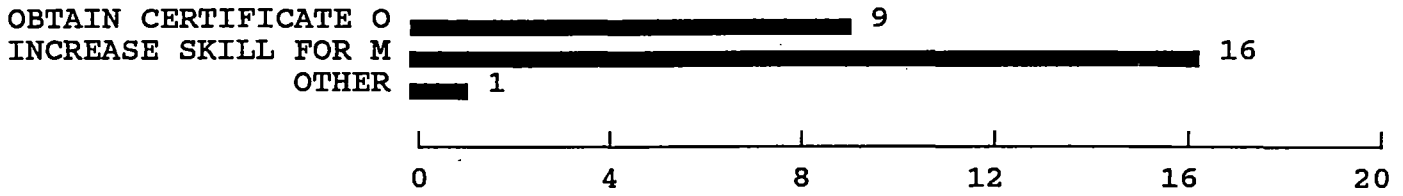
26

Missing cases

27

REASON PRIMARY OBJECTIVE AT OCC

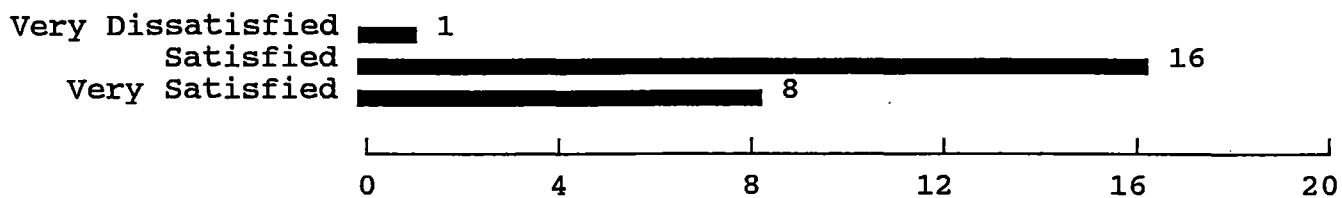
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
OBTAIN CERTIFICATE O	1	9	17.0	34.6	34.6
INCREASE SKILL FOR M	4	16	30.2	61.5	96.2
OTHER	8	1	1.9	3.8	100.0
UNKNOWN/NO RESPONSE	9	27	50.9	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	



Valid cases 26 Missing cases 27

COURSE COURSES IN MAJOR FIELD

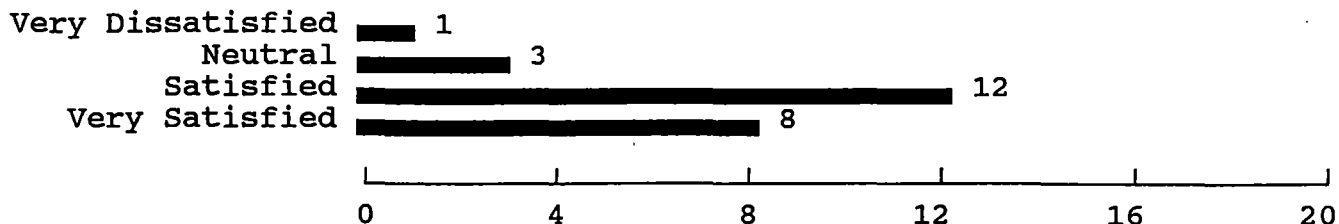
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Very Dissatisfied	1	1	1.9	4.0	4.0
Satisfied	4	16	30.2	64.0	68.0
Very Satisfied	5	8	15.1	32.0	100.0
Unknown/No Response	9	28	52.8	Missing	
		-----	-----	-----	
Total		53	100.0	100.0	



Valid cases 25 Missing cases 28

GENERAL GEN EDUC/SUPPORT COURSES

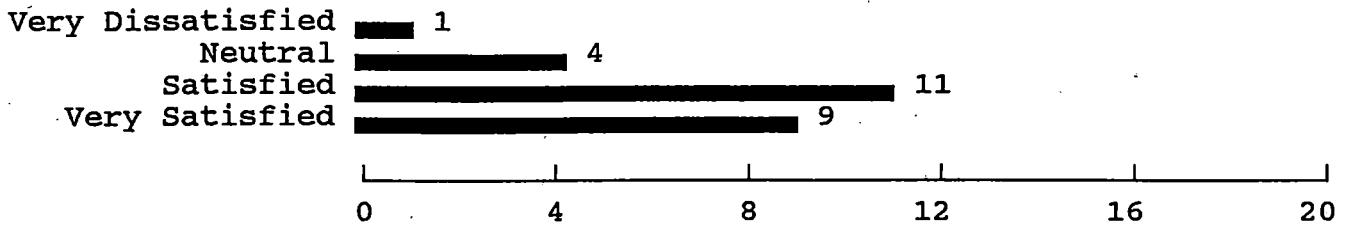
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Very Dissatisfied	1	1	1.9	4.2	4.2
Neutral	3	3	5.7	12.5	16.7
Satisfied	4	12	22.6	50.0	66.7
Very Satisfied	5	8	15.1	33.3	100.0
Unknown/No Response	9	29	54.7	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	



Valid cases 24 Missing cases 29

LIFE RELEVANCE OF COURSE WORK

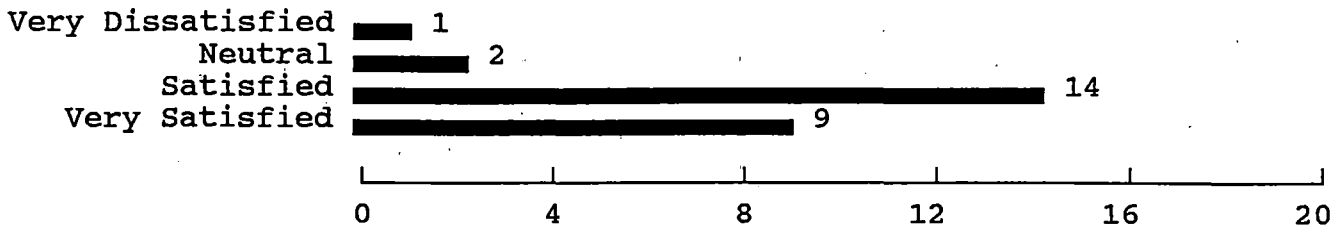
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Very Dissatisfied	1	1	1.9	4.0	4.0
Neutral	3	4	7.5	16.0	20.0
Satisfied	4	11	20.8	44.0	64.0
Very Satisfied	5	9	17.0	36.0	100.0
Unknown/No Response	9	28	52.8	Missing	
		-----	-----	-----	
Total		53	100.0	100.0	



Valid cases 25 Missing cases 28

TEACHING QUALITY OF TEACHING

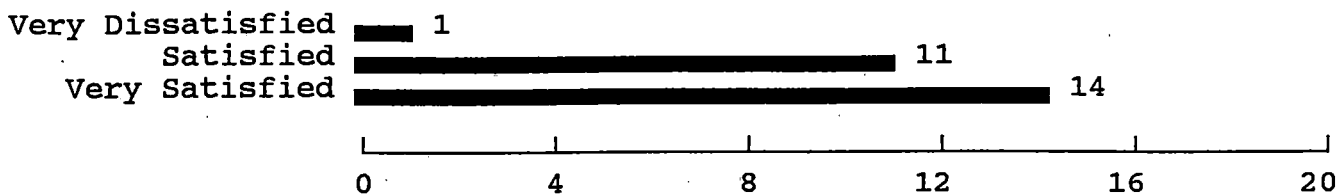
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Very Dissatisfied	1	1	1.9	3.8	3.8
Neutral	3	2	3.8	7.7	11.5
Satisfied	4	14	26.4	53.8	65.4
Very Satisfied	5	9	17.0	34.6	100.0
Unknown/No Response	9	27	50.9	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	



Valid cases 26 Missing cases 27

FACULTY RELATIONSHIP WITH FACULTY

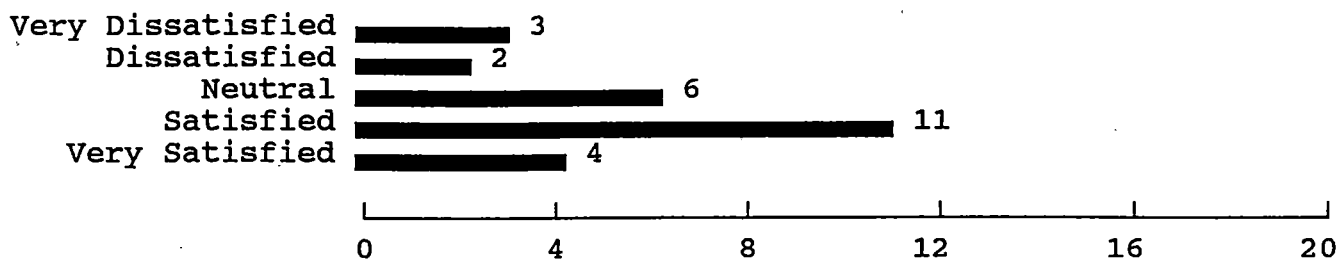
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Very Dissatisfied	1	1	1.9	3.8	3.8
Satisfied	4	11	20.8	42.3	46.2
Very Satisfied	5	14	26.4	53.8	100.0
Unknown/No Response	9	27	50.9	Missing	
		-----	-----	-----	
Total		53	100.0	100.0	



Valid cases 26 Missing cases 27

ADVISING ACADEMIC ADVISING

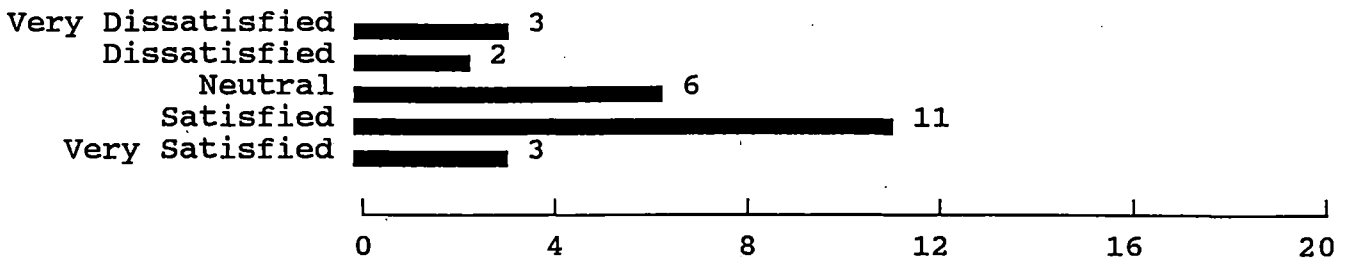
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Very Dissatisfied	1	3	5.7	11.5	11.5
Dissatisfied	2	2	3.8	7.7	19.2
Neutral	3	6	11.3	23.1	42.3
Satisfied	4	11	20.8	42.3	84.6
Very Satisfied	5	4	7.5	15.4	100.0
Unknown/No Response	9	27	50.9	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	



Valid cases 26 Missing cases 27

COUNSEL COUNSELING SERVICES

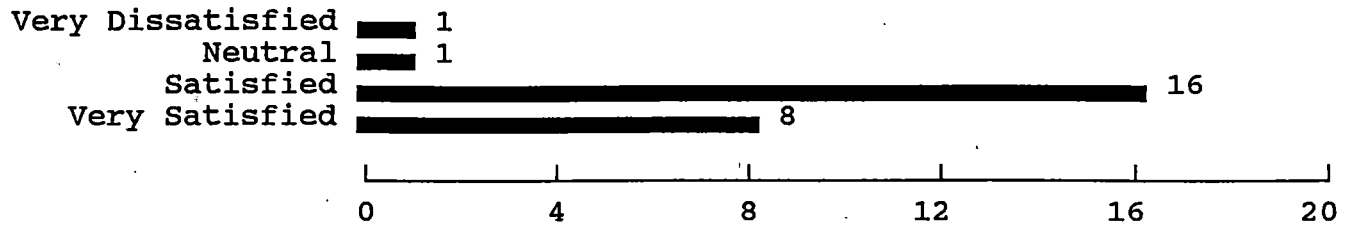
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Very Dissatisfied	1	3	5.7	12.0	12.0
Dissatisfied	2	2	3.8	8.0	20.0
Neutral	3	6	11.3	24.0	44.0
Satisfied	4	11	20.8	44.0	88.0
Very Satisfied	5	3	5.7	12.0	100.0
Unknown/No Response	9	28	52.8	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	



Valid cases 25 Missing cases 28

EDUCATE QUALITY OF EDUCATION

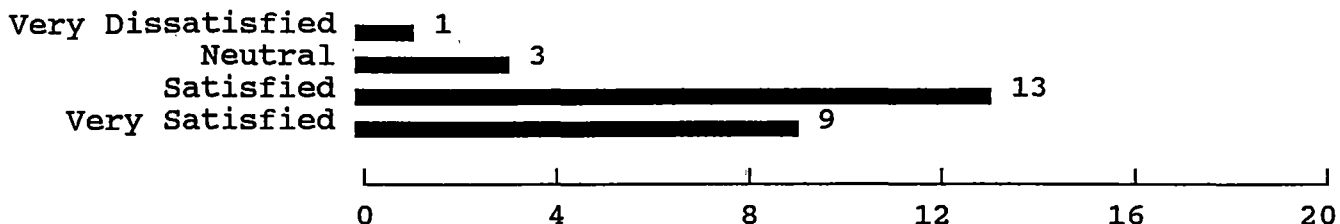
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Very Dissatisfied	1	1	1.9	3.8	3.8
Neutral	3	1	1.9	3.8	7.7
Satisfied	4	16	30.2	61.5	69.2
Very Satisfied	5	8	15.1	30.8	100.0
Unknown/No Response	9	27	50.9	Missing	
		-----	-----	-----	
Total		53	100.0	100.0	



Valid cases 26 Missing cases 27

OVERALL OVERALL EXPERIENCE

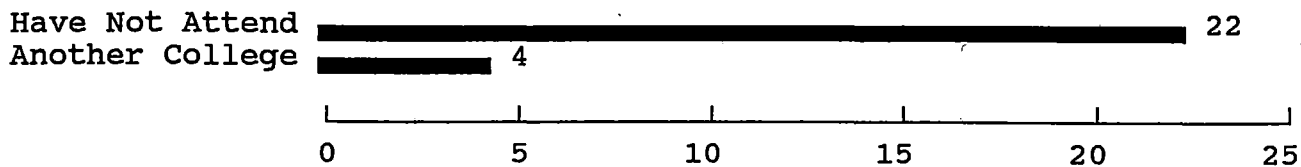
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Very Dissatisfied	1	1	1.9	3.8	3.8
Neutral	3	3	5.7	11.5	15.4
Satisfied	4	13	24.5	50.0	65.4
Very Satisfied	5	9	17.0	34.6	100.0
Unknown/No Response	9	27	50.9	Missing	
		-----	-----	-----	
Total		53	100.0	100.0	



Valid cases 26 Missing cases 27

SCHOOL ATTENDED COLLEGE SINCE GRADUATING

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Have Not Attend	0	22	41.5	84.6	84.6
Another College	1	4	7.5	15.4	100.0
Unknown	9	27	50.9	Missing	
		-----	-----	-----	
Total		53	100.0	100.0	

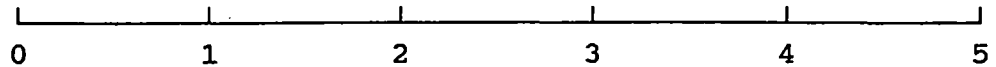


Valid cases 26 Missing cases 27

COLLEGE COLLEGE NAME

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
PURDUE UNIVERSITY -M	1230	1	1.9	33.3	33.3
MACOMB COMMUNITY COL	2054	1	1.9	33.3	66.7
	9927	1	1.9	33.3	100.0
NOT LISTED	9999	50	94.3	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	

PURDUE UNIVERSITY -M	██████████	1
MACOMB COMMUNITY COL	██████████	1
9927	██████████	1

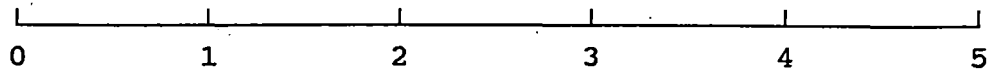


Valid cases 3 Missing cases 50

MAJOR CURRENT MAJOR FIELD

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Business Administrat	70	1	1.9	50.0	50.0
Industrial Engineeri	324	1	1.9	50.0	100.0
Unknown/No Response	999	51	96.2	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	

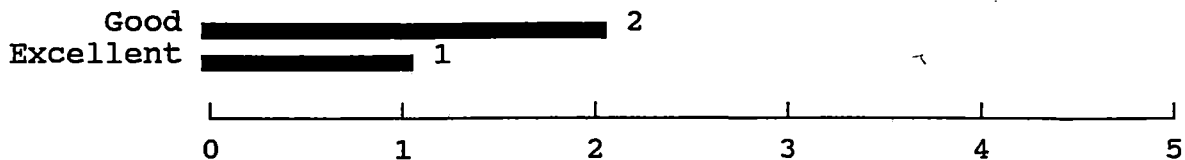
Business Administrat	██████████	1
Industrial Engineeri	██████████	1



Valid cases 2 Missing cases 51

PREPARE TO CONTINUE EDUC

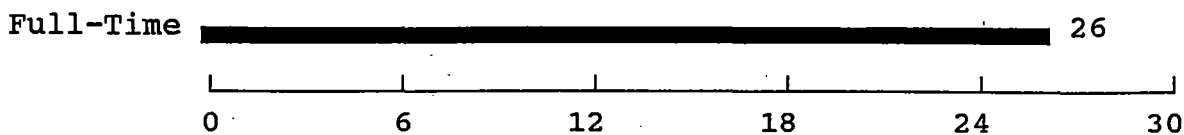
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Good	4	2	3.8	66.7	66.7
Excellent	5	1	1.9	33.3	100.0
Unknown/No Response	9	50	94.3	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	



Valid cases 3 Missing cases 50

EMPLOYED CURRENT EMPLOYMENT STATUS

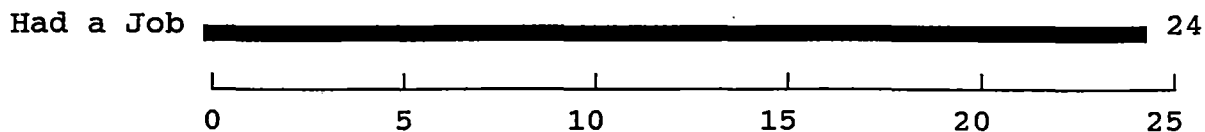
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Full-Time	1	26	49.1	100.0	100.0
Unonown/No Response	9	27	50.9	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	



Valid cases 26 Missing cases 27

LOOK MONTHS LOOKING FOR JOB

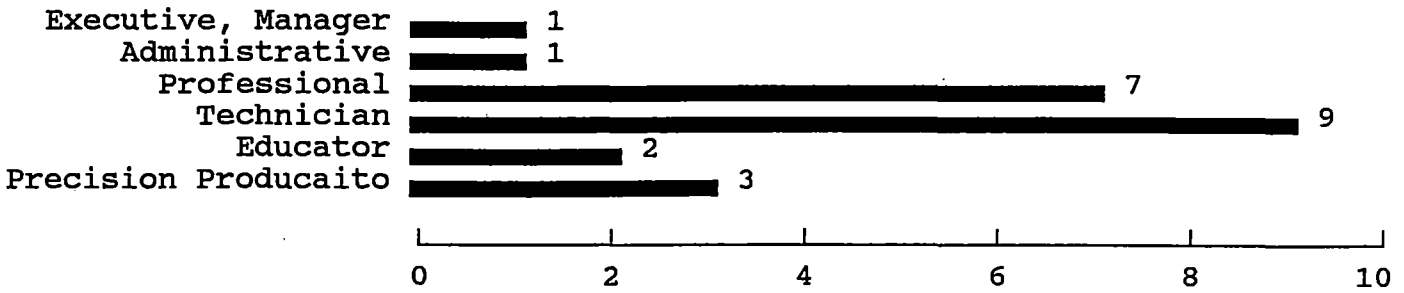
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Had a Job	0	24	45.3	100.0	100.0
Unknown/No Response	99	29	54.7	Missing	
		-----	-----	-----	
Total		53	100.0	100.0	



Valid cases 24 Missing cases 29

JOB JOB TITLE

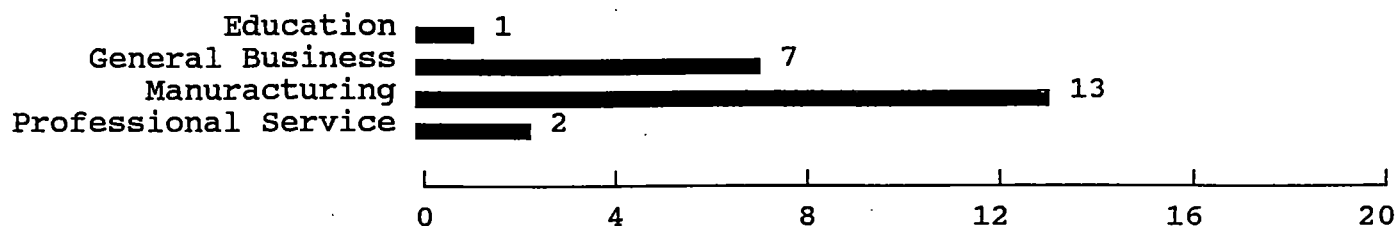
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Executive, Manager	1	1	1.9	4.3	4.3
Administrative	2	1	1.9	4.3	8.7
Professional	3	7	13.2	30.4	39.1
Technician	6	9	17.0	39.1	78.3
Educator	11	2	3.8	8.7	87.0
Precision Producaito	14	3	5.7	13.0	100.0
Unknown	99	30	56.6	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	



Valid cases 23 Missing cases 30

FIRM EMPLOYER

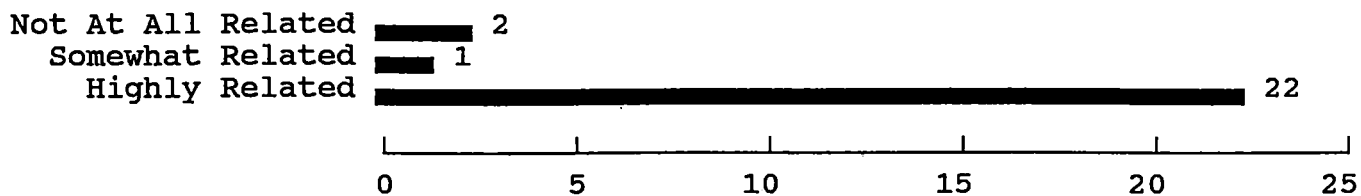
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Education	3	1	1.9	4.3	4.3
General Business	6	7	13.2	30.4	34.8
Manufacturing	11	13	24.5	56.5	91.3
Professional Service	12	2	3.8	8.7	100.0
Unknown	99	30	56.6	Missing	
Total		53	100.0	100.0	



Valid cases 23 Missing cases 30

RELATED JOB RELATED TO PROGRAM

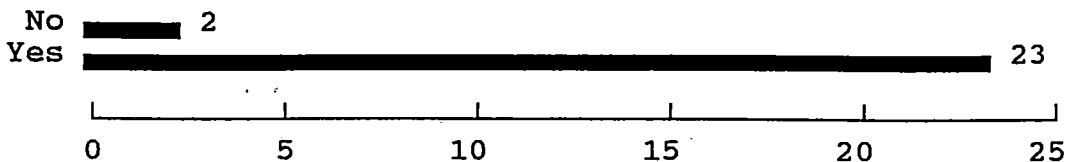
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Not At All Related	1	2	3.8	8.0	8.0
Somewhat Related	2	1	1.9	4.0	12.0
Highly Related	3	22	41.5	88.0	100.0
Unknown/No Response	9	28	52.8	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	



Valid cases 25 Missing cases 28

USING USING KNOWLEDGE AND SKILLS

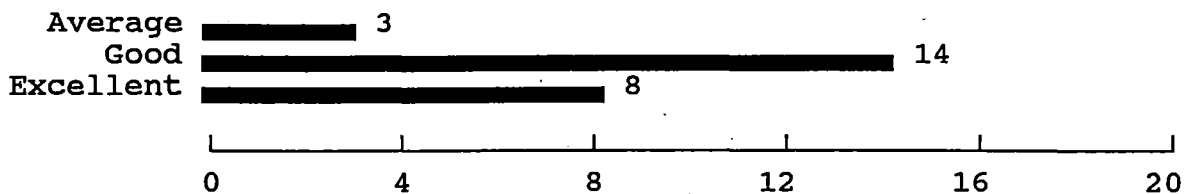
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
No	0	2	3.8	8.0	8.0
Yes	1	23	43.4	92.0	100.0
Unknown/No Response	9	28	52.8	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	



Valid cases 25 Missing cases 28

RATING RATE EDUCATIONAL RELEVANCE

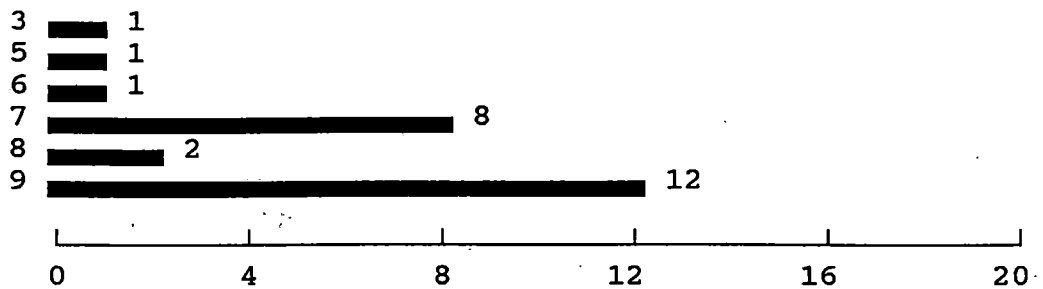
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Average	3	3	5.7	12.0	12.0
Good	4	14	26.4	56.0	68.0
Excellent	5	8	15.1	32.0	100.0
Unknown/No Response	9	28	52.8	Missing	
		-----	-----	-----	
	Total	53	100.0	100.0	



Valid cases 25 Missing cases 28

DESCRIBE DESCRIBE OVERALL FEELING

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	3	1	1.9	4.0	4.0
	5	1	1.9	4.0	8.0
	6	1	1.9	4.0	12.0
	7	8	15.1	32.0	44.0
	8	2	3.8	8.0	52.0
	9	12	22.6	48.0	100.0
Unknown/No Response	99	28	52.8	Missing	
	Total	53	100.0	100.0	



Valid cases 25 Missing cases 28

February 3, 1995

Dear ,

Dana Corporation, in cooperation with Oakland Community College in Auburn Hills, Michigan, offers employees an opportunity to participate in a Manufacturing Technology Program. Since our records indicate that you are one of the 162 Dana employees who have participated in this program since its inception ten years ago, we are asking for your cooperation in an upcoming study.

In the next week to ten days, an interviewer from OCC's Office of Institutional Planning and Analysis will be telephoning you at work to ask you to participate in a short survey. Designed to determine the program's effectiveness, the survey will allow us to make improvements for future program participants. Please take a few minutes to give thoughtful, candid responses to this survey. All responses will of course be kept confidential, and will be used only for the purposes of improving the program.

In preparation for the survey, please consider the following issues:

Strengths and weaknesses of the program

Ways in which the program has impacted you professionally

Changes you have made at work as a result of your participation in the program

If you have any questions about the upcoming survey, contact Linda Casenhiser, Manager of the Advanced Technology Center at Oakland Community College, at (810) 340-6617.

Sincerely,

Roger Harnishfeger
Dean

Rick Whitman
Manager of Education