This is a report on a business survey conducted by Columbia Gorge Community College (CGCC) (Oregon) to review the success and quality of the college's degree and certificate programs in business administration, computer application systems, and computer information systems. The community college surveyed 104 local businesses to verify the perceived community need for graduates from the preceding programs. A total of 72 (69%) of the businesses responded. These organizations expressed the desire and intent to hire new employees with such backgrounds as CGCC described within the next 2 to 3 years. Accountant, office clerk, administrative assistant, marketing analyst, Web page designer, and computer systems manager were the top professional positions desired by responding businesses. The companies also reported that they would support continuing education for their current and future employees. They showed equal preference to work experience and college education for potential employees. The report contains two appendices, the survey instrument, and additional comments from respondents. (MKF)
Columbia Gorge Community College
Office of Professional/Technical Education

Business Survey

Dr. Jonathon V. McKee
COLUMBIA GORGE COMMUNITY COLLEGE
BUSINESS SURVEY

ABSTRACT
Columbia Gorge Community College is in the process of reviewing its degree and certificate programs in Business Administration, Computer Application Systems and Computer Information Systems. CGCC surveyed 104 Mid-Columbia Businesses to verify the perceived community need for graduates from these programs. Seventy-two of the 104 businesses indicated they intend to hire 68 new employees in the next two to three years. This report summarizes the methodology of and responses to a survey used to determine the extent of the need for Columbia Gorge Community College computer and business graduates in the Mid-Columbia and how to best address this need.

SUMMARY
During the summer of 2001, Columbia Gorge Community College conducted a survey of Columbia Gorge businesses to verify the perceived community need for computer and business education. The survey has provided information that will help the College understand the needs for computer and business education in the Gorge and has verified whether or not graduates of a College program are welcome in the Columbia Gorge job market. The survey attempted to answer two primary questions:

- Will Columbia Gorge organizations and businesses be hiring personnel trained in computing and business during the next two to three years?
- What type of prospective computer science, information systems and/or business program(s) is/are best suited to produce graduates needed by Columbia Gorge businesses and organizations?

A simple seven-question instrument (Appendix A) to encourage response from busy businesspersons was pilot tested by College faculty and staff. The questionnaire was revised in response to constructive criticism of the pilot test participants. The instrument was designed so it could be completed in a relatively short amount of time, encouraging at least a 60 percent response.

Mid Columbia Council of Governments, Hood River County Chamber of Commerce, Klickitat County Chamber of Commerce and Skamania County Chamber of Commerce provided mailing lists of "high technology" businesses and organizations that were eventually selected for this study with representation from the following groups:

- Manufacturing businesses and organizations,
- Banking and financial establishments,
- Government agencies and not-for-profit organizations, and
- Service providers (for example, Internet Service providers, telephone companies, or cable television companies).
The following steps were used:

- June 2001 – Selected list of businesses to be included in study.
- July 2001 – Mailed personalized advance letter notifying businesses of their selection and the nature of the survey.
- July 2001 – Mailed questionnaire with a cover letter explaining the scope of the study.
- August 2001 – Mailed a second questionnaire to non-respondents.
- August 2001 – Compiled report on the findings.

RESPONSE RATE

One hundred and four surveys were mailed; seventy-two responses were completed and returned. This represented a sixty-nine percent response.

LIMITATIONS OF THE STUDY

1. For the most part the survey was mailed to either the chief executive office or the human resource manager. However, we do not know who completed the survey; we assume that is was a knowledgeable management level person. The survey results are only as reliable of those persons' ability to project the organizations needs during the next three years.

2. In the first question of the survey, we attempted to characterize the prospective programs in several short descriptors, e.g. “accounting,” or “network administration.” Our intent was to see whether there were apparent needs for one type of program over another. However, since we did not define these terms it is difficult to know whether differences in responses truly indicated differences in needs. The differences between system analysis, network administration, and computer systems management may be very slight in certain settings in which one and two persons are operating an organizations computing infrastructure. At the same time, there is a significant overlap in the basic curricula in all of these programs.

3. Finally, our population was selected because we knew businesses that work in “high technology” areas are most likely to hire graduates trained in computing. However, we made no attempt to survey other businesses not on the “high technology” lists. We recognize, however, that virtually everyone in business today uses computers. Our selection process favors large “high technology” businesses, and ignores a host of other businesses either because they don’t qualify as “high technology” or because they are small.
FINDINGS

- Will Columbia Gorge organizations and businesses be hiring personnel trained in computing and business during the next two to three years?

The sample population replied that they intend to hire 68 employees in the next 24-36 months. This finding is amplified below in the discussion of questions two through four:

- What type of prospective computer science, information systems and/or business program(s) is/are best suited to produce graduates needed by Columbia Gorge businesses and organizations?

The top four responses were Accounting (40), Clerk (30), Administrative Assistant (30), and Marketing (26). However, we prefer to interpret these figures with caution. These are broad common curricula that are related to all of the three CGCC program areas (Business Administration, Computer Application Systems, and Computer Information Systems), and all of them could be responsive to the needs as expressed. As we continue discussions we will look for the best fit that will include many considerations, one of which is the specific curriculum.

Overwhelmingly those businesses and organizations will consider hiring a Columbia Gorge Community College graduate to fill future staffing needs. This represents an important opportunity for the college.

Finally, the majority of the respondents will support continuing education for their current employees. Therefore, there is probably a large educational need beyond the 68 employees that will be hired in the next 24 to 36 months.

ITEM-BY-ITEM DISCUSSION OF THE QUESTIONNAIRE

Question 1: “Which of the following areas most clearly address your staffing needs?”

The majority of respondents selected Accounting (40), Clerk (30), Administrative Assistant (30), and Marketing (26) were also popular selections (figure I). However, the language structure of this question is not precise. Organizing the data across three distinct CGCC degree tracks there were 147 responses for program areas that fall under Business Administration, 73 responses that fall under Computer Information Systems and 70 responses that fall under Computer Application Systems (figures, II, III & IV).

All of the most popular responses fit into the CGCC Business Administration program area. Less popular responses from this CGCC program area were Business Manager (16) and E-Commerce Specialist (7).

Among the 63 responses under the CGCC Computer Information Systems program area the most popular responses were Computer Systems Management (18), Network
Administration (16) and Hardware Maintenance (16). Programming (11), Systems Analysis (7) and Software Design (5) were less popular responses.

Finally, the most popular response under the CGCC Computer Applications Systems program area was Webpage Design (21). Software Applications (12), Multi-Media (11), Geographic Information Systems (8), and Computer Assisted Drafting (9) were not popular responses.

Figure One: Program Needs
Question 2: “Are you more likely to select an employee with experience only, one-year certificate, 2-year associates degree, industry certification, or baccalaureate or masters degree?”

With 23 respondents, Figure V indicates that a 2-year associate’s degree may most likely meet the needs of Columbia Gorge businesses and organizations. However, with 25 respondents many businesses clearly prefer experience only. The next highest response was baccalaureate or masters degree (14), followed by industry certification (8) and one-year certificate (4).

Although this question begins to provide data regarding employer preference to hire, it is still far from conclusive. For instance, it might be possible to prefer to hire an associate’s degree for one type of computing expertise, and experience only for another.

![Figure V: Hiring Preference](image)

Question 3: “Are you likely to hire staff with a certificate or an associate’s degree in computing in the next 24 to 36 months?”

All of the respondents responded to this question. Twenty-six said they are likely to hire 39 employees in the 24 to 36 months. Forty-six said they are not likely to hire in the next 24 to 36 months.
Question 4: “Are you likely to hire staff with a certificate or an associate’s degree in business in the next 24 to 36 months?”

All of the respondents responded to this question. Twenty-seven said they are likely to hire 29 employees in the 24 to 36 months. Forty-five said they are not likely to hire in the next 24 to 36 months.

Question 5: “If the program addressed your needs would you consider hiring a graduate of a Columbia Gorge Community College program?”

All of the respondents responded to this question, with 67 indicating that they would definitely or probably consider hiring a Columbia Gorge Community College graduate. The preponderance of positive responses is reassuring.

Question 6: “If a Columbia Gorge Community College program addressed your organization's needs, would you encourage your staff to participate?”

All of the respondents responded to this question, with 63 indicating that they would definitely or probably encourage their staff to participate in a Columbia Gorge Community College program. Nine respondents said they were “more than likely not” willing to encourage their staff to participate. It should be noted that perhaps certain smaller businesses might not be in a financial position to encourage continuing education activities of employees.

Question 7: “How many employees does your company currently employ?”

As figure VI will illustrate, the sizes of the companies were distributed between 20 businesses and organizations with 51 or more employees, and nine businesses and organizations with 26 to 50 employees.

Figure VI: Number of Employees

51 and over 9
26 to 50 17
11 to 25 15
6 to 10 11
1 to 5

72 Respondents out of 104 surveys mailed

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CONCLUSION

We believe that there is sufficient known demand for employees indicated by this survey to encourage continuing the dialogue toward the goal of meeting the Mid-Columbia business and computer employment needs. The survey also indicates a broad range of needs; therefore, the curriculum content should be broad and basic. We believe that the broad and basic content could be found by combining the Business Administration, Computer Information Systems and Computer Applications program and curricula. As we engage in this discussion we will invite local industry participation in order to provide a real world perspective.
Appendix I

Columbia Gorge Community College Needs Assessment
A Survey of Columbia Gorge Businesses and Organizations

Use the reverse side to comment on any item; use the item number to identify your comments.

1. Which of the following areas most clearly address your staffing needs? (Put an 'X' by all that apply.)

<table>
<thead>
<tr>
<th>Accounting</th>
<th>Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Assistant</td>
<td>Multi-Media Production</td>
</tr>
<tr>
<td>Business Manager</td>
<td>Network Administration</td>
</tr>
<tr>
<td>Hardware Maintenance</td>
<td>Programming</td>
</tr>
<tr>
<td>Clerk</td>
<td>Software Applications specialist</td>
</tr>
<tr>
<td>Computer Assisted Drafting</td>
<td>Software Design</td>
</tr>
<tr>
<td>Computer Systems Management</td>
<td>Systems Analysis</td>
</tr>
<tr>
<td>E-Commerce Specialist</td>
<td>Webpage design</td>
</tr>
<tr>
<td>GIS</td>
<td>Other (please comment on the back)</td>
</tr>
</tbody>
</table>

2. Are you more likely to select an employee with? (Put an X by one choice)

- Experience only
- One year Certificate
- 2-year associate’s degree
- Industry Certification
- Baccalaureate or Masters Degree

3. Are you likely to hire staff with a certificate or an associate’s degree in computing in the next 24 to 36 months? (Put an X by one choice)

- Definitely yes (how many?)
- Probably (how many?)
- More than likely not

4. Are you likely to hire staff with a certificate or an associate’s degree in business in the next 24 to 36 months? (Put an X by one choice)

- Definitely yes (how many?)
- Probably (how many?)
- More than likely not

5. If the program addressed your needs would you consider hiring a graduate of a Columbia Gorge Community College program? (Put an X by one choice)

- Definitely yes
- Probably
- More than likely not

6. If a Columbia Gorge Community College program addressed your organization's needs, would you encourage your staff to participate? (Put an X by one choice)

- Definitely yes
- Probably
- More than likely not

7. How many employees does your company currently employ? (Put an X by one choice)

- 1 TO 5
- 6 TO 10
- 11 TO 25
- 26 TO 50
- 51 AND OVER
ADDITIONAL COMMENTS

#1.
- Electrical Technology
- Other: Graphic Design – Computer aided.

#2.
- Experience in the field is a BIG plus in hiring.
- Would consider any of others doc.
- Depends on the position
- We are a small public school district.
- Customer service rep.
- We need a general manager and we need a qualified office assistant
- Depends

#3.
- Probably (how many) not sure

#3 & #4.
- It is impossible at this point to predict our recruiting needs over the next several years.

#5.
- We would consider hiring a college graduate from any place and review their resume to see experience based on our company needs.
- There is a definite need for customer service training: to include basic computer skills, phone skills, communication skills, and a crisis management.
- Mr. Store Seed is no longer with our company please refer future material to Sherrie Wilkins.
- Current admin. Assistant is a graduate of CGCC. AAS-accounting, acct, clerk, M.I.S. cert.

#6.
- I had four of my employees go to a beginning computer class at the college and by the first break they had all left because they went to fast. A basic class, how to turn on/off the machines to start with, is what my services and installers need so the can advance to the place our kids are at in Jr. high. Basics like using a mouse and moving files.
- I run a collection agency. We use a computer program by C.U.B.S. and I have to train every employee myself to use the systems and to collect bad debts, and learn the laws that govern us.
- Marketing is such a specialized part of business; I would not expect to have a degree available from CGCC.
- Grant writer with grant administration experience as well as project development specialist and loan fund experience.
- We have sent one employee to accounting classes.

#7.
- 6 to 10 Locally.
- Gorge Area
- We will probably not grow to more than 5. Some of our employees are part-time.

Other Comments:
- Very small business / office family owned.
- Other major staffing needs are: RN’s, Lab Technologists, Pharmacy Techs, X-ray Techs, OR Techs, and Respiratory Therapists.
- Technician
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