SHORELINE COMMUNITY COLLEGE
VISUAL COMMUNICATIONS TECHNOLOGY PROGRAM
REVIEW
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EXECUTIVE SUMMARY AND PRIORITY SUGGESTIONS

Overall Observations

The Visual Communications Technology (VCT) Program is one of the largest programs of its kind in Western Washington. It's distinguished from its peers (including many other community colleges) by accepting all applicants and not requiring a portfolio review prior to admittance. This provides great opportunity for folks to explore and possibly enter the field, and also creates challenges for faculty to create a challenging program for students of varied ability.

The program is ably led by chair Al Yates, three full-time faculty, and a program coordinator. They have put together one of the most comprehensive VCT programs in Washington State with degrees in Graphic Design, Animation and Video, Game and Art Design, and Creative Project Management. This last degree complements the open-entry nature of the program by offering an option for those students who lack the creative talent to be successful in the other areas. The program also offers a number of certificate options.

Faculty plan to launch an alignment effort next year and based on this review, this work makes sense. Below a number of areas are highlighted where alignment and norming will improve the program including: mapping coursework to program outcomes, norming grading and grading rubrics, standardizing terms used in instruction, and more.

Priority Suggestion 1: Improve Portfolio Development Throughout the Program

Faculty and the advisory committee agree that employment in the industry hinges on the development of a portfolio. The student and alumni surveys indicated there was room to improve the development of these portfolios throughout the program and faculty agreed with this comment as well.

Suggestions

1.1 Through the alignment effort, ensure that every course includes one to two portfolio-driven projects (p. 20).
1.2 Revise the specialization courses to enhance the portfolio development and include instruction on how to use portfolios to market one's work (p. 20).
1.3 Consider holding formal and public portfolio review sessions at Shoreline and invite advisory committee and other people working in the field to review this student work. This could serve three purposes: (1) Provide students approaching graduation with feedback on their portfolios; (2) Give students an opportunity to market themselves to potential employers and/or clients; and (3)

Expose new students to the importance of portfolios and give them ideas for the creation or refinement of their own (p. 20).

Priority Suggestion #2: Improve Computer Support and Instruction

Instruction in this program depends on the use of dedicated labs with specialty software used by industry to create graphics, web pages, animation, and more. Both faculty and current students noted that these computers are not being kept up to date and this is significantly impeding instruction and student progress. Many students cannot afford the software used and rely on the computer lab to complete class assignments. On a regular basis, lessons cannot be taught and/or computers cannot be used to develop projects because they have not been updated. Shoreline's Technology Support Services used to have a full-time tech support person who staffed this lab, but the position was cut.

The program requires most students to take Basic Introduction to Macintosh Systems Operations. This two-credit course provides all students with the foundation and terminology necessary to be successful in the industry. The program offers challenge tests for students. Even though it's only 2 credits, a modularized course would help students challenge parts they are more likely to pass (e.g., basic Macintosh functions) and focus on areas where they are likely to need extra help (e.g., Macintosh terminology).

Finally, some segments of the industry are using PC-based machines (e.g., game design), but the program is Macintosh-based. Redesigning this course to include PC system operations or creating a separate course for PC system operations for those students who plan to move in that direction, would be helpful.

Suggestion

2.1 Technology Support Services should consider placing a dedicated support person in the VCT computer lab (p. 24).
2.2 VCT should either create a separate Introduction to PC Operating System or add the PC Operating System to the existing Macintosh class (p. 21).
2.3 VCT should modularize the Intro to Mac Operating System and/or PC Operating system courses to improve student's ability to challenge courses (p. 21).

Priority Suggestion #3: Improve Planning, Advising, and Course Clustering

For the most part, VCT does a good job with planning, advising, and course clustering. However, current student respondents to the survey identified a few specific areas that could be improved.

Suggestions

3.1 Review all planning forms to ensure they are up to date (p. 25).

3.2 Plan a hard advising hand-off with Worker Retraining and BFET advisors. Ensure all new students understand who their VCT advisor is and consider a graded class assignment that encourages students to meet with their advisor early in their academic career (p. 25).

3.3 When clustering specialty courses, improve communication around the course expectations, make adjustments to the curriculum to make the secondary lessons more explicit, and look for ways to improve student support through the course (pp. 25-26).

Findings

School-wide Findings
1. Shoreline Community College should develop a system for collecting contact information from graduating students. This information could be used by the Foundation for fundraising, as well as by individual departments to assess alumni satisfaction and the degree to which alumni achieved program outcomes (p. 8).

Program Level Findings
1. Program outcomes for the four degrees are aligned appropriately.
2. Curriculum mapping should occur to provide the department with measurable results regarding student achievement of program level outcomes (p. 9).
3. Enrollment has held steady despite lowering enrollments overall at Shoreline as the economy improves (p. 14).
4. A few certificates have low completion figures (i.e., Business Foundation, Web Design, and recently Digital Photography Level II). Evaluate these certificates to ensure they are relevant and consider consolidation if necessary (p. 17).
5. VCT completion ratios (comparing completion at VCT to the State and to all of Shoreline) reveal that VCT has a significantly higher completion rate in comparison. No reasons for this were identified in the review (p. 18).
6. Some CIP codes associated with this program appear to be mismatched. Faculty are encouraged to work with the Institutional Research department to review these assignments and update them where necessary (p. 28).

Employment Findings
1. Employment projections and program advisory committee comments indicate that this field is growing (pp. 27-28).
2. The majority of employment, especially for new graduates, likely occurs in freelancing, which is not captured by government data and is not reflected in the projections (pp. 27-28).
3. Consider reviewing the Business Foundation certificate to focus more completely on freelancing/sole proprietor employment (p. 17).

Student/Course Level Findings
1. There are fewer females in this program compared to available national data. The available national data is old (2009), but the percent of females in VCT in 2009 also did not match the national figures. The program advisory committee believes that there are significantly more men working in the field in Seattle than represented by the national figures (pp. 15-16).
2. A review of recruitment materials revealed no gender bias (pp. 15-16).
3. A review of completion data revealed no gender bias (pp. 15-16).
4. Half of the full-time faculty are female (two) and the program has an involved and experienced female program manager. The program has only three part-time faculty out of ten positions (including the overall Studio Arts department) (pp. 15-16).
5. The program is encouraged to continue monitoring its gender split, continue with unbiased recruiting and treatment of students, and recruit more part-time female faculty (pp. 15-16).
6. Racial, ethnic, and socio-economic diversity for this program is favorable (p. 17).
7. Seven courses had consistently high fill rates (over 100 percent full) and six had consistently low fill rates. Students requested more online and evening options to accommodate working schedules. Analyze course offerings by time of day and modality to see if fill rates can be balanced by tweaking when/how they are offered (pp. 18-20).

Curriculum Findings

1. Open responses to the student survey indicated that a few students experienced frustration with the curriculum structure. Specifically they noted that course sequencing did not consistently promote student learning. Consider evaluating course sequencing and improving it where gaps are identified (p 20).
2. This program requires more credits than normally found in a professional-technical program (ranging from 90-95 credits for the Creative Project Management degree to 117-126 credits for Game and Art Design). However, an analysis of peer colleges demonstrates that Shoreline's VCT program is in line with the norm for VCT across the state (pp. 20-21).
3. Because the industry evolves quickly and consistently, especially in the use of boutique computer programs, VCT is working on developing curriculum that highlights the use of the fundamentals of design, teaching students how to stay relevant, and teaching them to "learn how to learn". The advisory committee supports this strategy and it should continue to be implemented and revised (pp. 20-21).

Faculty Findings

1. The faculty are engaged, thoughtful, and had a good understanding of the needs of students and employers (p. 22).

2. Student-to-faculty ratio is comparable to peer institutions (p. 22).

Resource Findings

1. See above.

Partnerships

1. The advisory committee is engaged and includes representatives of the various industry segments covered by this program (p. 24).
2. Faculty have recruited recent alumni to participate on the advisory committee. This has helped to boost membership and energize the committee. This is a best practice that could be emulated by other Professional-Technical programs at Shoreline. To maintain a diversity of experience, recent graduate participation on the committee should be limited to 20 percent of the entire committee (p. 24).
3. Faculty should continue to monitor opportunities to partner with secondary schools as career and technical education receives more attention, especially with the election of the new State Superintendent who campaigned, in part, on revitalizing career and technical education in Washington State (p. 24).

Program Services

1. See above.

INTRODUCTION

In an effort to maintain the highest quality post-secondary education and meet regulatory requirement, Shoreline Community College hired Phippen Consulting, LLC in spring of 2017 to conduct a program review of its Visual Communications Technology program (VCT).

METHODOLOGY

Meetings
- One one-hour meeting with Division Dean, program chair, and Institutional Review staff to identify major issues of focus.
- Three two-hour meetings with staff and faculty to discuss all aspects of their program.
- One 90 meeting with the VCT Program Advisory Committee to discuss the relevance of this program.

Documents Reviewed
- One survey of current students (n=43)
- One survey of alumni covering (n=26)
- Student demographic data
- Class cancellation and waitlists
- Student completion data
- Student completion ratios for VCT, Shoreline, and the state
- Student grade distributions
- Comparative data on student-faculty ratios
- Comparative data on full-time to part-time faculty ratios
- Program and course-level fill rates
- Labor market data
- Job openings data from EMSI
- Program-level learning outcomes
- College and program website and planning guides
- Annualized FTEs, headcount, and percent of enrollment by program and by certificate/degree)

Surveys

The program instituted an alumni and current student survey this year (see the separate document, "VCT Surveys" copy of the survey results). Surveys were distributed by Shoreline's Marketing and Communications Department using MailChimp and Survey Monkey. One email and one follow-up email was sent to both current and former students resulting in a response rate of 26.7 percent for current students and 11.5 percent to former students. The former student survey response could be improved by collecting contact information for graduating students.

ASSESSING STUDENT LEARNING

Program Outcomes

VCT offers four associate degrees and nine certificate options. There was some question about the alignment of outcomes for the four degree options. The following table reveals little to no overlap in the four degrees.

AAS Program Outcome Analysis

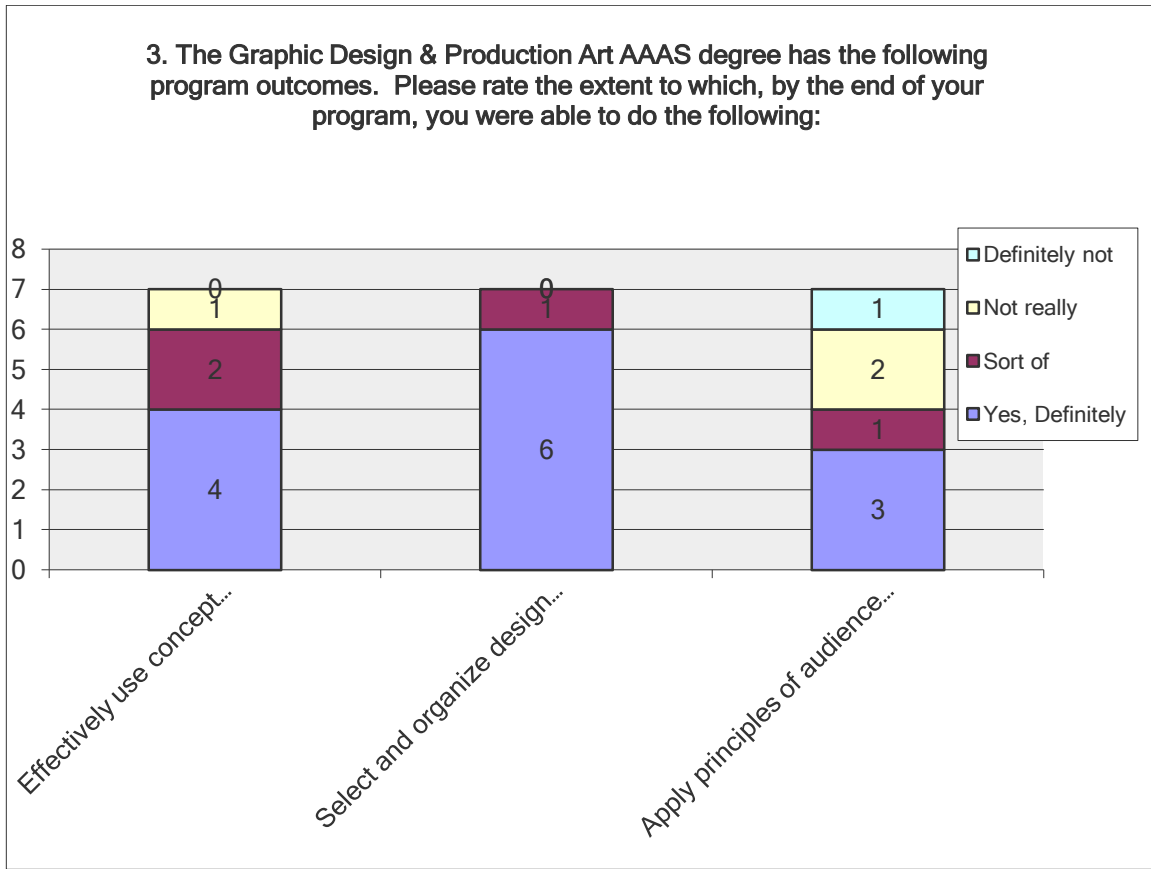| Program Outcomes	Graphic Design	Animation & Video	Creative Project Mgmt	Game and Art Design
Effectively use concept development procedures in visual communication problem solving	X			
Select and organize design elements including letter forms, illustrations, typography and other graphic images and effectively use art elements such as line, shape, color, value, texture and form in the development of visual images for a variety of media	X			
Apply principles of audience and market analysis, conduct research and develop resources in the production of desktop publishing, graphic design, illustration, electronic paste-up, scanning and manipulation of images, and multimedia productions	X			
Effectively use design elements and technical skills to create effective visual images for animation or video		X		
Create, select and organize design elements including letter forms, illustrations, typography and other graphic images in a structured environment for development in multimedia		X		
Apply principles of audience and market analysis, conduct research and develop resources in the production of visuals in commercial, documentary and artistic animation or video		X		
Identify the basic components of marketing strategies such as identification of market segments, consumer buying behavior, product planning, and promotion of goods and services.			X	
Explain and apply advertising strategies for planning, producing and selecting the appropriate media			X	

Program Outcomes	Graphic Design	Animation & Video	Creative Project Mgmt	Game and Art Design
Demonstrate good sales skills: effectively interview clients, accurately gauge consumer needs, plan and deliver effect			X	
Apply basic art elements in the development of visual communication concepts			X	
Apply basic principles of graphic design in the selection and organization of images and text			X	
Identify mechanical aspects related to development of production-ready art, printing and multimedia			X	
Appropriately select production techniques for specific design projects, give sales presentations, and build customer goodwill			X	
Develop and apply perceptual skills in creation of 2 D and 3 D game levels using visual design and game development software				X
Using game development software integrated with design software, demonstrate technical skills, project management and production skills				X
Conceive, plan, design and produce physical prototypes of games with characters and other assets, level, rules and game strategy				X

The number of students with multiple VCT degrees was also analyzed between AY 2013 to 2015, revealing few students that pursue multiple degrees.

- 3 degrees: 2
- 2 degrees: 6
- 1 degree: 72
- % of students with >1 degree: 10%

The alumni survey asked participants to indicate the degree or certificate they completed at Shoreline, and to evaluate the extent to which they felt they achieved the program's learning outcomes. The results are reported below.

Of the 26 respondents to the alumni survey, 7 stated they had completed the Graphic Design and Production Arts AAS. The following chart shows that alumni of this program responding to the survey rated their achieving the three program outcomes for this AAAS on a scale of 1 (definitely not) to 4 (yes, definitely).

3. The Graphic Design & Production Art AAAS degree has the following program outcomes. Please rate the extent to which, by the end of your program, you were able to do the following:

Legend:
- Definitely not
- Not really
- Sort of
- Yes, Definitely

Effectively use concept...: Yes, Definitely 4, Sort of 2, Not really 1, Definitely not 0
Select and organize design...: Yes, Definitely 6, Sort of 1, Definitely not 0
Apply principles of audience...: Yes, Definitely 3, Sort of 1, Not really 2, Definitely not 1

One respondent completed the Animation/Video for Multimedia AAS. Their response to the achieving the program outcomes is:

3. The Animation/Video for Multimedia AAAS degree has the following program outcomes. Please rate the extent to which, by the end of your program, you were able to do the following:

Legend:
- Definitely not
- Not really
- Sort of
- Yes, Definitely

Effectively use design...: Yes, Definitely 1
Create, select and organize...: Yes, Definitely 1
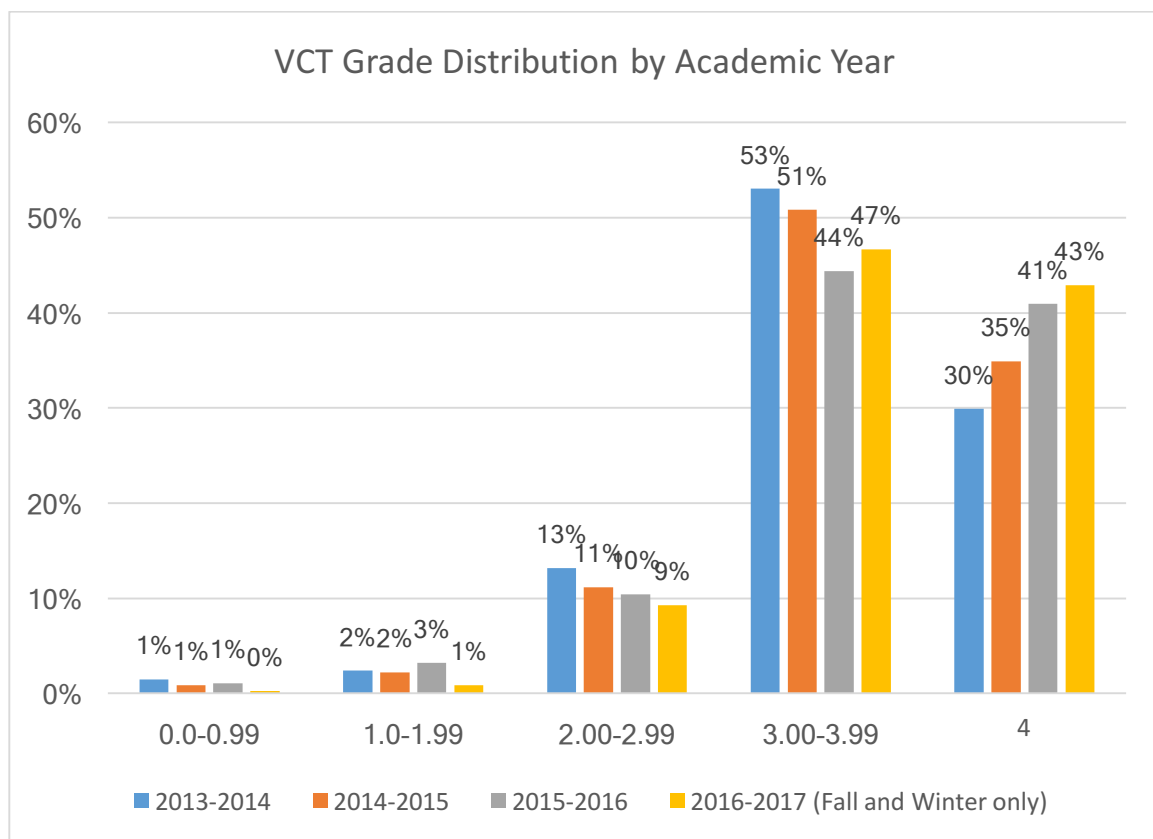Apply principles of audience...: Not really 1

To better understand the degree to which graduates of the program attain the program learning outcomes, it is suggested that the department engage in a curriculum mapping process to connect these outcomes to the existing courses. This process will help identify gaps, overlaps, and misalignments between the program outcomes and existing courses. It will also result in tools faculty can use to evaluate the attainment of these outcomes.

Meeting Individual Learning Needs

On a scale of 1 (poor) to 5 (excellent), current students (n=39) gave this department a strong 4.05 on its ability to meet individual learning needs.
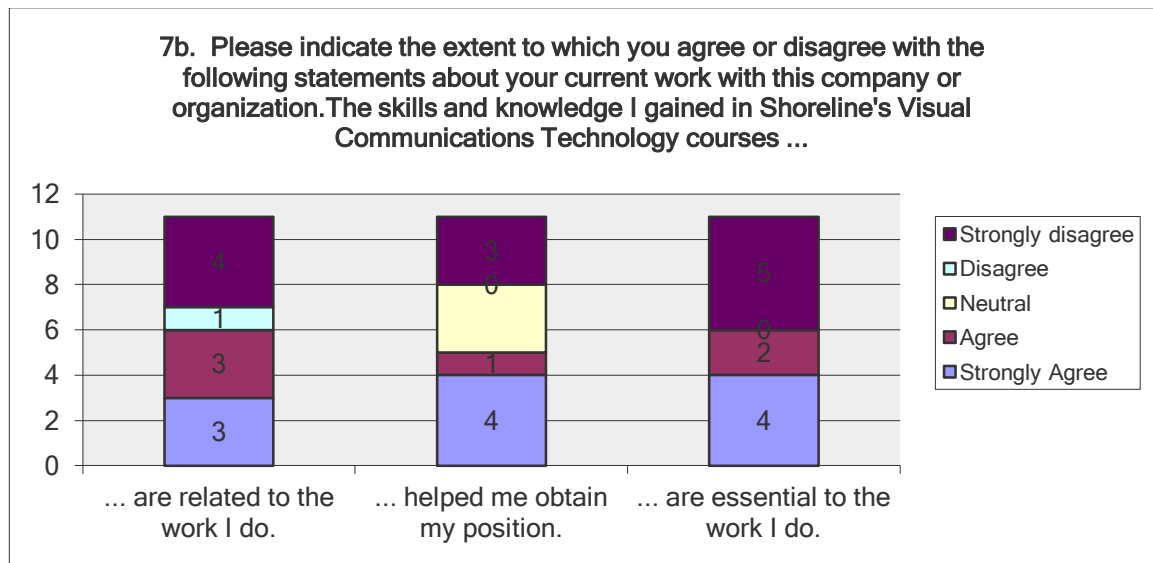
Grade Distributions

An examination of VCT grade distributions revealed a trend in providing higher grades. As will be discussed later in this report, VCT staff and faculty plan to work on norming several facets of their program over the next year. It is suggested that this work include ensuring grade awards are standardized across the department.

VCT Grade Distribution by Academic Year

EMPLOYMENT OUTCOMES

To understand employment outcomes, two data sources were used. First, VCT alumni who responded to the survey reported their employment status (responses varied between 8 and 25).

Eleven out of 25 respondents work full- or part-time. The majority of respondents (6 out of 11) felt like their degree was related to the work they do. Slightly less than half (5 out of 11) felt their degree helped them gain their position and 6 out of 11 felt their degree was essential to their work.

7b. Please indicate the extent to which you agree or disagree with the following statements about your current work with this company or organization. The skills and knowledge I gained in Shoreline's Visual Communications Technology courses ...

The second data source is the Data Linking for Outcomes Assessment database compiled by the Washington State Board for Community Colleges linking program outcomes and employment data. This data shows the employment outcomes for alumni that completed their degree or certificate compared to those who did not (i.e., "Leavers").[1] The data does not show what jobs these individuals have.

	Leavers	Ns	Completers	Ns
2012-2013	56%	36	64%	33
2013-2014	56%	25	56%	34
2014-2015	50%	15	58%	26

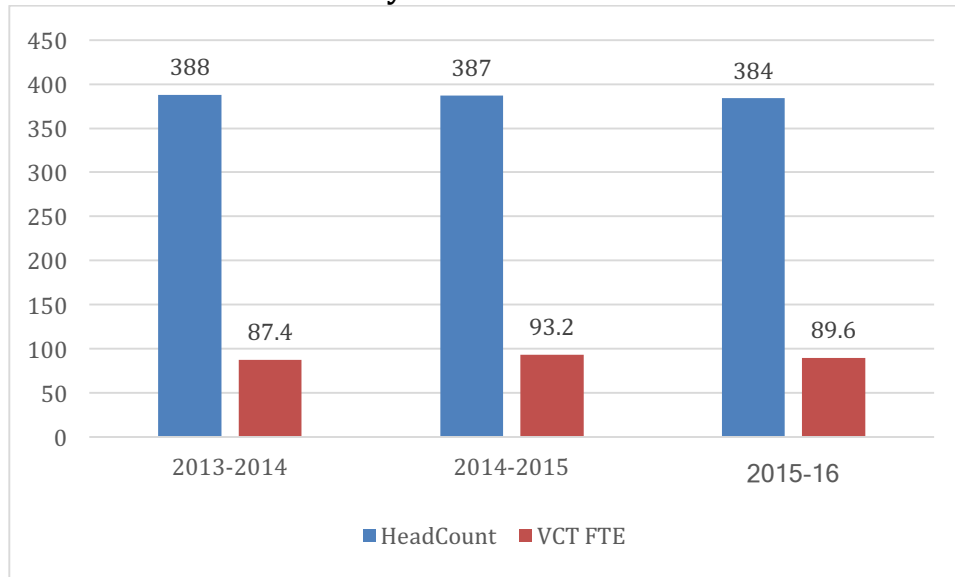Completers generally gain employment at a higher rate than program leavers.

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[1] The data includes alumni who have not enrolled in another Washington State community or state college or university for at least one year (i.e., so recent graduates are not included). It does not include alumni who do not have a social security number. For these reasons it may be an undercount of actual employment.
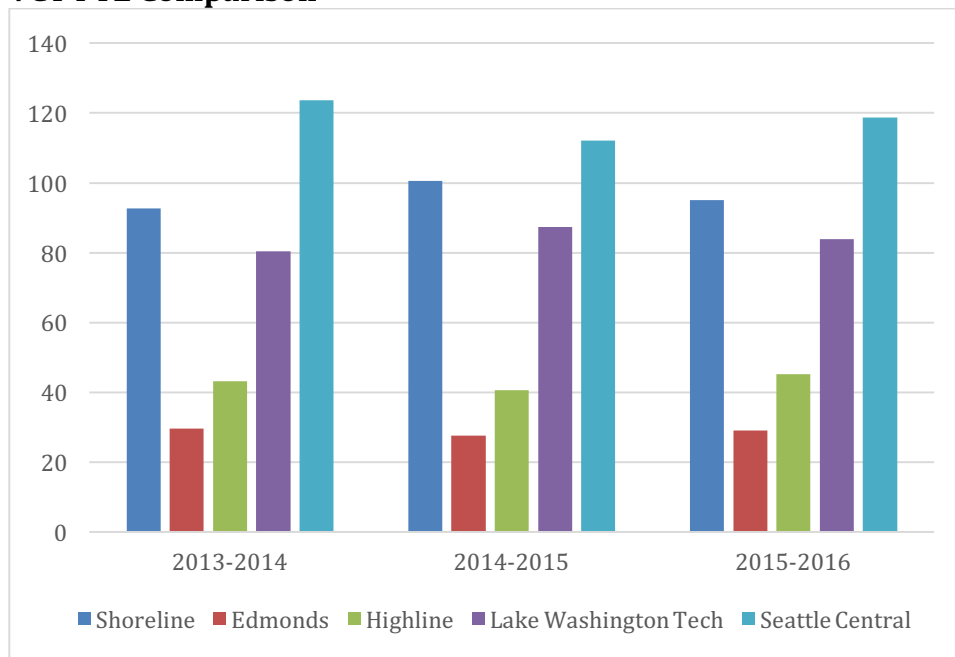
STUDENT DATA TRENDS

Enrollment

As the following table shows, VCT headcount and FTE enrollment has remained remarkably stable during the economic recovery, in contrast to many professional technical programs. Shoreline has the second largest VCT program in Washington State (Seattle Central College has the largest program). Shoreline's relative size is a testament to the popularity of its program since it has one of the smallest markets in comparison to other programs, especially those in Central Puget Sound.

VCT Headcount and FTE by Academic Year

The following table compares VCT enrollment fluctuations to local competitors. Shoreline's FTE increased by 2.6 percent between AY 2013 and AY 2015. Other programs that experienced enrollment increases include Highline and Lake Washington Technical College. Edmonds and Seattle Central experienced slight decreases (-1.9 percent and -3.9 percent). Part of Highline's increase can be attributed to adding a new program during this period – Animation, Interactive, Video Gaming.

VCT FTE Comparison

Student Demographics

Gender

Individual college programs should not be held accountable for significantly improving demographics found in a profession at large. Using examples from previous reviews in this round, the majority of people working in the music technology field are men and the majority of people working in business technology are women. These programs reflect those national and state demographics. Programs are encouraged to promote diversity by hiring diverse faculty, but are not expected by themselves to beat industry trends.

Unfortunately, available demographic data on relevant professions is old, pre-dating the Great Recession, which raises some questions about how accurately it represents the current profession. Designers, including graphic designers, were 54 percent female nationally in 2009, the latest figures available (AIGA, 2009). Fine artists, art directors, and animators were 45 percent female nationally that same year (International Foundation for Women Artists, 2009). Just over 11 percent of game designers are female (International Game Developers Association, 2005).

In comparison, VCT students are 38 percent female with the majority of the FTE concentrated in the Graphic Design program (60 FTE out of 95 FTE total). There are also more women in the Graphic Design program. This discrepancy triggered a closer examination of the reasons for this. Lending some credence to the data, the 2011 review noted that 47 percent of the student body was female (based on 2009 figures) and that the percent of female students had decreased since 2008. In 2009,

the VCT department had more males in it than the national data and this demographic imbalance has gotten progressively worse.

Our attention turns to possible reasons for this imbalance. Could it be a retention issue – are women dropping out before completion? An analysis of female course and degree completion by Institutional Review staff revealed no disparities. Women are not completing the program at a lower rate than men. This indicates there is no discrepancy in grading or a problem with the treatment of female students in the program.

Could this be a recruiting problem? According to the current student survey, about 30 percent found Shoreline's VCT program because of the college website (the most of any source). This is a consistent finding across the four other Shoreline programs already reviewed. An analysis of the website does not reveal a disparity in recruiting. The word "student" is used instead of third person pronouns (he or she). All but one image shown is of different designs created by students. The one image showing a student shows a female.

The program employs two female and two male full-time faculty in addition to a female program manager. These five individuals would meet with any prospective students wanting additional program information and provide most advising services. It has 10 part-time faculty, three of which are female. It is suggested that more females are recruited to become full-time and/or part-time faculty.

The VCT program advisory committee members, when presented with national demographic data of their profession, unanimously stated that the data did not accurately portray the gender balance in graphic design in Seattle. They believe the Seattle design community is composed of a majority of men. One committee member stated, "I've been in the field for 30 years, and have gone to AIGA meetings in Seattle (the local chapter of the national professional association and the source for one of the data points) and its mostly men."

Faculty believe that the VCT program attracts a number of males, especially those who are switching careers, because of its dependence on computers and the perceived ease of progressing through the program.

Because this data is older and national in focus, there is some healthy skepticism about it's relevancy today in the Seattle market. No reasons for the gender discrepancy could be found as a part of this review. It appears to be neither a recruiting nor a retention problem. It is suggested that faculty continue to monitor the gender makeup of students, be vigilant to continue their strong non-biased recruitment and retention of females, and ensure diversity in hiring both full-time and especially part-time faculty as positions become open.

Age, Race, and Ethnicity

Regarding other demographic data, VCT students are similar in age, on average, compared to Shoreline's professional-technical students. VCT students had a mean age of 29 in 2015-16, compared to 28.8 for Shoreline's professional-technical mean. However, VCT had a greater portion of students 21 years or younger than Shoreline professional-technical programs overall, at 42 percent compared to 32 percent.

The program student body is composed of 40 percent people of color, compared to 20 percent nationally (AIGA, 2009).   The advisory committee agreed that Seattle's graphic design workforce is composed of a majority of white individuals and that Shoreline is doing a good job of serving non-white populations.

Program diversity will continue to improve if program administrators identify people of color and female candidates for new teaching positions, especially part-time positions where female candidates are under-represented.

Completion Data

Completion data are portrayed below. A few certificates, such as the Business Foundation and Web Design, have had few completions during the study period. It is suggested that faculty examine these to determine the reason for the low completion numbers. For example, the Business Foundation low completion is surprising given that both faculty and the Advisory Committee noted that many graduates start their own businesses after graduation. Faculty discussed examining whether this certificate could better meet the needs of freelancers and, thus, become more attractive to students.

Completions	AY 2013	AY 2014	AY 2015
Game and Art Design (AAAS 117-126 credits)	2	4	5
Animation/Video for Multimedia (AAAS 108-121 credits)	3	4	7
Digital Illustration/Animation Level II (ST 18 credits)	3	3	2
Creative Project Management (AAAS 90-95 credits)	0	2	2
Business Foundation (ST 19 credits)	0	1	0
Computer Foundation (ST 15 credits)	14	16	5
Art and Design Foundations (ST 15 credits)	32	45	37
Graphic Design (AAAS 112-121 credits)	16	11	16
Visual Communications Foundation (CP 61-64 credits)	1	1	3

Completions		AY 2013	AY 2014	AY 2015
Foundation Program with Customized Specialization (CP 54-59 credits)		1	0	4
Computer Graphics Foundations (CC 20 credits)		14	18	9
Web Design (ST 19 credits)		0	0	1
Digital Video (ST 15-17 credits)		0	4	1
Digital Photography Level II (ST 13 credits)		3	1	1

When comparing VCT completion ratios to Shoreline Community College and statewide ratios, this program greatly exceeds the Shoreline and statewide completion rates. Faculty were asked about possible reasons for this, but no clear answers emerged.

VCT Technology Completion Ratios Compared to State and Shoreline

All Workforce Certificates and Degrees		2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
State	*Ratio*	*Unavail.*	*20%*	*20%*	*20%*	*Unavail*	*Unavail.*
Shoreline	Completions	641	626	694	652	702	545
	Headcount	2262	2110	2331	2156	2075	1854
	Ratio	*28%*	*30%*	*30%*	*30%*	*34%*	*29%*
All VCT	Completions	18	80	63	58	78	69
	Headcount	47	142	159	157	168	163
	Ratio	*38%*	*56%*	*40%*	*37%*	*46%*	*42%*
Workforce Degrees Only		2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Shoreline	Completions	251	194	206	203	208	181
	Headcount	1798	1616	1786	1643	1534	1389
	Ratio	*14%*	*12%*	*12%*	*12%*	*14%*	*13%*
All VCT	Completions	11	14	20	18	13	25
	Headcount	41	76	116	117	103	119
	Ratio	*27%*	*18%*	*17%*	*15%*	*13%*	*21%*

<u>Waitlists and Fill Rates</u>

Shoreline Community College's Institutional Review Department (IRD) studies waitlist data for the college, analyzing number of seats waitlisted by course and quarter, in addition to several additional factors of importance. This analysis flags courses that have 16 or more seats waitlisted.

There were no courses with chronic waitlist problems during the three-year study period.

Fill rates are determined by comparing the number of students enrolled in a course during an academic year, with that course's capacity for the year. Analyzing fill rates identified several courses where the fill rate is consistently high (i.e., over 100 percent for one or more years during the study period), including:

- VCT 102-24
- VCT 136
- VCT 155-156
- VCT 170-277
- VCT 176
- VCT 204-297
- VCT 235-251

Courses that had consistently low fill rates include:

- VCT 112
- VCT 124-199
- VCT 125
- VCT 125-199
- VCT 128
- VCT 199

To ensure VCT is meeting the needs of working adults, course popularity was also analyzed for AY 2013-2016 by time of day and modality. The vast majority of courses are offered in the morning and afternoon, with few evening and online options. This analysis revealed few waitlist problems. However course popularity, measured by students enrolled divided by class capacity, revealed that online courses were most popular with fill-rates of just over 90 percent. The only online courses offered are two introductory and required courses. The current student survey responses indicated a desire for more evening and online courses.

	# of sections	# enrolled	final waitlist	final waitlist/# enrolled	students enrolled/class capacity
Morning courses	140	1560	36	1.7%	55.0%
Afternoon courses	289	3167	97	3.1%	53.6%
Evening courses	33	195	3	1.5%	28.8%
Online courses	47	866	65	2.3%	90.7%

It is suggested that faculty examine evening and online offerings and expand those where possible, especially if these adjustments can help balance high- or low-fill rate courses. Regarding evening courses, the low fill rate could be because the most popular courses are not offered in the evening.

CURRICULUM

Comments from the student surveys indicate that there may be some disorganization across the program. Open responses to the question "Does the program have an effective curriculum structure?" (this question received a relatively high score of 3.9 on a scale of 1 to 5) indicate that a few students were frustrated with the current program structure. This includes preferring a course sequence that builds more from one class to the next so that iterative concepts are taught more closely together.

Faculty also discussed the need to work together to improve norms across the department. The desire for norm-setting was comprehensive including everything from using consistent technology to ensure grading rubrics are consistent to ensuring courses are mapped to program outcomes. This work is important and could include an examination of course sequencing to identify room for improving how the course sequence supports program outcomes and overall student learning.

<u>Length</u>

Three of the four associate degrees affiliated with this program run longer than 90 credits:
- Game and Art Design (AAAS 117-126 credits)
- Animation/Video for Multimedia (AAAS 108-121 credits)
- Graphic Design (AAAS 112-121 credits)
- Creative Project Management (AAAS 90-95 credits)

This is an issue that was also raised in the 2010 program review. Curriculum revisions that occurred in 2011 and 2013 attempted to address this problem by combining several three-credit courses and making them five credits.

A comparison of peer colleges reveals that related programs are similar in length, so Shoreline is not alone in having long VCT-related degrees.

- Seattle Central College Graphic Design AAS – 120 credits
- Lake Washington Technical College Game and Art Design AAS-T – 107 credits (No comparison exists for Animation/Video for Multimedia)

Counteracting this desire to shorten the program is the industry's constant use of new computer programs and other technical tools to create graphic arts, multimedia, animation, and game and art design. Although the Advisory Committee

noted that the core suite of design programs are fairly common and do not often drastically change. They also note that one pursuing a degree in VCT must be ready to dedicate a portion of their career to staying current with both design trends, and the tools used to create designs. A web search using the term "staying current in graphic design" uncovers literally thousands of blog posts and articles on this topic. Staying current is part of the job of not just professionals working in the field, but for faculty that teach it as well.

Faculty are sensitive to the dual pressures of keeping their program relevant and not adding more credits needed to achieve degrees in the program (as evidenced by changes following the 2010 program review). One approach they are taking is to ensure they are teaching the core design programs and acknowledge up front that a graduates will require the ability to stay up to date in this constantly evolving field. Implementing this strategy requires faculty to focus on helping their students learn the fundamentals of design, learn how to stay relevant, and "learn how to learn" new design computer programs which will eventually be created during their career. Faculty should continue developing this strategy. The current student survey indicates that they need to develop careful, consistent, and frequently repeated messaging to help students understand how this approach will help them with their careers.

Portfolios

The Program Advisory Committee and faculty both agree on the importance of portfolios for finding work after graduation. Faculty have designed the program to ensure portfolios are continuously developed throughout the program. Each course is supposed to have one or two portfolio-driven projects, although full-time faculty do not think this is being taught uniformly throughout the program. The specialization courses are also focused on portfolio development, although a more methodological approach is planned. Faculty are encouraged to continue ensuring that the curriculum is designed and consistently implemented to focus on the development and marketing of portfolios.

Operating System

Some parts of the industry are using Windows machines, but the VCT program focuses exclusively on training students to work on Macintosh machines. The program should monitor this trend and consider ensuring students could work on both platforms. The program requires an Introduction to Computers course in most of their degrees. Because many students have some knowledge of computers, if this course were converted to a modular format students could more easily challenge those parts they understood and focus their time on rounding out their knowledge.

FACULTY

The faculty participating in the program review were engaged, thoughtful, and had a strong understanding of the needs of students and employers.

<u>Faculty Workload</u>

The following table highlights the number of sections taught by different types of faculty. In recent years, VCT has a higher number full-time faculty and fewer part-time faculty than its peer programs. This positions the program well in regard to future growth and developing and implementing the recommendations in this program review and future needed enhancements.

Year	Status	VCT	MUSTC	PROF TECH	SHORELINE
2011-2012	CONTRACT			1%	1%
	FULL-TIME	39%	40%	39%	38%
	MOONLIGHT	7%	14%	6%	4%
	PART-TIME	54%	47%	53%	55%
	VOLUNTEER			2%	2%
2012-2013	CONTRACT			1%	1%
	FULL-TIME	37%	41%	37%	36%
	MOONLIGHT	11%	13%	8%	5%
	PART-TIME	50%	45%	54%	56%
	VOLUNTEER	2%		1%	1%
2013-2014	CONTRACT	2%		5%	3%
	FULL-TIME	52%	41%	36%	33%
	MOONLIGHT	12%	13%	5%	4%
	PART-TIME	35%	45%	54%	59%
	VOLUNTEER			0%	1%
2014-2015	CONTRACT	2%		3%	2%
	FULL-TIME	52%	40%	38%	36%
	MOONLIGHT	10%	12%	7%	5%
	PART-TIME	37%	48%	52%	57%
	VOLUNTEER			1%	1%

Year	Status	VCT	MUSTC	PROF TECH	SHORELINE
2015-2016	CONTRACT	11%		10%	5%
	FULL-TIME	52%	39%	36%	35%
	MOONLIGHT	4%	10%	6%	4%
	PART-TIME	33%	51%	48%	55%
	VOLUNTEER			0%	1%
2016-2017	CONTRACT			4%	5%
	FULL-TIME	46%	36%	36%	33%
	MOONLIGHT	5%	12%	6%	4%
	PART-TIME	49%	49%	53%	56%
	VOLUNTEER			0%	1%

VCT operates at a lower student to faculty ratio compared to its peer departments and quite close to the statewide average for all community college VCT programs. Increasing enrollment will help keep these levels competitive with the rest of the college and peer programs.

Quarter	VCT	MUSTC	PROFTECH	SHORELINE	STATE (VCT)†
Fall 2010	1:17	1:21	1:16	1:21	1:17
Fall 2011	1:15	1:25	1:14	1:20	1:17
Fall 2012	1:16	1:23	1:15	1:20	1:17
Fall 2013	1:15	1:23	1:15	1:20	1:16
Fall 2014	1:18	1:21	1:13	1:19	1:18
Fall 2015	1:18	1:23	1:13	1:19	1:19
Fall 2016	1:18	1:19	1:13	1:17	1:19

†(Source: https://tableau.sbctc.edu/t/SBCTC/views/S-FRatios/SFRatiosandAnnualizedFTES?%3Aembed=y&%3Adisplay_count=no)

Professional Development

VCT faculty use a variety of strategies to stay current in their constantly evolving field. The majority of them do some freelancing work during the summer months. They also stay current with design trends and tools by following relevant industry e-zines and blogs. Some also take classes to learn how to use new, emerging tools. Finally, some instructors use the new tools to design lessons, for example, by creating a template and exercise for students to complete.

RESOURCES

This is a technology-dependent program that relies on Macintosh computers in a dedicated lab. The reliance on Macintosh computers is appropriate as these are widely used in the graphic design industry. However, these computers are not regularly maintained by Shoreline's computer department and faculty do not have the privileges necessary to keep them up to date. The impact of this on instruction was noted by both faculty and respondents to the current student survey. Shoreline's Technology Support Services should develop a solution to this problem preferably by putting a full-time tech support person in the building.

PARTNERSHIPS

Active Partners

The Program Advisory Committee meeting for the program review had five individuals representing a variety of industry segments: interactive design including websites, mobile apps, game design, and video animation; wide format printing; bicycle design; web-based training; and in-house graphic design for companies with different lines of business. Three of the committee members are former graduates. This is an excellent strategy for expanding and/or revitalizing advisory committees that are languishing; however the proportion of recent graduates to non-graduates should not exceed 20 percent of the entire committee so that a diversity of experience is maintained. Other programs with small committees should consider copying this best practice, particularly Business Technology and Business Administration.

Because the Advisory Committee is active and engaged with the program, faculty are encouraged to continue pursuing job shadows and/or internships for their students with members. Faculty shared that Advisory Committee members are primarily small to medium business owners with few resources available to manage internships. However even a two-hour job shadow can be designed to add value and help students better understand the field.

The program has hosted a meeting with Digipen to explore a possible an articulation agreement, although nothing has come of this initial meeting yet. The VCT program manager sits on the Edmonds School District advisory committee. More partnerships with school districts occurred in the past, but Shoreline schools of late are more focused on college prep rather than career and technical education. Faculty should continue to monitor their openness as career and technical education is receiving more attention, especially with the election of the new State Superintendent who campaigned, in part, on revitalizing career and technical education in Washington State.

Al Yates, the program chair, wishes to explore more partnerships during a possible upcoming sabbatical.

PROGRAM SERVICES

Current students were surveyed regarding their opinions of VCT's program services. They were asked to rate each component on a scale of 1 (poor) to 5 (excellent). The ratings were:

Program Element	Rating	N
Helpful program information	3.7	39
Effective curriculum structure	3.9	39
Support individual learning needs	4.0	39
Adequate preparation for employment	3.6	39
Adequate guidance for career planning	3.5	39
Adequate program resources	4.2	39
Class schedule meets student needs	3.4	38
Academic advising meets student needs	3.6	39
Effectiveness of other support services	4.0	39

The responses for this program were lower than other programs surveyed during this round of program reviews. Open responses to these questions fell into the theme of wishing the program was organized better. Students reported outdated program information, room for improving the curriculum structure, outdated workstations, not enough evening and online courses, and difficulty finding the appropriate advisor.

With regard to "helpful program information", there were seven open responses to this question. Five of the seven responses specifically stated that program requirements are outdated on the planning forms. It is suggested that all planning forms be reviewed and updated.

In discussions with faculty, they believe the advising difficulties could be related to confusion with the referral process from Worker Retraining and BFET advisors. It is suggested that this process be improved.

Under the "class schedule meets student needs" section, one student provided additional information indicating that they had an instructor teaching two in-person classes at the same time in the same room. In discussing this with issue with faculty, they explained that about once annually, the specialization courses do not have enough students to support separate sections. To keep these courses open, they combine the courses and design them to mimic real world settings where students are expected to work independently. This is a creative solution that keeps

enrollment high enough to operate these specialty courses. However, the low rating on this program component suggests that some refinement to this approach is needed. This could include improving communication around the course expectations, making adjustments to the curriculum to make the secondary lessons more explicit, and look for ways to improve student support through the course.

COMPETITION

Shoreline's VCT program is unique among community college programs on a couple of different levels. First, it has a fairly comprehensive program offering associate degrees in four separate areas. No other local college offers such a robust selection of options. Second, the program offers open entry to any interested student. Many other comparable schools, such as Seattle Central, use a competitive process to screen candidates to the program.   A couple of programs, Seattle Central and Lake Washington Technical College, offer baccalaureates in related fields. The following table illustrates the local differences:

	Shoreline	Edmonds	Seattle Central	Lake Washington	Bellevue
Graphic Design	AAS (112-121 Cr)	ATA (97 Cr)	AAS (120 Cr)	AAS-T (103 Cr) CC CP	AA CP
Game and Art Design	AAS (117-126 Cr)		CP	AAS-T (107 Cr)	
Animation Video for Multimedia	AAS (115-122 Cr)				
Creative Project Management	AAS (90-95 Cr)				
VCT Foundation	CP				
Foundation plus specialization	CP				
Art and Design Foundation	CC		BAS CP		
Computer Foundation	CC		CC - OL	CP	
Computer Graphics Foundation	CC				
Business Foundation	CC			CC	
Digital Illustration – Animation Level II	CC				

	Shoreline	Edmonds	Seattle Central	Lake Washington	Bellevue
Digital Photography Level II	CC			CC	
Digital Video	CC				
Web Design	CC			CP	
Applied Design				BATD CC	

Current students were asked what other programs they considered before selecting Shoreline and their responses indicated that Shoreline competes with several different public and private programs in Washington and across the country including:

- Seattle Central College
- North Seattle College
- Edmonds Community College
- University of Washington
- Western Washington University
- Lake Washington Technical College
- Bellevue College
- Digipen
- Everett Community College
- Seattle University
- Cascadia College
- Portland Community College

Students are quite likely to recommend this program to others, giving it a 4.2 on a scale of 1 (definitely not) to 5 (definitely) (N=39).

LABOR MARKET OPPORTUNITIES

Job growth in King County for the majority of occupations targeted by this program is forecasted to increase significantly over the next 10 years, growing faster than the national average for these occupations. Median earnings are also strong in these occupations.

The program advisory committee explained that a large number of people working in the design field are independent contractors and would not be captured in the UI data on which these projections are based. Snohomish County data was not included in this analysis because the number of workers in Snohomish County was so small relative to King County. However, the advisory committee believes that there are a significant number of independent contractors in Snohomish County

pursuing this field. For this reason, the majority of the advisory committee indicated that they believe the projections to be significantly undercounting both the number of individuals working in King County as well as underestimating the actual demand for these workers. As one committee member stated, "Seattle is a creative city and it's growing incredibly quickly."

The advisory committee members also noted that the data presented to them missed occupations related to job titles such as pre-press technician, output print technician, and production artist. The occupations presented to them were based on CIP codes Shoreline has assigned to VCT. These CIP codes should be examined to ensure they are capturing these additional training categories. Further, the CIP codes related to Audiovisual Communications Technologies/Technicians, Other, do not generate related, relevant SOC codes and should be reconsidered.

King County Occupational Projections

Occupational title	Estimated employment 2014	Estimated employment 2019	Average annual growth rate 2014-2019	Average annual opening due to growth 2014-2019	Average annual total openings 2014-2019
Multimedia Artists and Animators	2,006	2,381	3.49%	75	117
Commercial and Industrial Designers	428	488	2.66%	12	23
Graphic Designers	4,043	4,680	2.97%	127	231
Designers, All Other	143	180	4.71%	7	11
Prepress Technicians and Workers	255	236	-1.54%	-4	0

 (Washington State Employment Security Department, 2017)

Comparing these growth figures with estimated supply numbers reveals that the key occupations in this cluster are in-demand or in-balance in King County.

- Multimedia Artists and Animators – In Demand
- Commercial and Industrial Designers – In Balance
- Graphic Designers – In Demand
- Designers, All Other – In Balance
- Prepress Technicians and Workers – In Decline
    (Source: EMSI, Shoreline Institutional Review Staff)