WASHINGTON STUDENT ACHIEVEMENT COUNCIL

EDUCATION · OPPORTUNITY · RESULTS

Intercollege Relations Commission Update

Fall Meeting

October 2013

Mission:

To inspire and foster excellence in educational attainment.

Creativity

Innovation

Technology

Diversity

Alignment

Accountability

Strategic Thinking

10/2013

Washington Student Achievement Council

We can make no better investment in our future than education.

The Council

2012 House Bill (ESSHB) 2483

Five
Governor appointed citizen members

Four
Education sector members

WSAC Agency
Executive Director

Council Members

Governor Appointees

Jeff Charbonneau

2013 National Teacher of the Year
Chemistry, Physics, Engineering

Maud Daudon, Chair

President & CEO of Seattle Metropolitan Chamber of Commerce

Karen Lee, Vice Chair

CEO of Pioneer Human Services, Western WA University Trustee

Dr. Susana Reyes

Assistant Superintendent, Mead School District

Rai Nauman Mumtaz

Premed Student, University of Washington Tacoma

Council Members

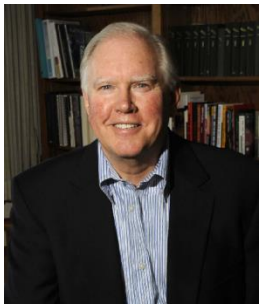
Education Sector Representatives

Marty Brown
Executive Director of SBCTC

Two year public colleges

Paul Francis
Executive Director of Council of Presidents

Four year public institutions



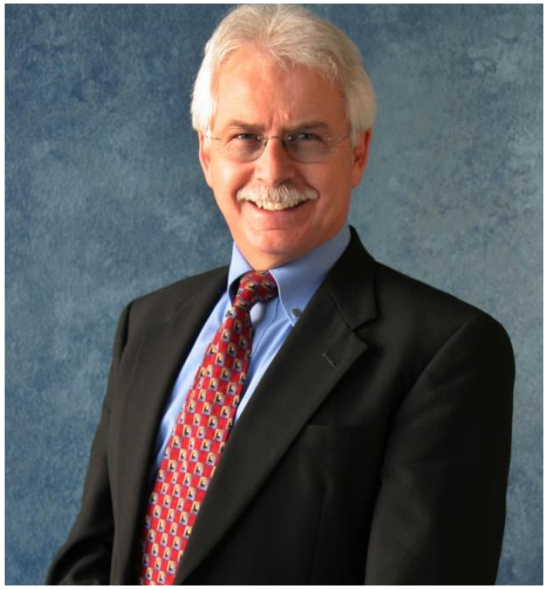
Ray Lawton, Secretary
Rumpeltes & Lawton, LLC

Independent Colleges of Washington

Scott Brittain
Assistant Superintendent, Ferndale School District

K-12 education system

Agency Executive Director



Gene Sharratt

Executive Director

Agency staff support Council's work in the following areas:

- Student Financial Assistance
- Guaranteed Education Tuition (GET)
- Policy, Planning, and Research
- Administrative Services
- Communications

Education • Opportunity • Results

5 Challenge Areas

Readiness

Affordability

Capacity & Success

Technology

Accountable Funding

National Context

By 2020, 65 percent of all jobs in the economy will require postsecondary education and training beyond high school.

By educational attainment:

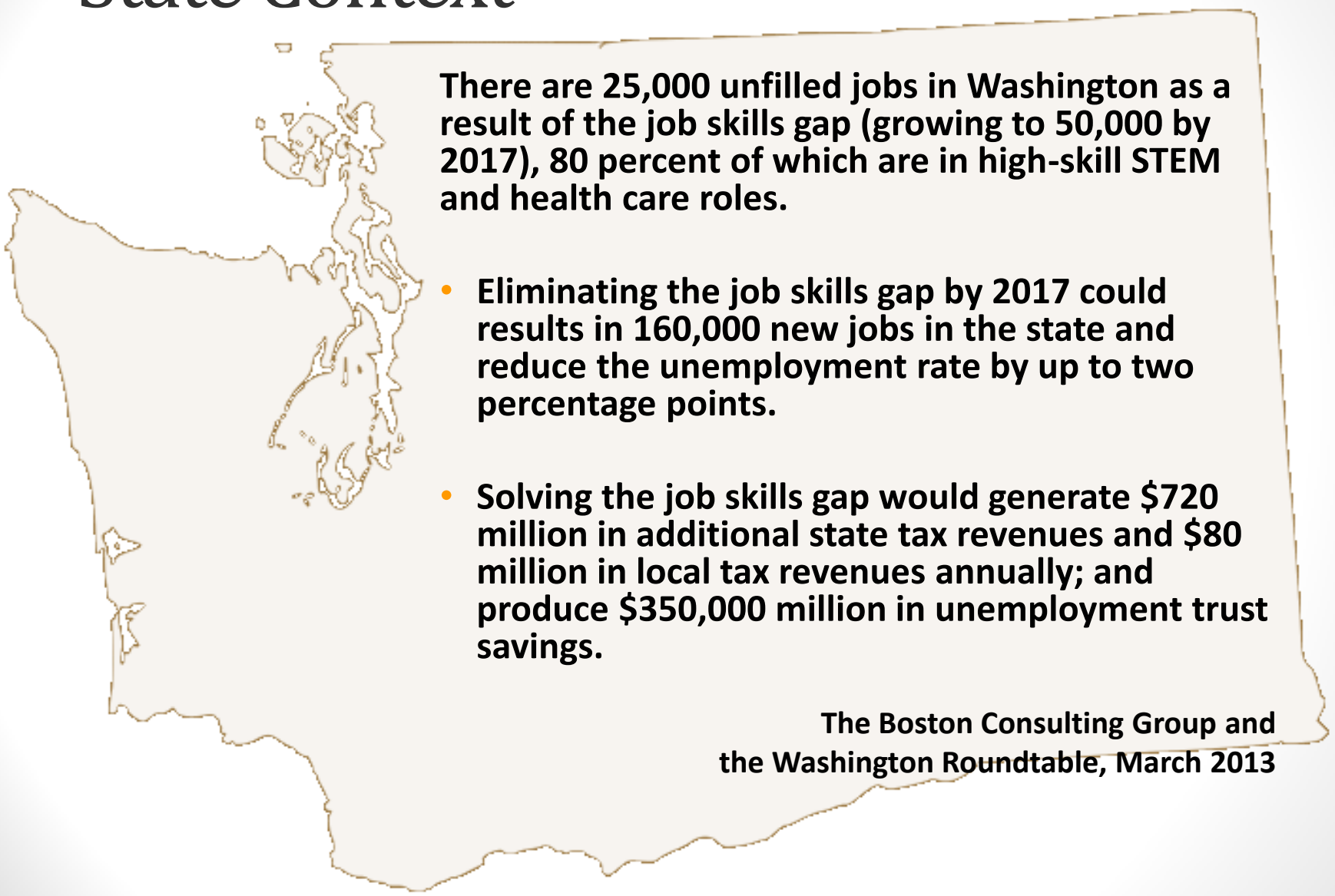
- **35 percent will require at least a bachelor's degree.**
- **30 percent will require some college or an associate's degree.**
- **35 percent will not require education beyond high school.**

Judgment/decision making, communications, analysis, and administration will be the four most in-demand competencies in the labor market.

The United States will fall short by 5 million workers with postsecondary education – at the current production rate – by 2020.

Georgetown University, Public Policy Institute, Spring 2013

State Context

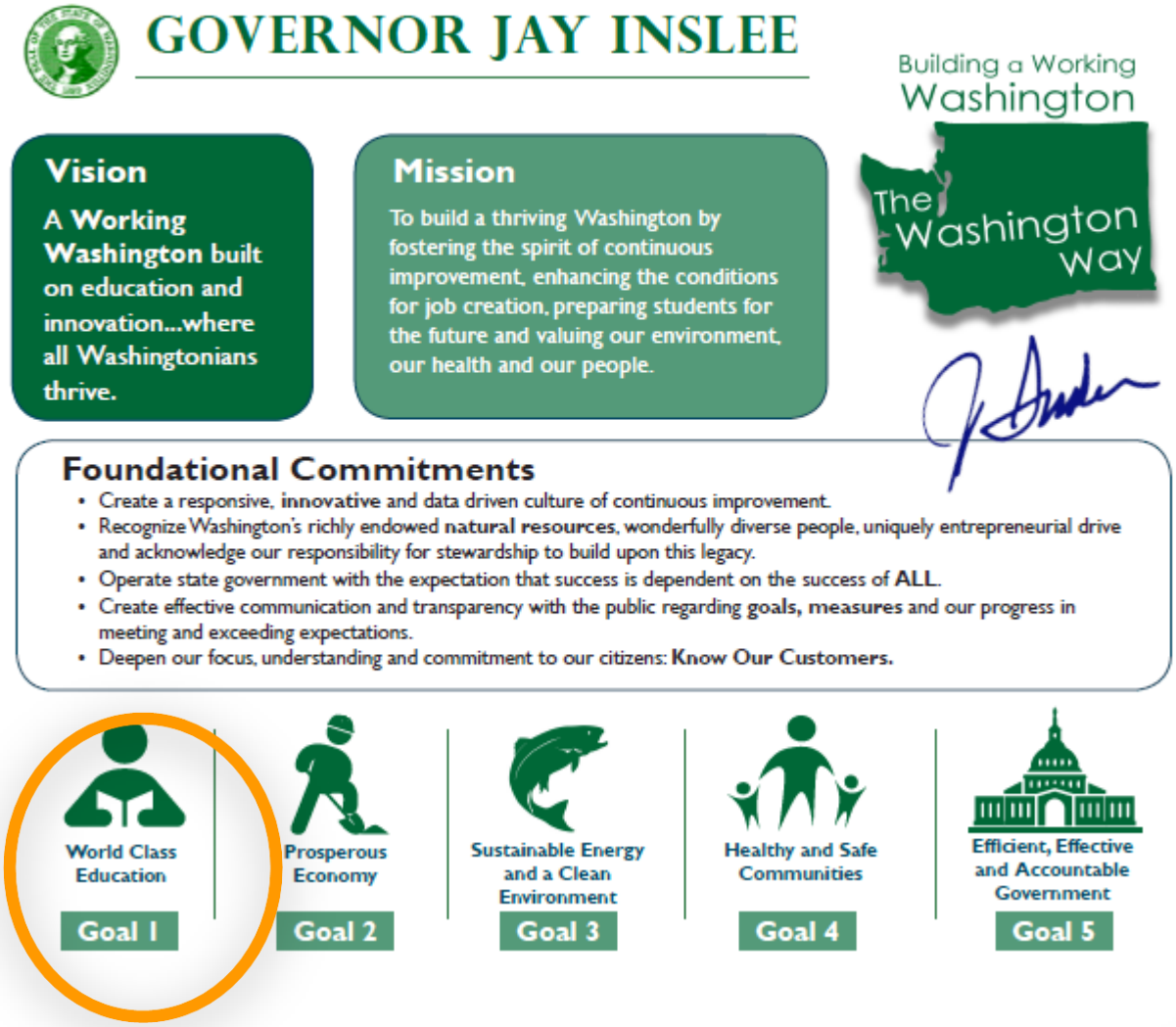


There are 25,000 unfilled jobs in Washington as a result of the job skills gap (growing to 50,000 by 2017), 80 percent of which are in high-skill STEM and health care roles.

- **Eliminating the job skills gap by 2017 could results in 160,000 new jobs in the state and reduce the unemployment rate by up to two percentage points.**
- **Solving the job skills gap would generate $720 million in additional state tax revenues and $80 million in local tax revenues annually; and produce $350,000 million in unemployment trust savings.**

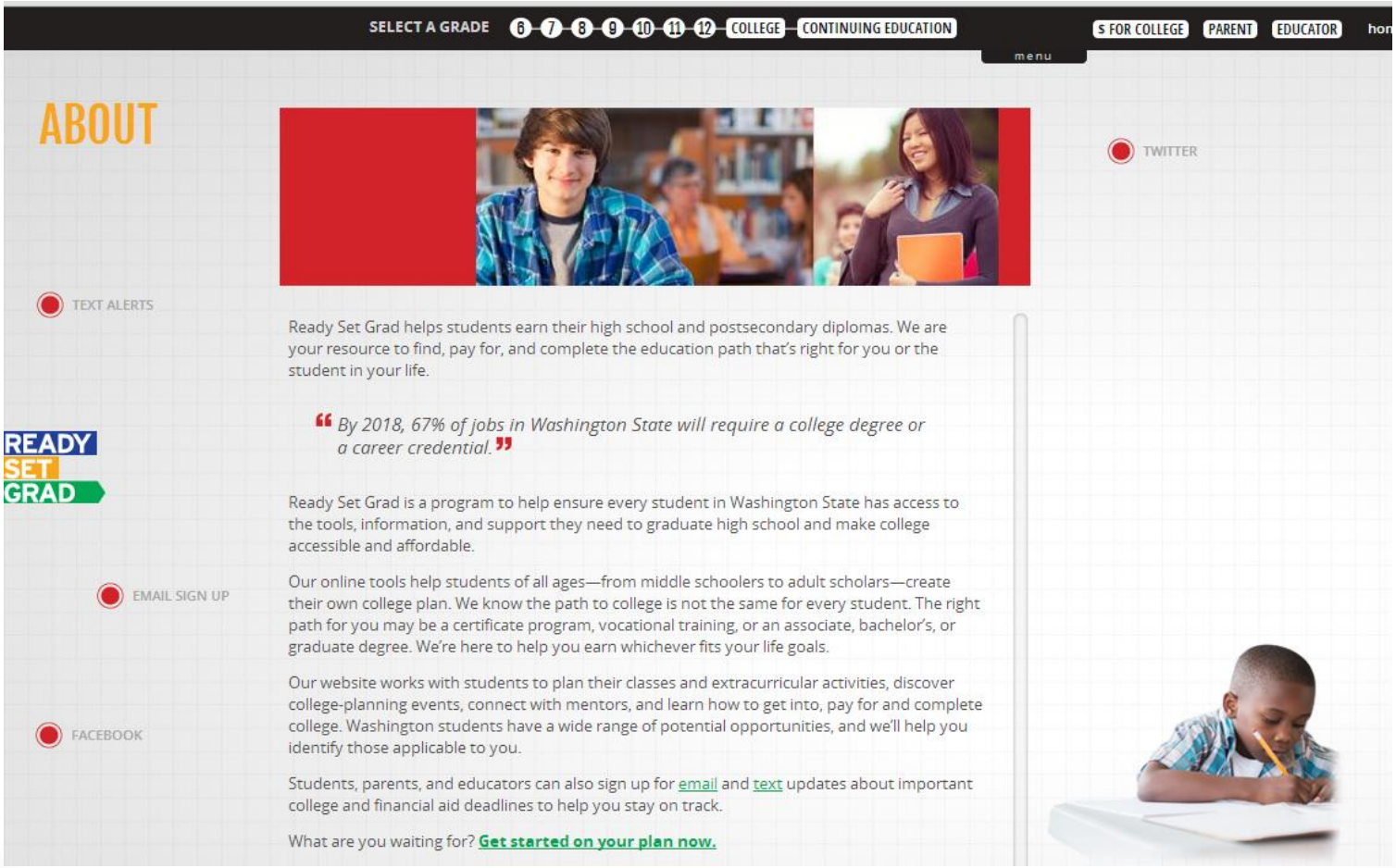
The Boston Consulting Group and the Washington Roundtable, March 2013

Roadmap Supports Results WA




READY
SET
GRAD

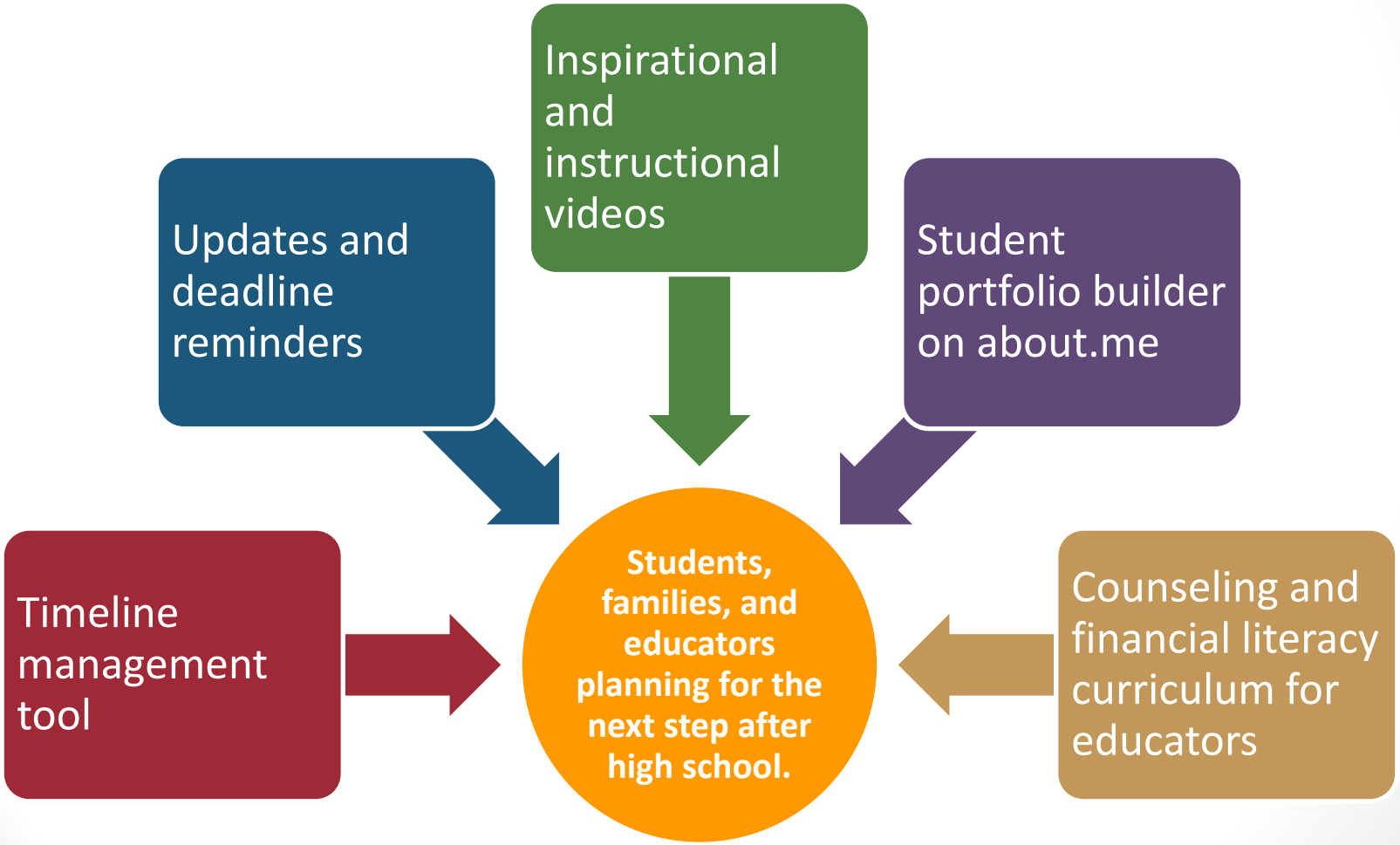
WWW.READYSETGRAD.ORG

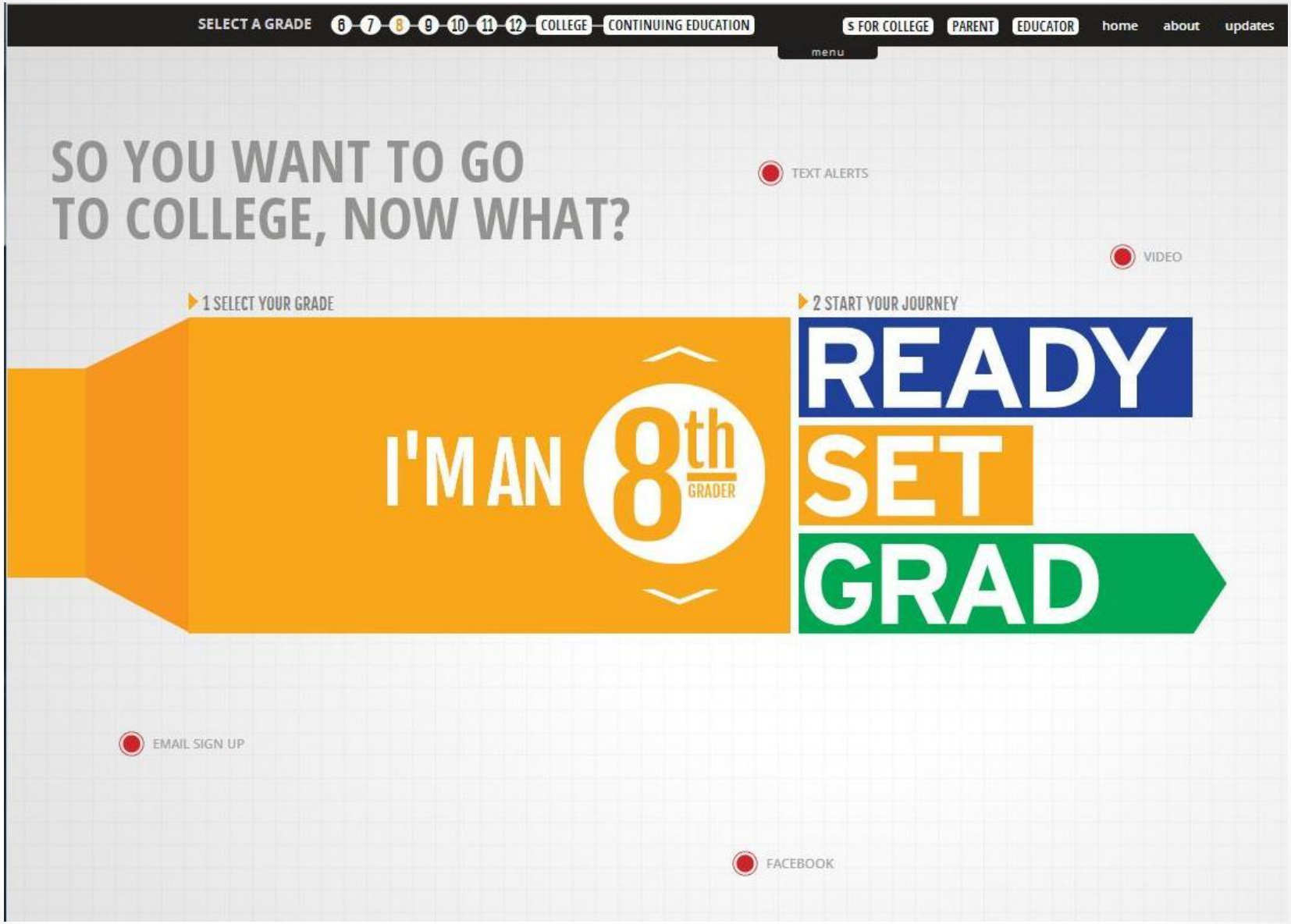


Ready Set Grad

Information Needs	• Finding information is easy, but finding *relevant* and *trustworthy* information is not.
Support Integration	• Web portal should augment, not replace, existing services offered by institutions and agencies.
Commitment	• Creating, maintaining, and supporting a higher education and career planning web portal will be a significant task and will not be a one-time effort.

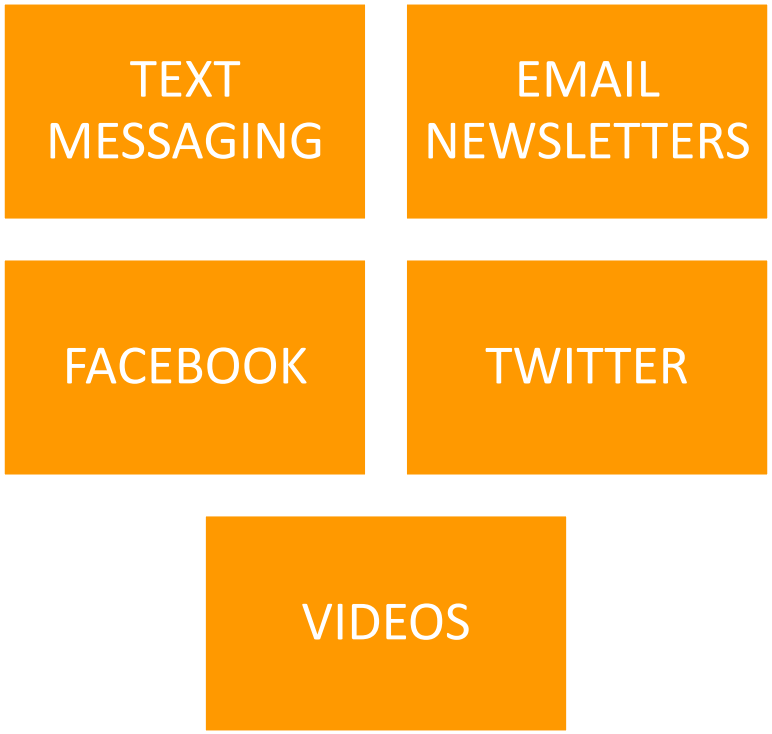
Ready, Set, Grad Website




SELECT A GRADE 6 7 8 9 10 11 12 COLLEGE CONTINUING EDUCATION
S FOR COLLEGE PARENT EDUCATOR home about updates
menu
SO YOU WANT TO GO TO COLLEGE, NOW WHAT?
TEXT ALERTS
VIDEO
1 SELECT YOUR GRADE
I'M AN 8th GRADER
2 START YOUR JOURNEY
READY
SET
GRAD
EMAIL SIGN UP
FACEBOOK

Timeline Management

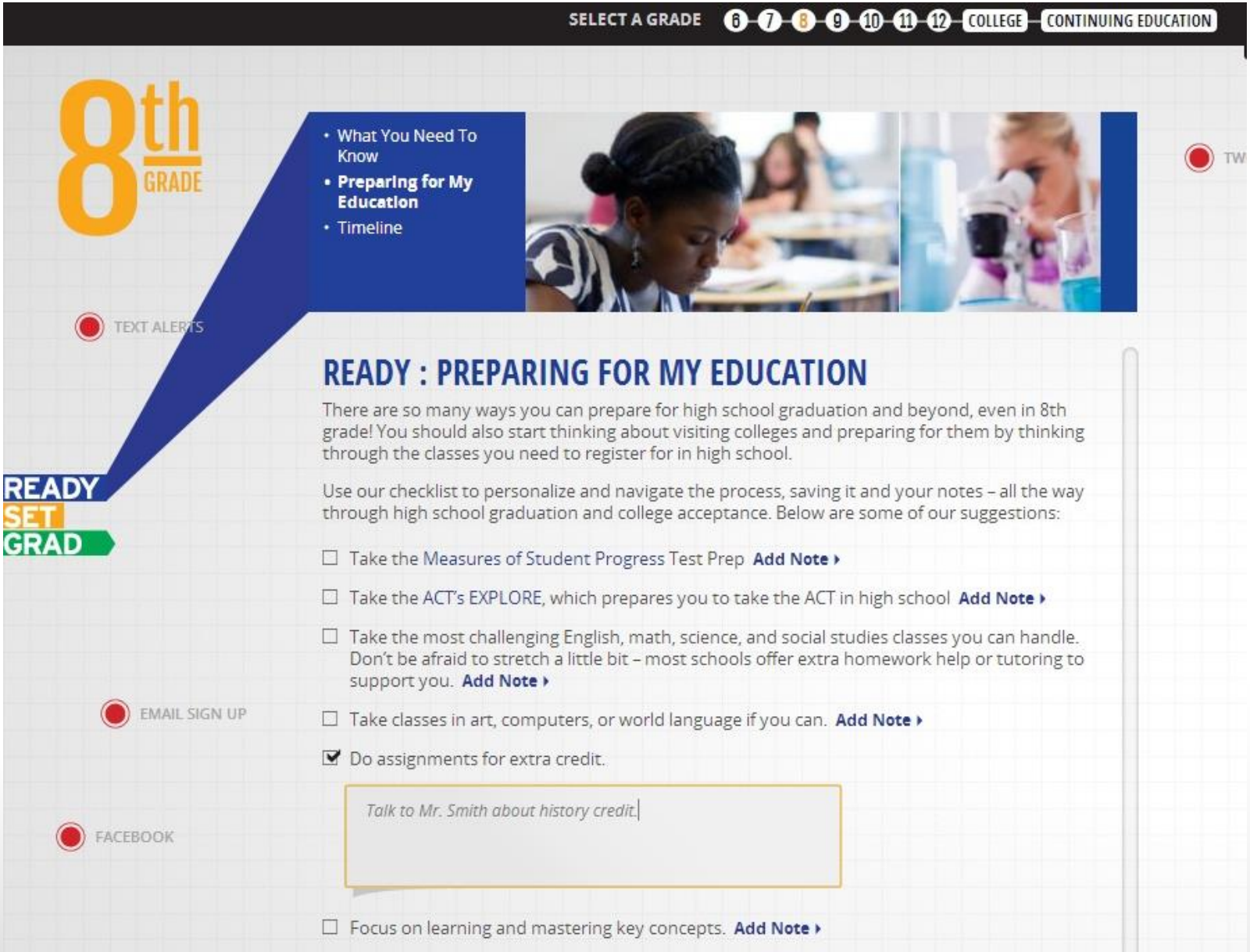
Updates & Reminders



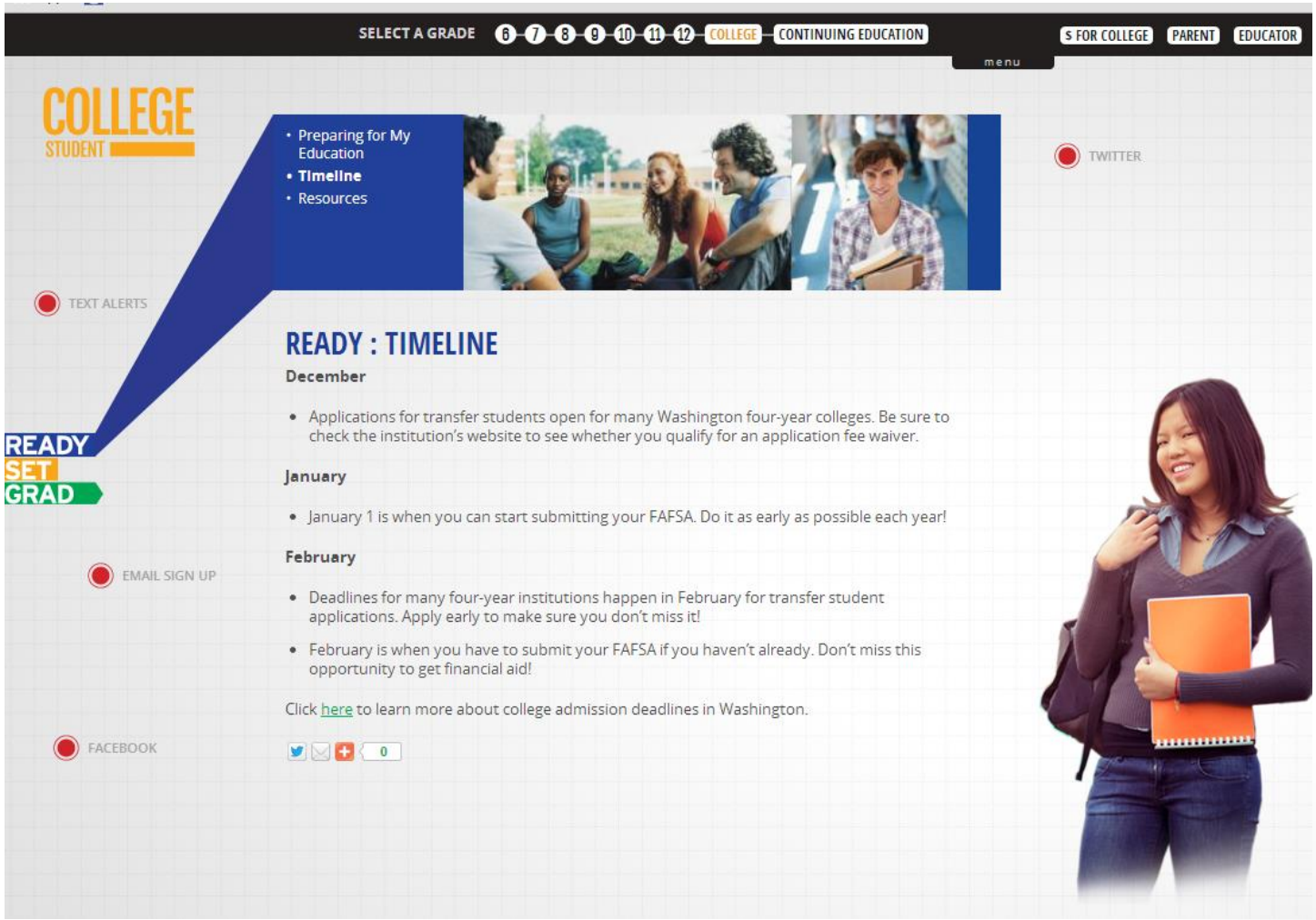
Students and families receive updates about events and deadlines.

- College Bound Sign-up
- College Application Week and College Goal Washington events
- College admission and financial aid deadlines

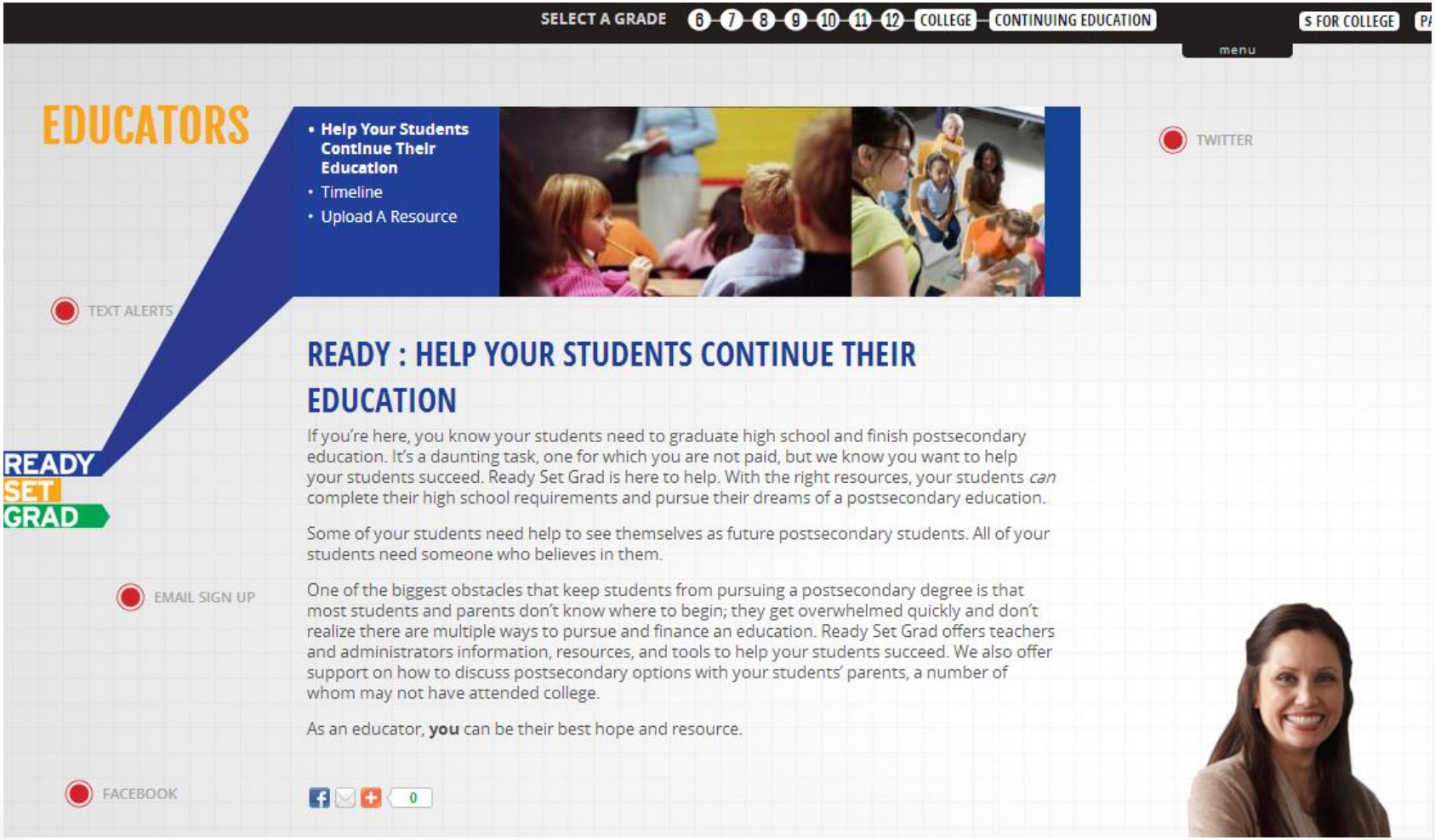
Planning Tools & Resources

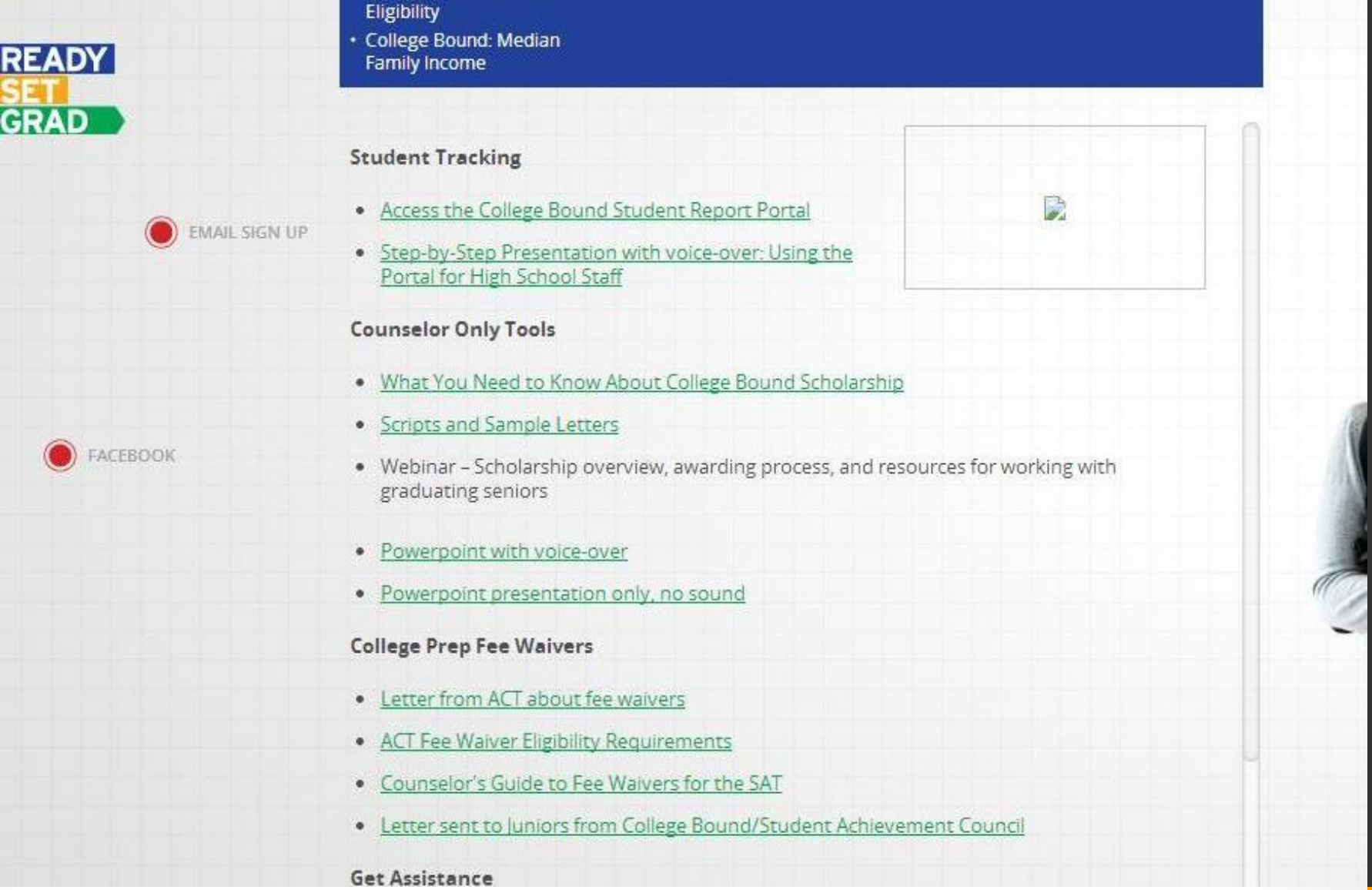


College Student Tools & Resources



For Educators…



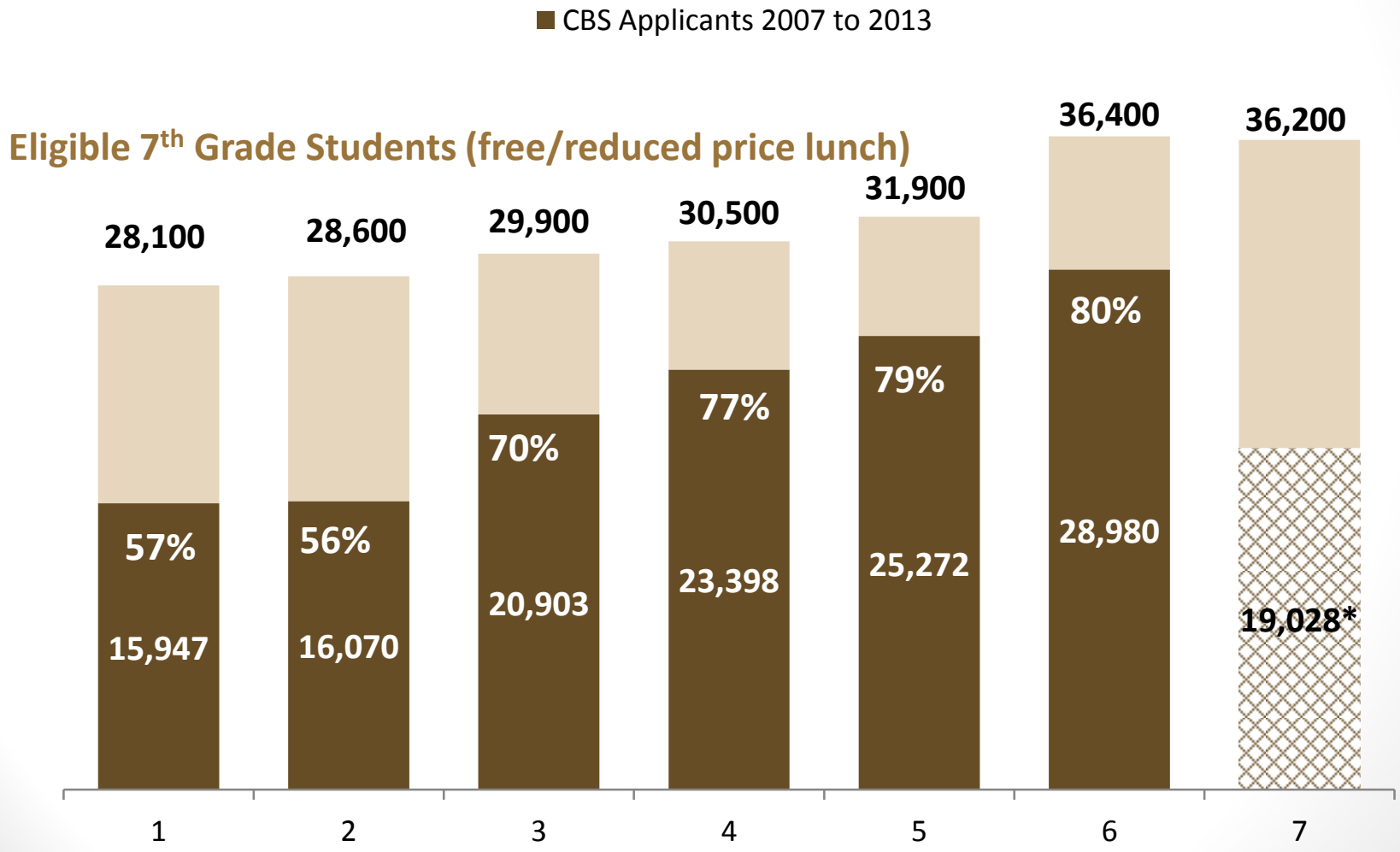


College Bound for Counselors & Educators

College Bound content on Ready Set Grad includes scholarship eligibility criteria, sign-up information, access to the Council's secure Portal, and other training resources.

College Bound Scholarship

151,600 Applications 2007 to 2013



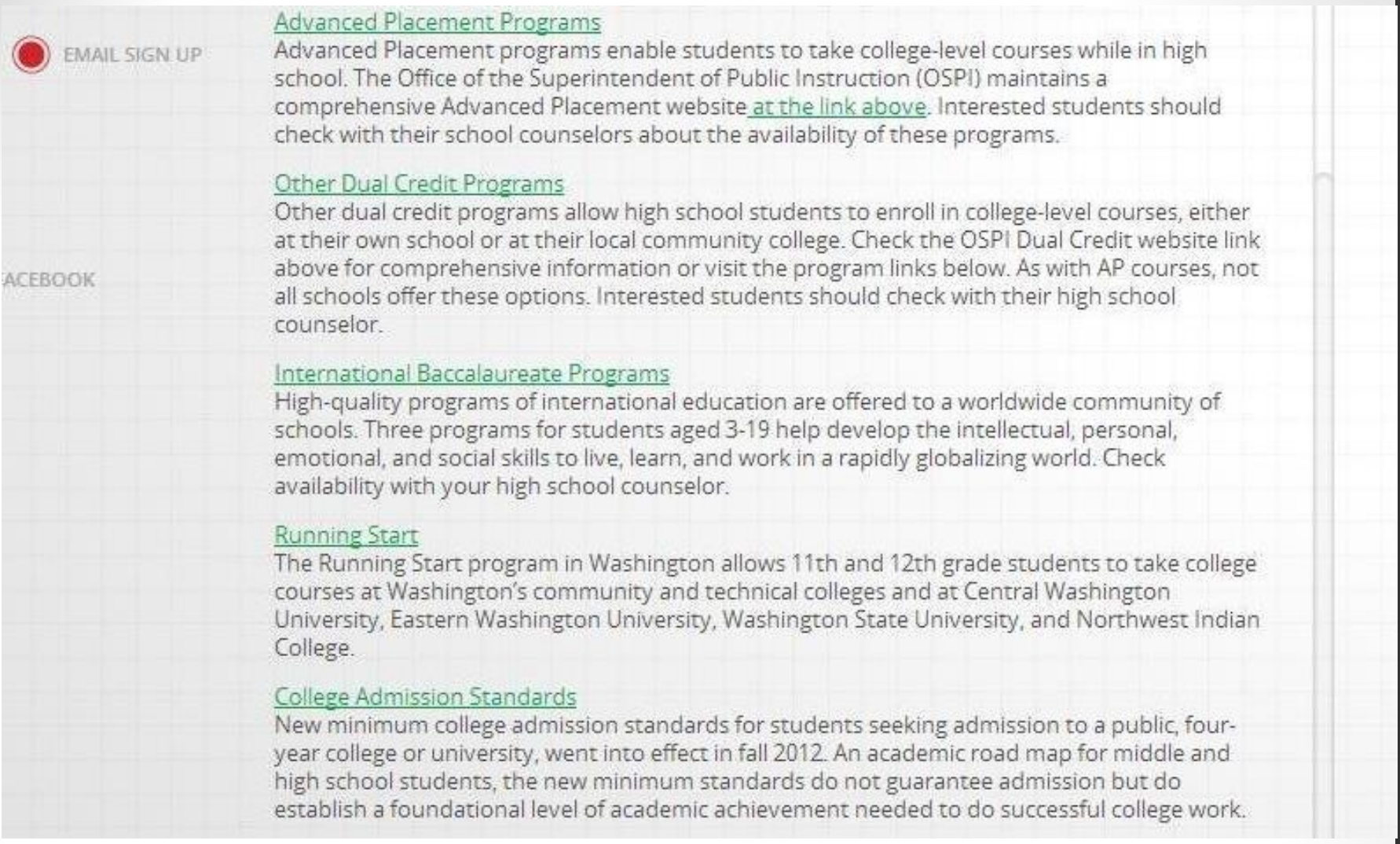
*Preliminary number as cohort deadline has not passed.

Financial Aid Resources

Tools for Families & Counselors

- Workbooks at www.fsa4counselors.ed.gov
- MyFSA for students with savings calculator at www.studentaid.gov
- College Score Card compares “net price” loan default and median borrowing at www.whitehouse.gov
- Additional resources www.nasfaa.org/counselors/Resources_for_Counselors.aspx

theWashboard.org



Minimum College Admission Standards (MCAS)& College Academic Distribution Requirements (CADR)

http://readysetgrad.org/#12th-grade/ready/what-you-need-know

What's Next on Ready Set Grad?

Ready, Set, Grad marketing campaign

- Seattle-based marketing firm contracted to plan and execute an 18-month marketing campaign, targeting counselors & other educators, students, and families.

Dual Credit look-up

- Drop-down menu feature to look-up and compare AP scores needed for credit at specific universities—Fall 2013

The Vault financial literacy curriculum

- Partnering with WSECU to provide interactive financial literacy curriculum—Late Fall 2013

ICRC Fall 2013

CREATING OPPORTUNITIES
WASHINGTON COMMUNITY AND TECHNICAL COLLEGES

Washington Community & Technical Colleges

One system. 34 colleges. Unlimited possibilities.

Scott Copeland
Policy Associate
Student Services , Education Division
scopeland@sbctc.edu

sbctc.edu ▪ checkoutacollege.com

ICRC Fall 2013

CREATING OPPORTUNITIES
WASHINGTON COMMUNITY AND TECHNICAL COLLEGES

Research Report No.13-5

The Role of Transfer in the Attainment of Baccalaureate Degrees at Washington Public Bachelor's Degree Institutions

Class of 2011

August 2013

Report Link

ICRC Fall 2013

CREATING OPPORTUNITIES
WASHINGTON COMMUNITY AND TECHNICAL COLLEGES

Research Report No.13-6

Bachelor of Applied Sciences: Outcomes Evaluation

August 2013

Report Link

ICRC Fall 2013

CREATING OPPORTUNITIES
WASHINGTON COMMUNITY AND TECHNICAL COLLEGES

CTC Transfers 2012-13

Public BI's (unofficial)	10,000+
+Western Governors University	1,826
Washington Independent BI's	1,900+
Portland State Univ. and U/Idaho	259
University of Phoenix	1,411

CREATING OPPORTUNITIES
WASHINGTON COMMUNITY AND TECHNICAL COLLEGES

Transfer Degree Inventory

Effective 2009, technical colleges may also offer transfer degrees in selected fields in support of professional baccalaureate work.

Bellingham , Clover Park, Lake Washington , and **Renton** offer DTA/MRP's

Transfer Link

(Scroll to bottom of page for *Transfer Degree Inventory)*

ICRC Fall 2013

CREATING OPPORTUNITIES
WASHINGTON COMMUNITY AND TECHNICAL COLLEGES

Applied Baccalaureates

Bellevue College
- Bachelor of Applied Science in Radiation and Imaging Sciences
- Bachelor of Applied Arts in Interior Design
- Bachelor of Science in Nursing (RN to BSN)
- Bachelor of Applied Science in Healthcare Technology and Management
- Bachelor of Applied Science in Information Systems & Technology

Centralia College
- Bachelor of Applied Science in Applied Management

Columbia Basin College
- Bachelor of Applied Science in Applied Management
- Bachelor of Applied Science in Project Management
- Bachelor of Applied Science in Cyber Security

Green River Community College
- Bachelor of Applied Science in Information Technology: Network Administration and Security

Lake Washington Technical College
- Bachelor of Technology in Applied Design

North Seattle Community College
- Bachelor of Applied Science in International Business

Olympic College
- Bachelor of Science in Nursing (RN to BSN)

Peninsula College
- Bachelor of Applied Science in Applied Management

Seattle Central Community College
- Bachelor of Applied Behavioral Science

South Seattle Community College
- Bachelor of Applied Science in Hospitality Management
- Bachelor of Science in Professional Technical Teacher Education

CREATING OPPORTUNITIES
WASHINGTON COMMUNITY AND TECHNICAL COLLEGES

SBCTC Transfer Responsibilities

ICRC, ARC, ATC, WCHSCR
Scott Copeland
Policy Associate, Student Services
Scott Copeland

JTC and IC
Director, Student Services and Transfer
Vacant

Research Report No. 13-5

The Role of Transfer in the Attainment of Baccalaureate Degrees at Washington Public Bachelor's Degree Institutions Class of 2011

August 2013

Background

The *Role of Transfer* study is an update to two previous studies on the graduating classes of 2001 and 2006. The former was completed by the State Board for Community and Technical Colleges (SBCTC).[1] The latter study focused on similar questions for students who earned their first bachelor's degree as graduates of the Class of 2006, and was completed by the Washington State University Social and Economic Sciences Research Center (SESRC) under contract to the Higher Education Coordinating Board (HECB).[2]

As the case with the previous reports, a steering group for state level input and a technical workgroup of research specialists (see Appendix A) at Washington's public colleges and universities assisted in questions for the data during the study. The report focuses exclusively on Washington's public baccalaureate degree universities.

About the Data

The source of data for the system is the SBCTC Data Warehouse for community and technical college (CTC) enrollments, and Public Centralized Higher Education Enrollment System (PCHEES) for the university records as stored in The Mutual Research Transcript Exchange (MRTE+) data system.[3] MRTE+ links student unit records from the CTCs and the public four year institutions in Washington. Overall data quality allowed for deep and rich analyses for student enrollments, transcripts, and completions.

The CTC data includes enrollment records from the 2004-05 through to the most current complete academic year. The university data begins in 2007-08.

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[1] The first study can be found at:
http://www.sbctc.ctc.edu/docs/data/research_reports/transfer/2003june_role_of_transfer.doc.

[2] The second study can be found at:
http://www.wsac.wa.gov/sites/default/files/HECBTransferStudyFINAL.pdf.
Note that the Washington 'Student Achievement Council' (WSAC) has replaced the HECB.

[3] The original Mutual Research Transcript Exchange was created in 2000 by Loretta Seppanen, (SBCTC) and Nina Oman (then of the University of Washington). MRTE+ was restarted with PCHEES data provided by the Education Research Data Center (ERDC).

For information about the report contact:
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Phone: 360-704-1019; email :dkaikkonen@sbctc.edu
Washington State Board for Community and Technical Colleges
TDD 800-833-6388

Previous data issues caveated in the last report are not present in the MRTE+ data. For example, the 2009 study did not have credits earned at the four year institutions. MRTE+ reports both previous credits transferred and credits earned for bachelor's degree completion. It identifies whether these credits were earned at the degree granting or another institution. This allows for more accurate analysis than the 2009 study for two significant issues: how to identify transfer students at entry point and how to determine total credits earned in completion of the bachelor's degree. However, because data sources are different from earlier versions of the study, precise trend analyses should be qualified. Going forward, iterations of this report will be based on a stable data source.

Study Definitions

Type of Student/Transfer Status

All 2011 bachelor's degree graduates were classified as being "direct entry," "CTC transfer," or "other transfer" based on the credits and credentials they brought with them when they first entered a public bachelor's degree institution. The criteria used for classifying the graduates are described more completely in Appendix D.

Majors

Student majors were grouped to simplify the analysis into one of seven categories. In cases where students earned more than one degree, their degrees were grouped and reported in the analysis, which provided some duplication. See Appendix C for a complete listing of the CIP codes within each major grouping.

Study Population

This report is based on the records of 20,499 students who earned a bachelor's degree as graduates of the Class of 2011. The study population includes all students who earned a degree from one of the six public bachelor's degree institutions or seven applied bachelor's degree institutions for whom transcript, demographic, and degree attainment data were available.

The study excludes international students, students without enough identifiable data in their record to create a match to the CTC system, and students not found in MRTE+ who earned a degree.

The 2013 Study – Key Questions

The study examines the graduating class of the public bachelor's degrees in 2010-11 (by gender, ethnicity, age, degree major, and institution type). Specifically, the study examines graduates in four parts:

1. By Four-Year Campus Type – What was the make-up of graduates at main campuses, branch campuses, university centers and community and technical college bachelor's degree programs?
2. By Transfer Status – How many bachelor's degree graduates entered four-year colleges directly? How many transferred from a Washington CTC? How many came through other paths?
3. By Pre-college Enrollments – What was the role of CTC pre-college English and math in preparing transfers and direct entry students to graduate with the bachelor's degree in 2011?

4. By Transfer Paths – What were the different transfer pathways delineated by the type of two-year degree CTC students received? How do these different pathways contribute to different bachelor's degree majors? How well do CTC transfer students perform compared to direct entry students on total credits earned to complete their bachelor's degree and senior year GPAs?

Selected Findings

1. **Transfer graduates are the majority of the baccalaureate graduating class of 2011. CTC transfers are the majority of those.**

    - Over half (51 percent) of all bachelor's degree graduates in the class of 2011 were transfer students.
    - This includes 40 percent who were CTC transfers. The definition of transfer is based upon previous credits transferred, previous credits earned at a CTC and/or a two-year degree earned.
    - Among the 49 percent counted as direct entry, half had transferred in credits from other institutions (less than 40 college credits) at entry, describing even a broader role for CTCs in the 2011 baccalaureate graduating class.

2. **CTC transfer is a substantial share of graduates in all majors, although the percent varies by campus type.**

    - Overall, CTC transfers were 40 percent of the 2011 graduating class. The percent of CTC transfers varied by campus type – 29 percent of research universities graduating classes, 37 percent of comprehensive regional classes, and 72-84 percent of branch campus, university center and CTC bachelor's degree classes.
    - CTC transfers graduated in all bachelor's degree majors in significant numbers. Of these graduates, CTC transfers comprised 51 percent of all education majors, 47 percent of business majors, 46 percent of health field majors, 40 percent of social sciences majors, 36 percent of liberal arts majors, and 35 percent of Science, Technology, Engineering and Mathematics (STEM) majors.

3. **Pre-college courses had a significant role preparing students to graduate in the 2011 class.**

    - Fifty-nine (59) percent of CTC transfer students completed remedial coursework at a CTC in English or math prior to progressing to a bachelor's degree (24 percent of all graduates).
    - For pre-college math, the percentage of students enrolled increased by age.
    - Forty-three (43) percent of CTC transfer STEM graduates and 53 percent of business graduates took pre-college math.
    - Students identifying as Hispanic, African American, and Native American had the highest rates of pre-college enrollments. Students as a whole from these groups were equally likely to start as direct entry or CTC transfer. However, the high participation in pre-college among CTC transfer students indicates that the availability of pre-college courses provided significant access for a segment of

students identifying as Hispanic, African American, and Native American who were less prepared and less likely to earn bachelor's degrees without this additional support.
- Pre-college preparation was also important for older students (those over age 25); another segment that CTC transfers significantly contributed to access and bachelor's degree completion.

4. Two-year degree paths proved efficient for CTC transfer graduates.

- The Direct Transfer Agreement (DTA) and the Major Related Pathways (MRP) in Business were the transfer paths chosen by 69 percent of CTC transfer bachelor's degree graduates. Statewide agreement for transfer to engineering, chemistry, and physics – the Associate of Science-Technology (AS-T) – was completed by four percent of transfers. Six percent of CTC transfers completed a technical degree.
- Overall, 79 percent of CTC transfers completed an associate degree.
- Graduates who completed associate degrees aligned with specific majors were very likely to complete a bachelor's degree in a related field:
    - Over eight in ten (83 percent) CTC transfers completing the Business DTA/MRP earned a bachelor's degree in business.
    - More than nine in ten (92 percent) CTC transfers completing an Associate in Science Track 1 or 2 completed a bachelor's degree in a STEM or health related major.
- Students earning AS-T Track 1 and Track 2 degrees were much more likely to enroll at research universities (81 percent and 72 percent, respectively) than students earning other degrees.
- Median credits earned for degree completion were comparable across all majors for CTC transfer and direct entry bachelor's degree graduates.
- Graduates earning Business DTA/MRP or Associate in Science Track 1 or Track 2 degrees needed to take fewer credits than those who did not use these specialized tracks.
- Senior year GPAs across all major degree fields were equivalent for CTC transfer and direct entry students.

Part One: Graduates by Campus Type

All institutions were grouped into five categories: research universities, branch campuses, regional comprehensive universities, university centers, and CTC bachelor's degrees.

Figure 1

Categorization of College Campuses

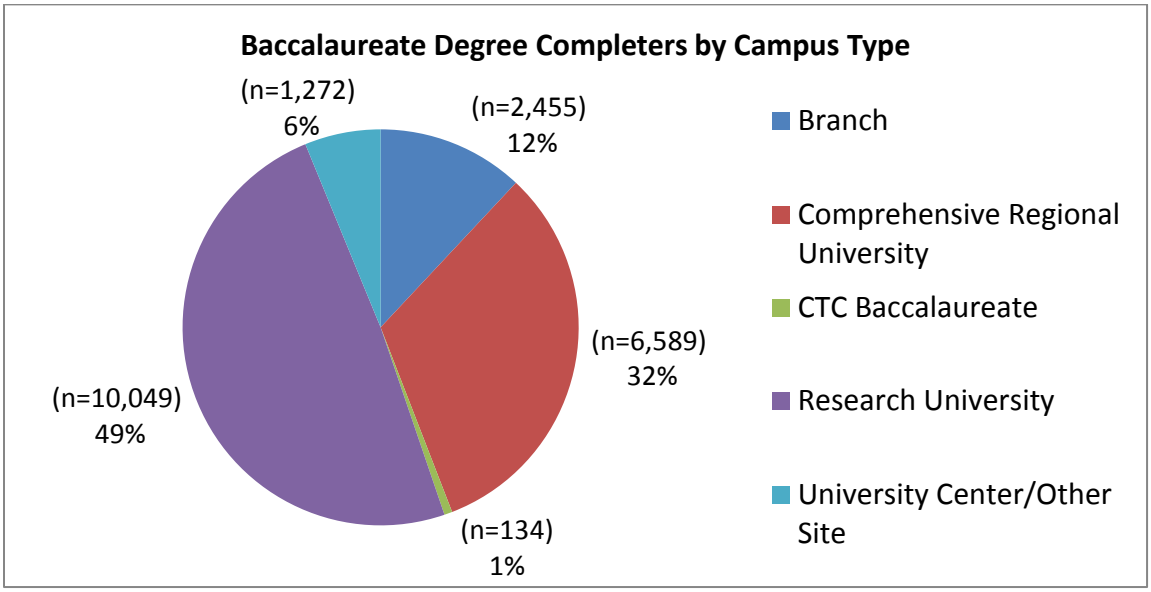
	Research Universities	Comprehensive Regional Universities	Branch Campuses	University Centers[4]	C TC Bachelor's degree
University of Washington	Seattle		Tacoma, Bothell	Other sites	
Washington State University	Pullman		Spokane, Tri-Cities, Vancouver	Distance and other sites	
Central Washington University		Ellensburg		Other sites	
Eastern Washington University		Cheney		Other sites	
The Evergreen State College		Olympia		Other sites	
Western Washington University		Bellingham		Other sites	
Community and Technical Colleges					Bellevue, Columbia Basin, Lake Washington, Olympic, Peninsula, Seattle Central, South Seattle[5]

This report is based on the records of 20,499 students who earned a bachelor's degree as graduates of the Class of 2011. Almost half (49 percent) of these students graduated from the main campus of a research university and about one third (32 percent) were from a regional comprehensive university. Twelve (12) percent of the graduates were from the branch campuses; another six percent graduated from university centers. One percent graduated from a CTC bachelor's degree institution.

[4] Centers included programs offered by public baccalaureate institutions at various off-site locations and included WSU distance learning enrollments. See Appendix B for a list of all centers.

[5] These colleges had applied baccalaureates in 2011. An additional three colleges were approved to offer applied baccalaureates at the time this report was written.

Figure 2



Graduates by Major

Degrees were grouped into seven categories. All degrees awarded were counted. The total number of degrees awarded was 21,281. Seven hundred and eighty-two (782) students earned double major degrees. The largest category was arts and letters, followed by social science and STEM. The highest percentage of research university degrees was in STEM (29 percent) followed by social science (26 percent) and arts and letters (23 percent). Regionals awarded over one third (35 percent) of their degrees in arts and letters and 20 percent in social sciences. Branch campuses awarded 24 percent of their degrees in business and 20 percent in social sciences. University Centers awarded 29 percent of their degrees in education and 27 percent in business. CTC bachelor's degrees focused on arts and letters (38 percent), business (37 percent), and health fields (25 percent).

Figure 3

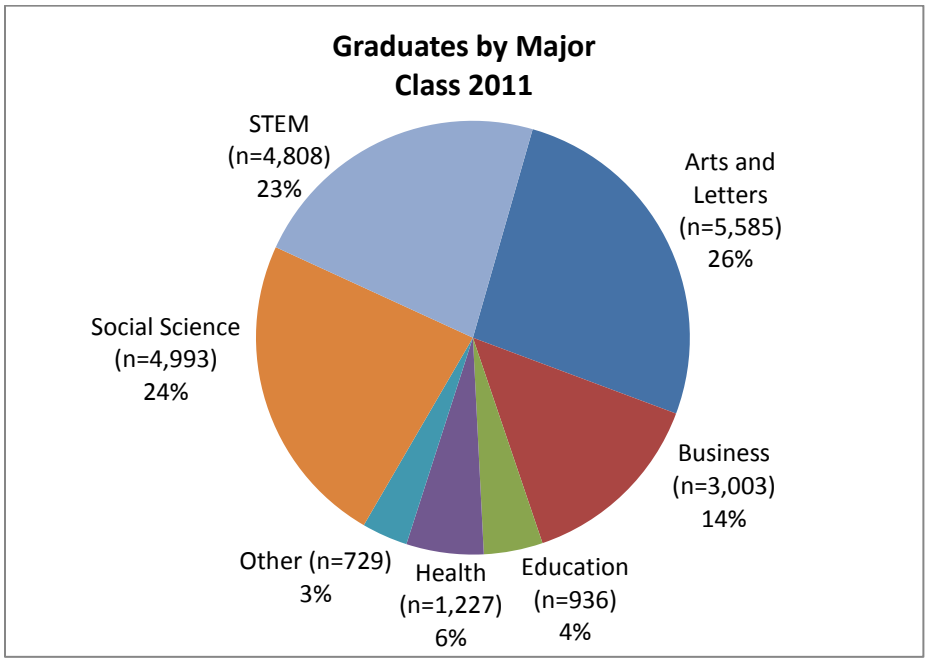
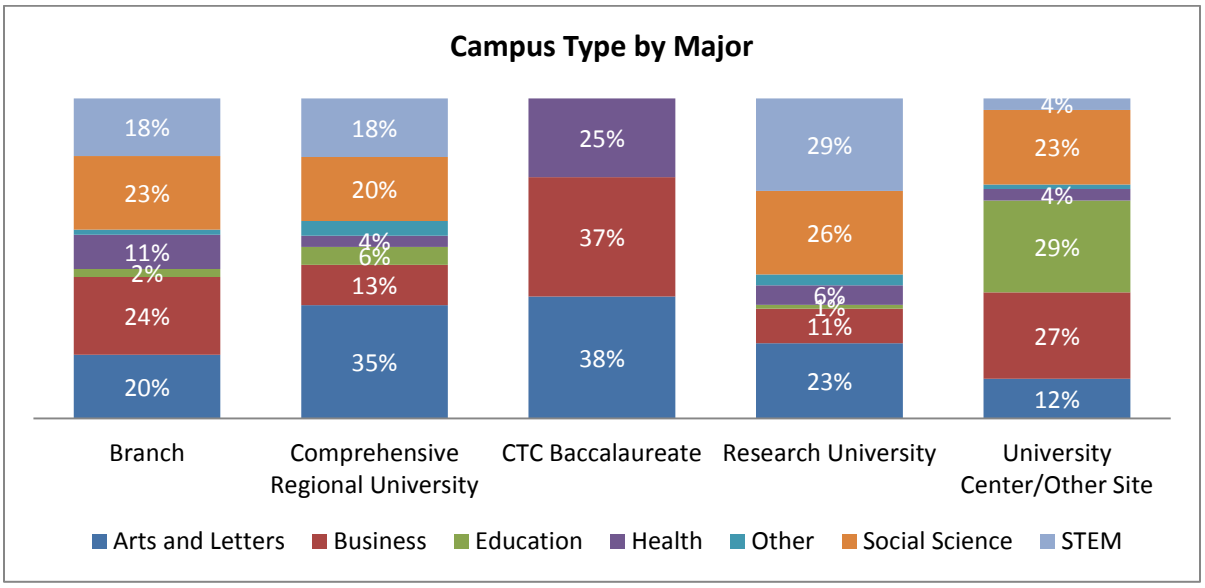


Figure 3.a
Degree Majors by Campus Type

Major	Branch	Comprehensive Regional University	CTC Baccalaureate	Research University	University Center/ Other Site	Total
Arts and Letters (n=5,585)	9%	43%	1%	45%	3%	100%
Business (n=3,003)	20%	28%	2%	38%	12%	100%
Education (n=936)	6%	41%	0%	13%	40%	100%
Health (n=1,227)	22%	19%	3%	52%	4%	100%
Other (n=729)	5%	43%	0%	50%	2%	100%
Social Science (n=4,993)	11%	27%	0%	56%	6%	100%
STEM (n=4,808)	9%	26%	0%	64%	1%	100%
Total (n=21,281)	12%	32%	1%	50%	6%	100%

Figure 3.b



Graduates by Race/Ethnicity, Gender, Age and Campus Type

This section describes the race/ethnicity, gender, and age of bachelor's degree graduates. Data are presented first in Figure 4 by campus type to show the percent of degrees earned by a group by campus type. Then in figure 4.a, the second view, the chart presents race/ethnicity by campus type. This chart shows the self-reported race/ethnicity of graduates disaggregated by the type of campus where they earned their degree. Each graduate is counted for each race and ethnic group reported and may be counted more than once.

Graduates' Self-Reported Race/Ethnicity

Data are presented first in Figure 4 by campus type to show the percent of degrees earned by a group by campus type. Then in figure 4.a, the second view, the chart presents race/ethnicity by campus type. This chart shows the self-reported race/ethnicity of graduates disaggregated by the type of campus where they earned their degree. Each graduate is counted for each race and ethnic group reported and may be counted more than once.

Figure 4 shows that research universities have the highest percentage of students of color. This is largely due to the substantial share (19 percent) of students identifying as Asian at these campuses. University Centers have the highest proportion of students identifying as Hispanic.

Figure 4
Campus Type by Student Reported Race/Ethnicity

Campus Type	Asian/Pacific Islander	African American	Native American	Hispanic	Multi-racial	White	Unknown
Branch (n=2,464)	14%	4%	1%	6%	2%	69%	5%
Comprehensive Regional University (n=6,561)	6%	2%	2%	5%	2%	77%	6%
CTC Baccalaureate (n=134)	11%	4%	1%	6%	1%	70%	6%
Research University (n=9,961)	19%	3%	1%	5%	1%	65%	6%
University Center/Other Site (n=1,311)	9%	6%	3%	8%	2%	67%	5%

The distribution of race/ethnicity by campus type (Figure 4.a) shows that 68 percent of graduates identifying as Asian received their degrees from a research university. Forty-six (46) to 47 percent of students identifying as white, Hispanic, and African American earned degrees from research universities and 31 to 37 percent earned degrees from regionals. Students identifying as Native American were the only group to have a higher percentage of graduates from regionals (45 percent) than from research universities (39 percent).

Figure 4.a
Student Reported Race/Ethnicity by Campus Type

Campus Type	Branch	Comprehensive Regional University	CTC Baccalaureate	Research University	University Center/Other Site
Asian/Pacific Islander (n=2,717)	12%	15%	1%	68%	4%
African American (n=602)	15%	26%	1%	47%	12%
Native American (n=317)	9%	39%	1%	38%	12%
Hispanic (n=1,094)	12%	30%	1%	47%	10%
Other, Multiracial (n=336)	14%	33%	1%	43%	9%
White (n=14,163)	12%	36%	1%	46%	6%
Unknown (n=1,204)	11%	33%	1%	49%	6%

Graduates by Gender

Females comprised over half (56 percent) of graduates at every campus type. The highest percentage of males by campus type was at research universities.

Figure 5

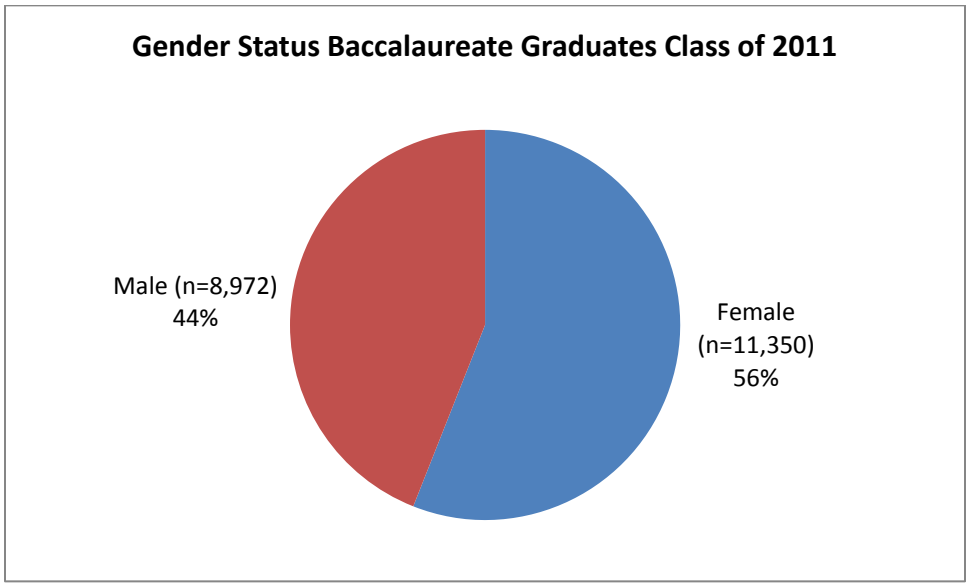
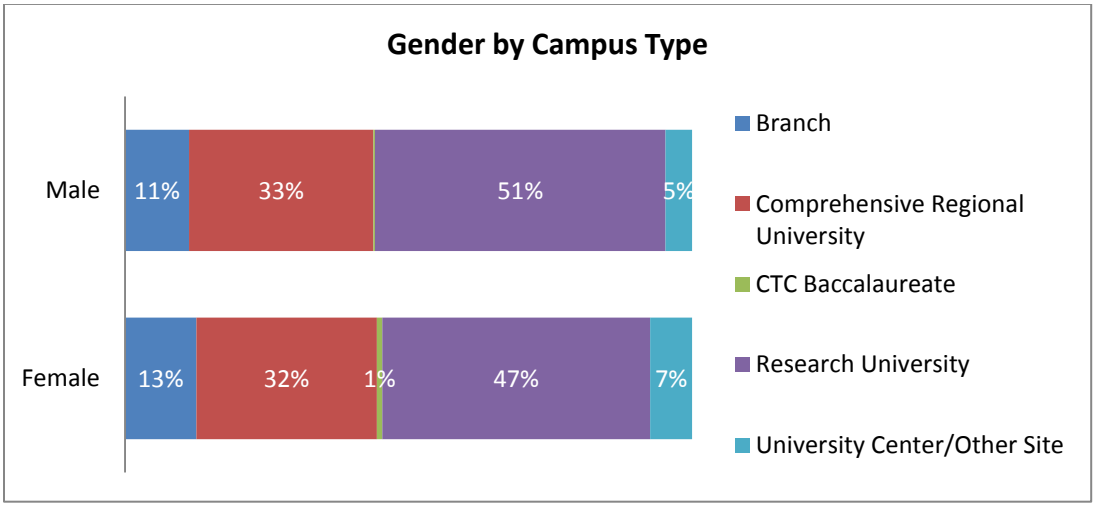


Figure 5.a
Campus Type by Gender

Campus Type	Female	Male
Branch (n=2,436)	58%	42%
Comprehensive Regional University (n=6,532)	55%	45%
CTC Baccalaureate (n=134)	80%	20%
Research University (n=9,956)	54%	46%
University Center/Other Site (n=1,264)	67%	33%
Total (n=20,322)	56%	44%

Figure 5.b



Graduates by Age

The majority (72 percent) of graduates were under 25 years. Younger students made up more than three-fourths of graduates at regional and research universities. Older graduates were more heavily concentrated at branches, university centers, and CTC bachelor's degrees.

Figure 6

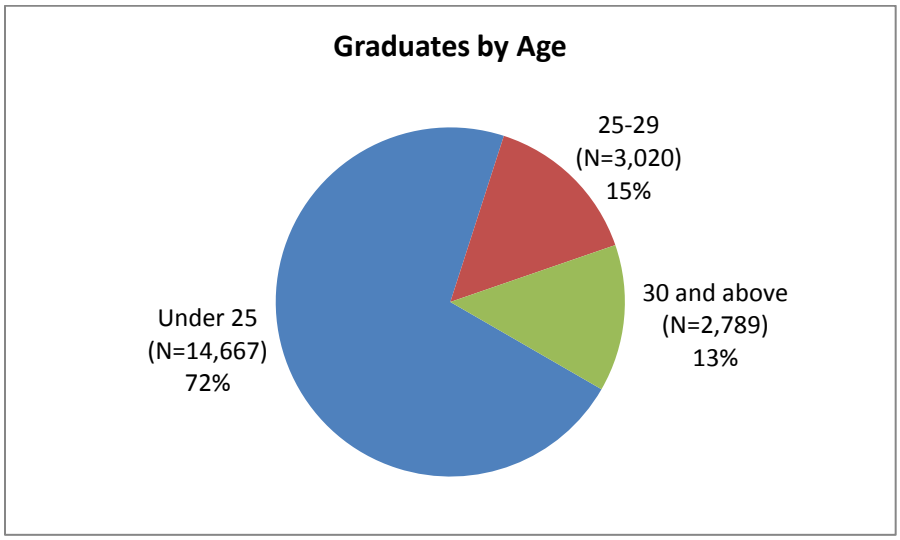
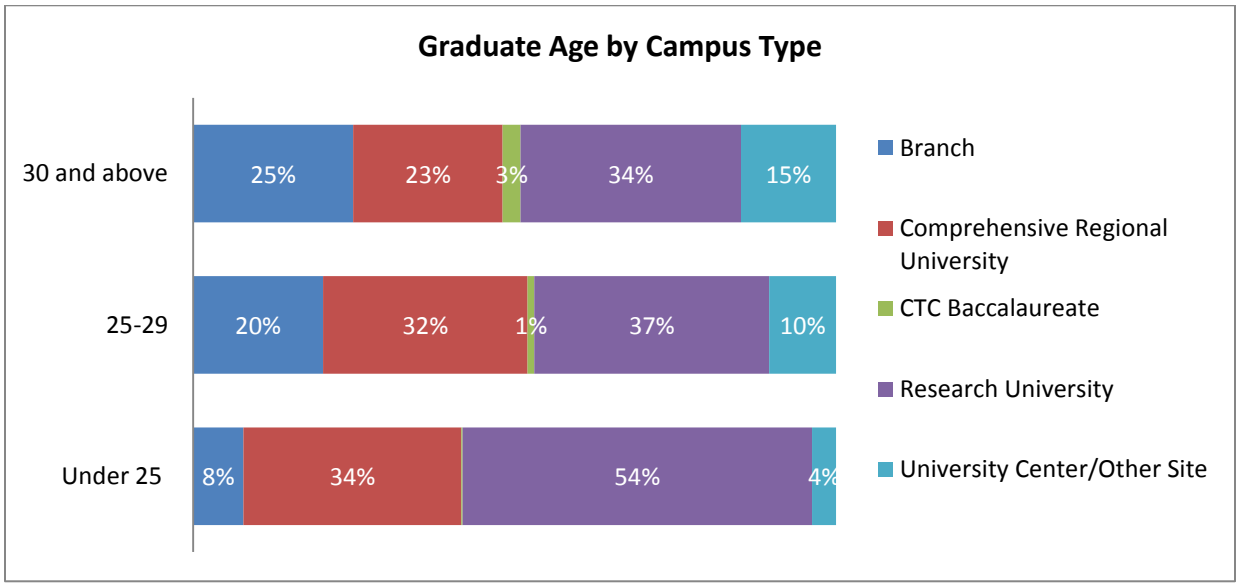


Figure 6.a
Campus Type by Age at Graduation

Campus Type	Under 25	25-29	30 and above
Branch (n=2,454)	47%	25%	28%
Comprehensive Regional University (n=6,582)	76%	15%	10%
CTC Baccalaureate (n=134)	18%	24%	58%
Research University (n=10,034)	79%	11%	10%
University Center/Other Site (n=1,272)	43%	25%	32%
Total (n=20,476)	72%	15%	14%

Figure 6.b



Part Two: Baccalaureate Graduates Entry Status

All graduates were classified as being a "direct entry," "CTC transfer," or "other transfer" based on the credits and credentials they brought with them when they first entered a public bachelor's degree institution. The criteria used for classifying the graduates are described more completely in Appendix D.

Over half (51 percent) of graduates in the class of 2011 were classified as transfer students (Figure 7). Transfer students included CTC transfers (40 percent) and other transfers (11 percent). Forty-nine (49) percent of bachelor's degrees were direct entry. About half of this group had previously transferred credits, however, less than the 40 credit threshold used to define a transfer student (Figure 8).

Figure 7

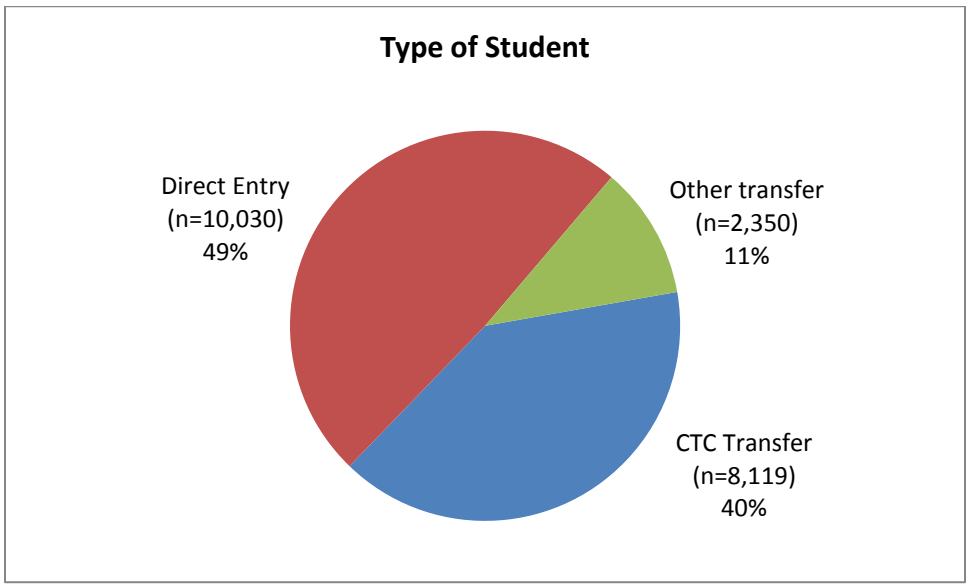
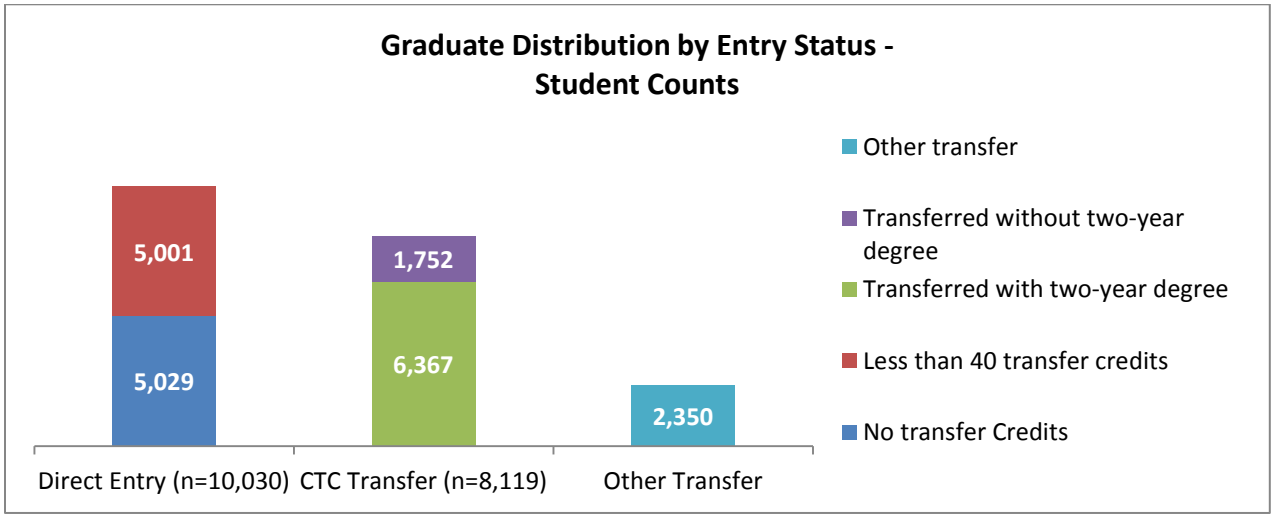


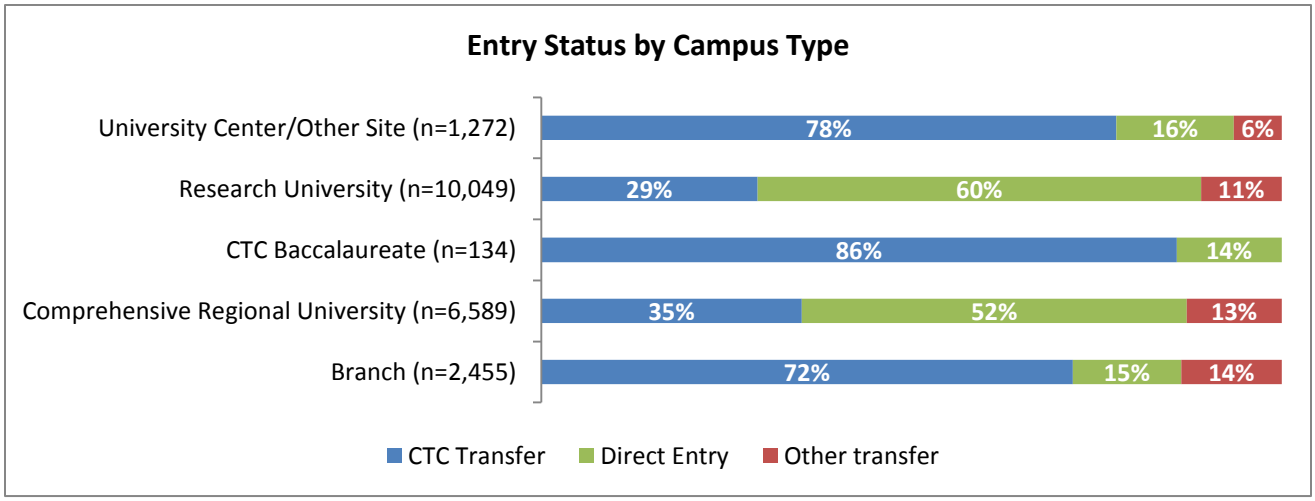
Figure 8



Entry Status by Campus type

Figure 9 below describes entry status by campus type. CTC transfers as a percent of graduates ranges from 29 percent of graduates at the research universities to 86 percent of graduates at the CTC bachelor's degrees. The number of CTC transfer graduates from university centers and branch campuses was on par with the total CTC transfer graduates in the regionals and nearly on par with the research universities.

Figure 9



Entry Status by Major

In Figure 10, CTC transfer students comprised at least one third of the graduates in each of the seven major categories (Figure 10). They comprised the largest share of graduates in education (51 percent), business (47 percent), and health (46 percent). They comprised 40 percent of social science graduates and 35 percent of STEM graduates.

Figure 10

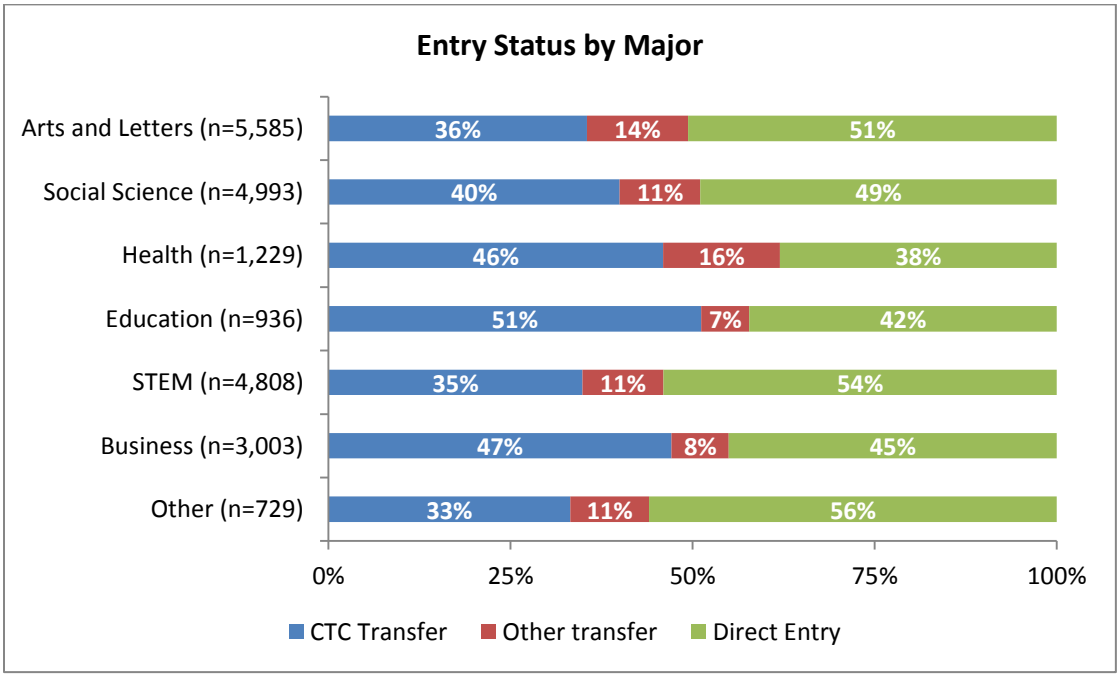
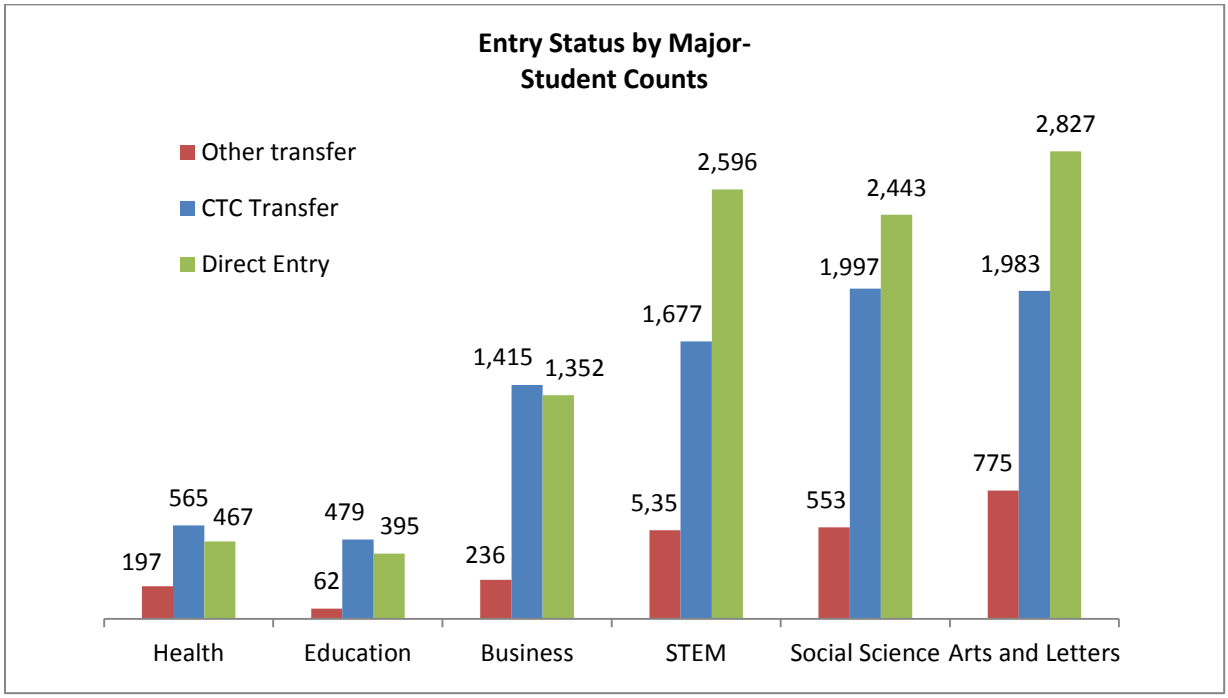


Figure 10.a

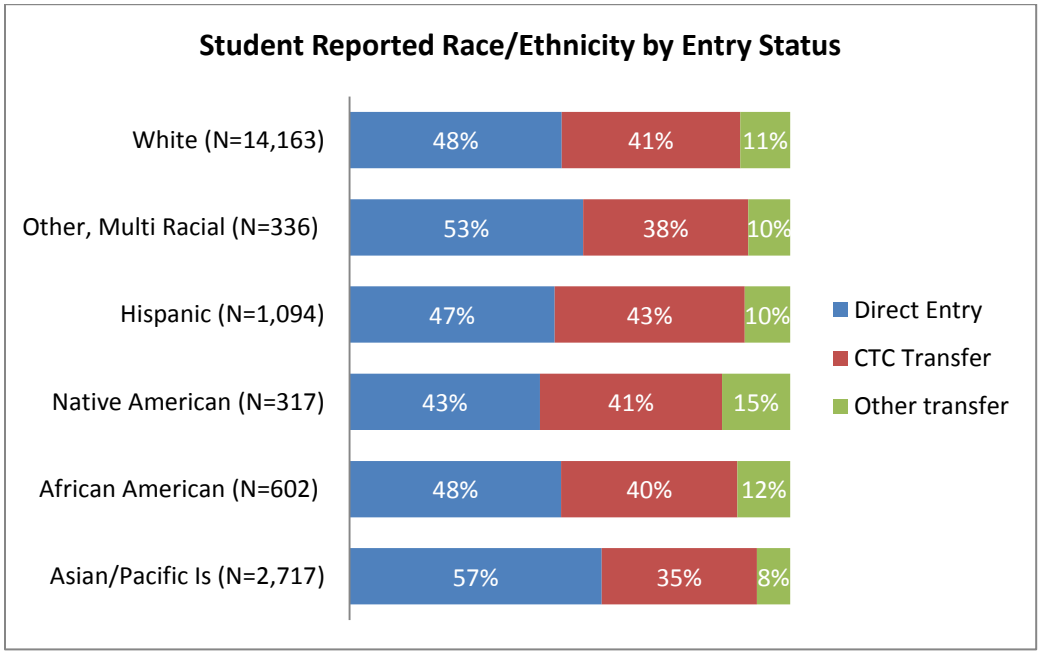


Entry Status by Student Characteristics

Race/Ethnicity

Over half of graduates reporting as Asian Pacific Islander and multi-race were direct entry students in their institutions. Graduates reporting as Native American had the smallest proportion of total graduates who were direct entry.

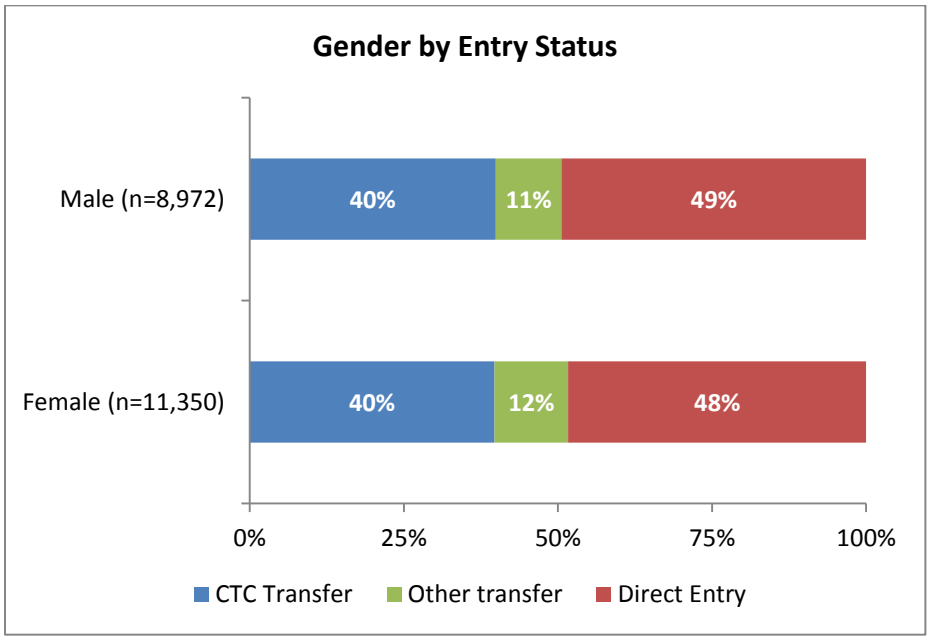
Figure 11



Gender

There is little difference in entry status by gender between males and females.

Figure 12



Entry Status by Age

CTC transfer students at entry are typically older than other graduates as shown in figure 13.

Figure 13

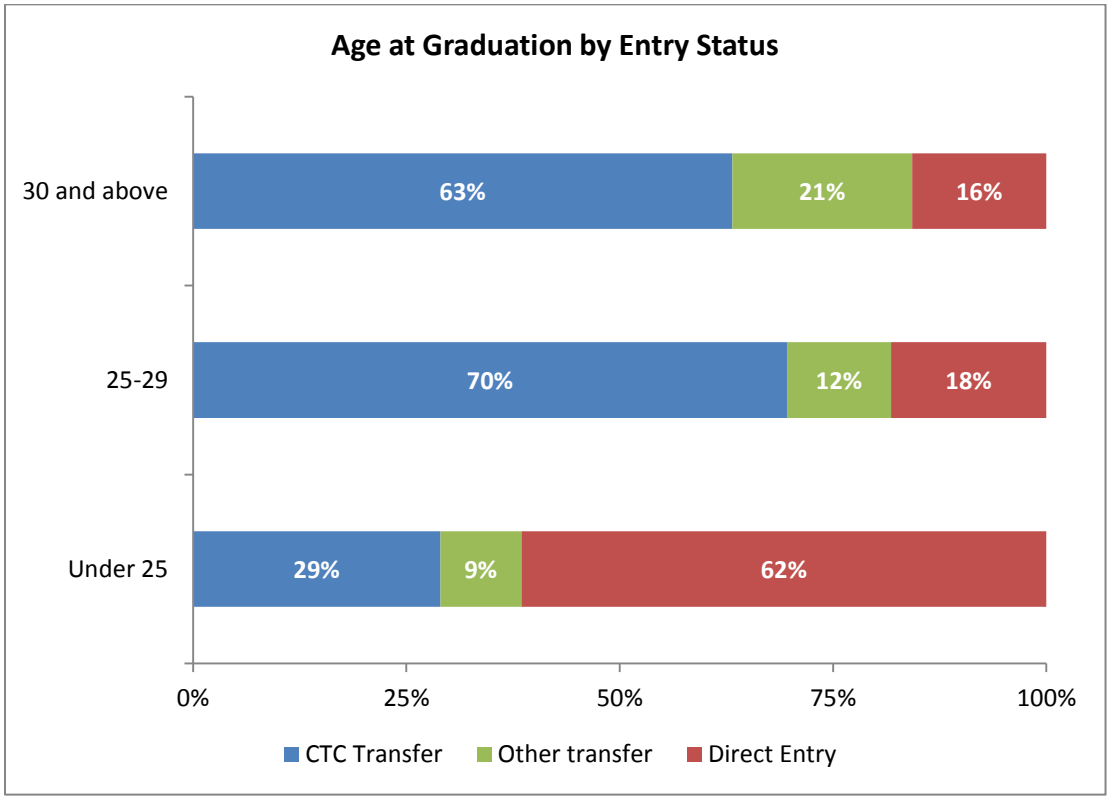
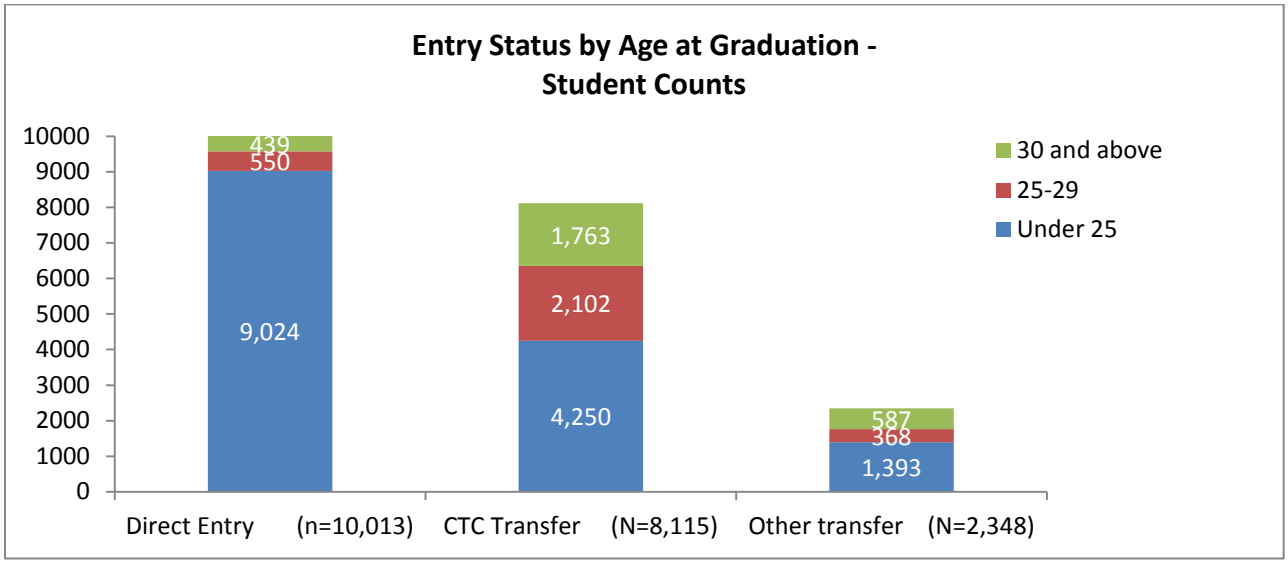


Figure 13.a

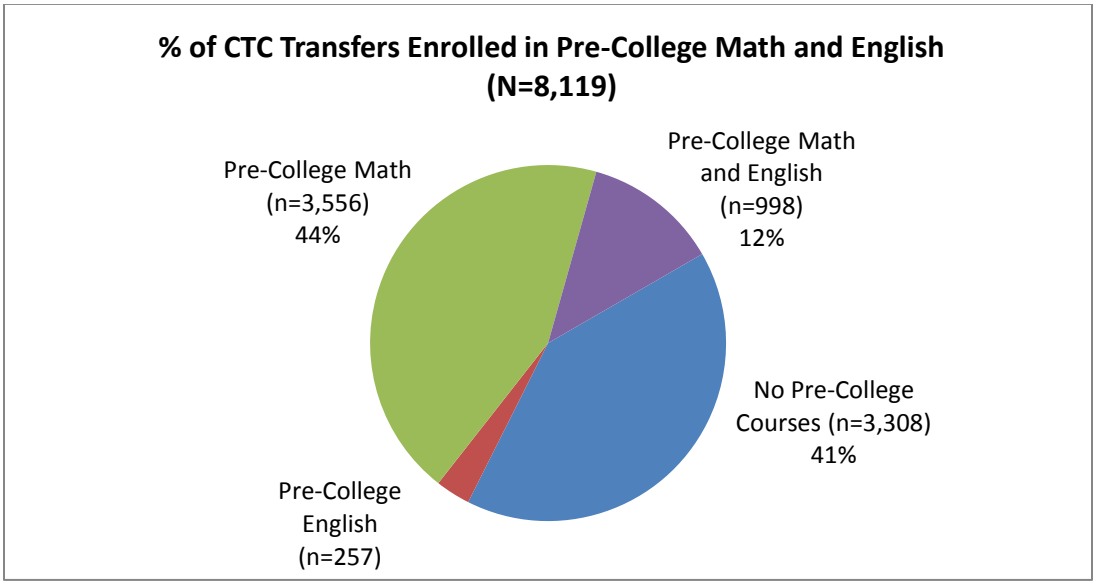

Entry Status by Age at Graduation - Student Counts
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
439
550
9,024
1,763
2,102
4,250
587
368
1,393
30 and above
25-29
Under 25
Direct Entry (n=10,013)
CTC Transfer (N=8,115)
Other transfer (N=2,348)

Part Three: Contribution of Community and Technical College Pre-College Preparation to 2011 Baccalaureate Graduates

Four thousand eight hundred eleven (4,811) CTC baccalaureate completers (nearly six in ten) enrolled in pre-college coursework at their CTC as part of their preparation to transfer.

In addition to the CTC transfer students reported above, there were nearly 900 students classified as "direct entry" and "other transfer" who also took pre-college courses at the CTCs: Forty-one (41) students took English, 786 took math, and 55 took math and English. This demonstrates the strong role played by the CTCs in supporting bachelor's degree students particularly with their math requirements.

Figure 14



Pre-College Enrollments by Baccalaureate Graduation Major and Campus Type

Pre-college course taking prior to transfer contributed substantially to graduates in all major fields (figure 15) and all campus types (figure 16).

Figure 15

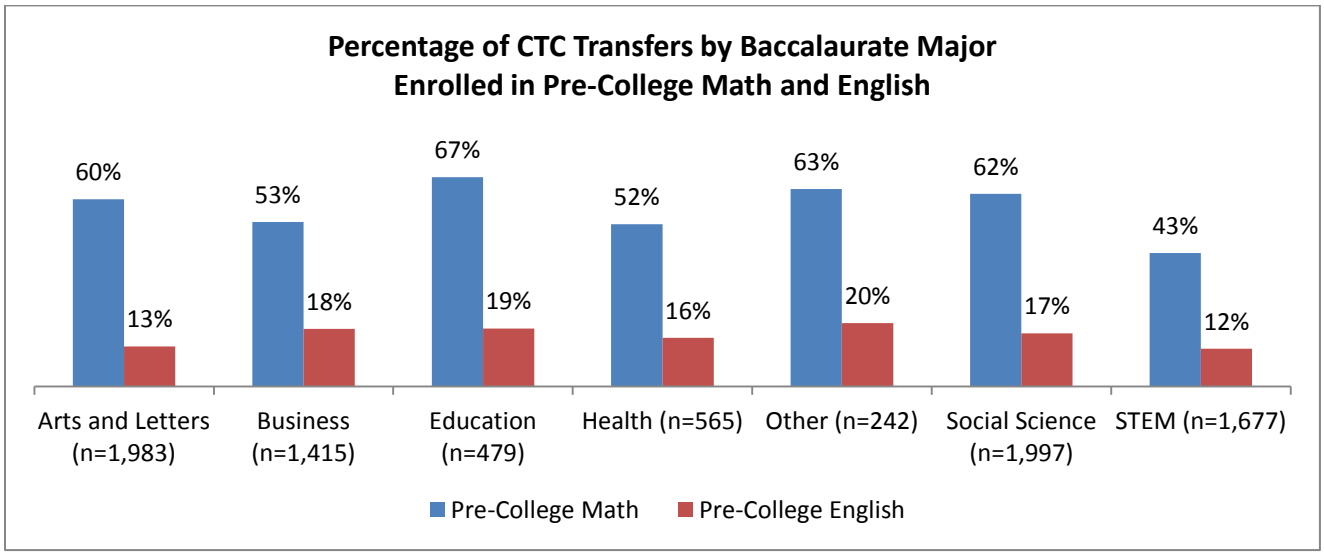
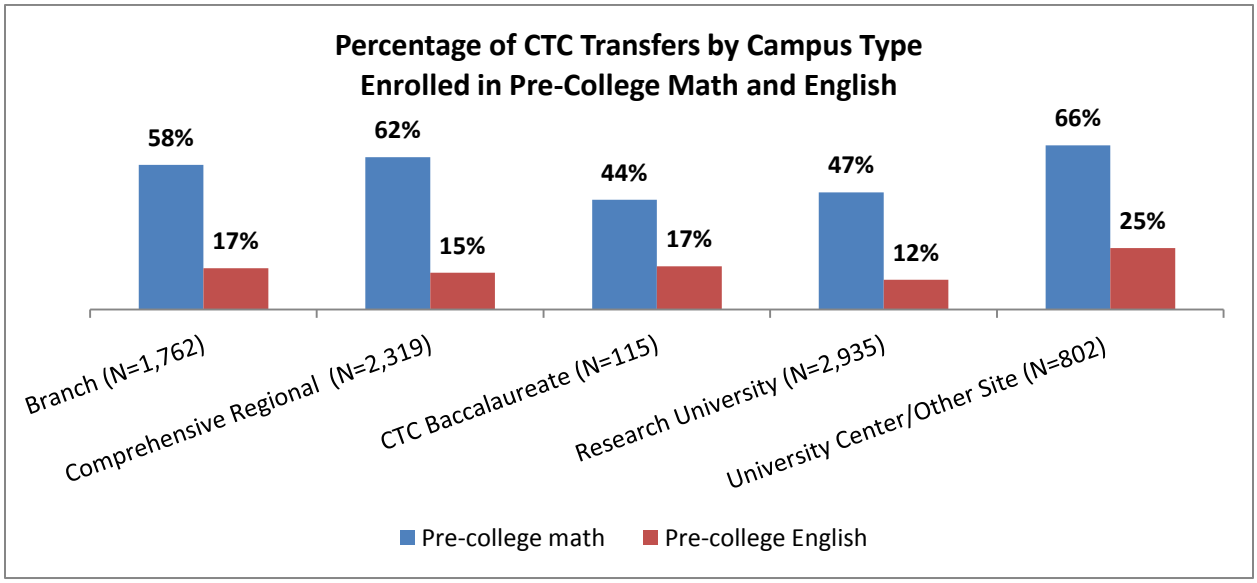


Figure 16



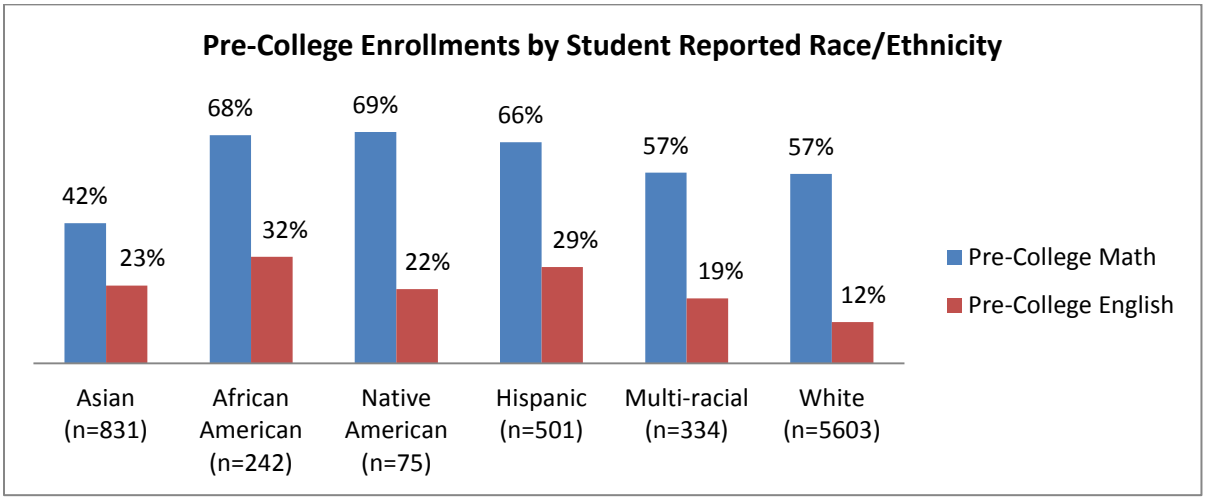
Characteristics of Pre-College CTC Transfer Students

Race/Ethnicity

Participation in pre-college courses was critical to preparing students in all race/ethnic groups.

Students identifying as Hispanic, African American and Native American had the highest rates of pre-college enrollments. Students from these groups were equally likely to start as direct entry or CTC transfer (Figure 11). However, the high participation in pre-college among CTC transfer students indicates that the availability of pre-college courses provided significant access for a segment of students who identified as Hispanic, African American, and Native American who were less prepared and less likely to earn bachelor's degrees without this additional support.

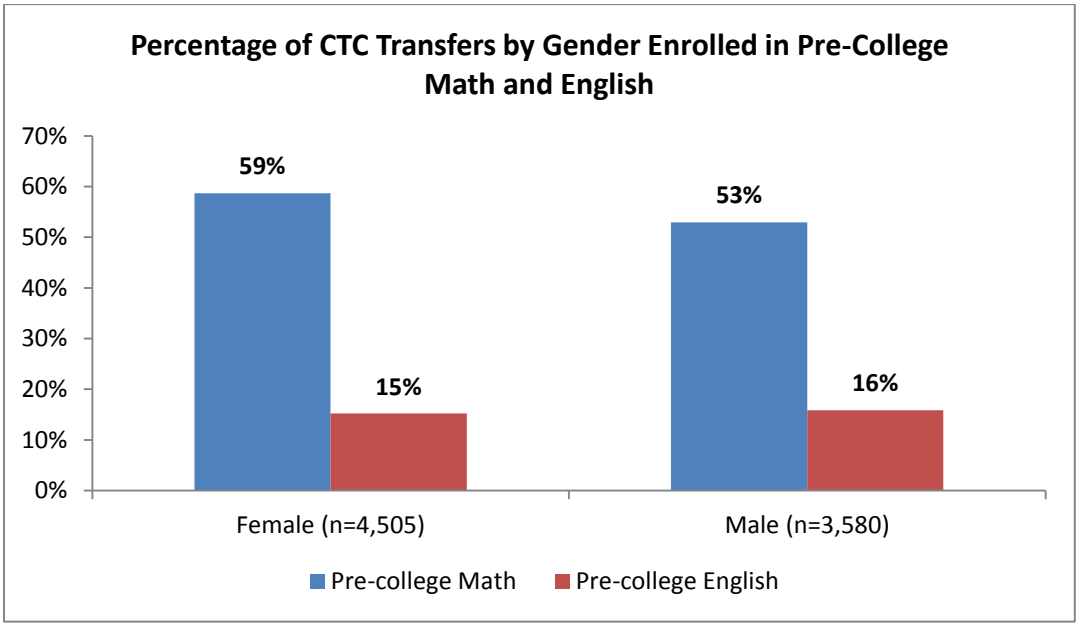
Figure 17



Gender

While over half of females and males enrolled in pre-college math, participation was higher for females. Males and females participated in pre-college English in about the same proportion.

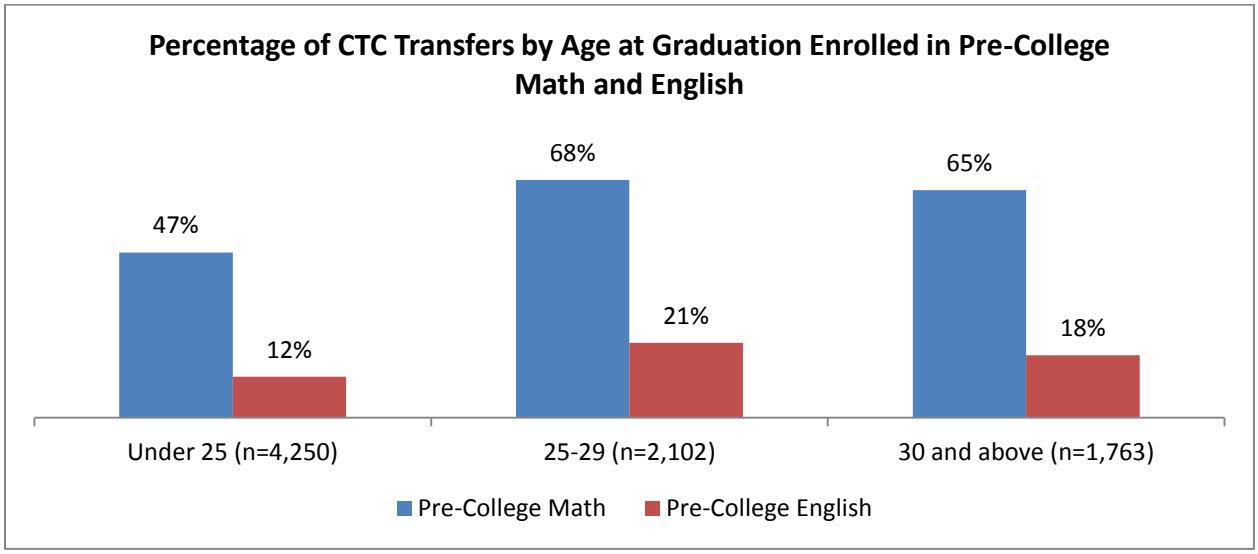
Figure 18



Age

Older graduates were more likely to have needed pre-college preparation prior to transfer than students under 25. However, there was substantial need in all age groupings.

Figure 19

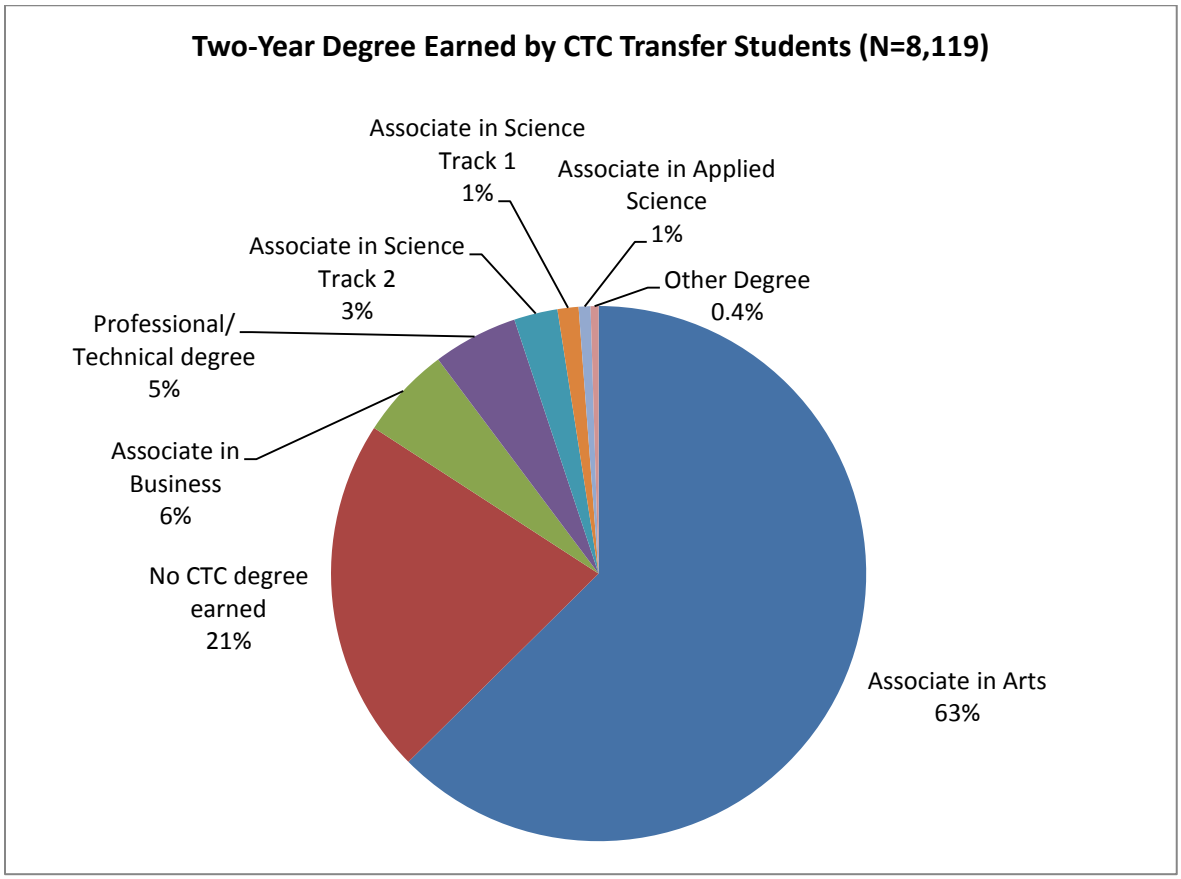


Part Four: CTC Transfer Pathways and How Transfer Graduates Perform Compared to Direct Entry Graduates

CTC Transfers by Two-Year Degree Type

Nearly eight in ten (79 percent) of CTC transfers earned their two year degree prior to transfer. The Direct Transfer Agreement (DTA) Associate degree (sometimes called the Associate in Arts, Associate in Arts and Sciences), was by far the most common degree transferred (63 percent). Another 10 percent earned specialized Associate in Arts and Science degrees. These degrees focus on specific transfer pathways for business, engineering, and sciences. Five (5) percent transferred with a professional technical degree. One (1) percent transferred with Associate in Applied Science degrees, professional technical degrees that include general education transfer required coursework. Finally, a very small portion (less than 1 percent) had transfer degrees in major ready pathways for education and pre-nursing.

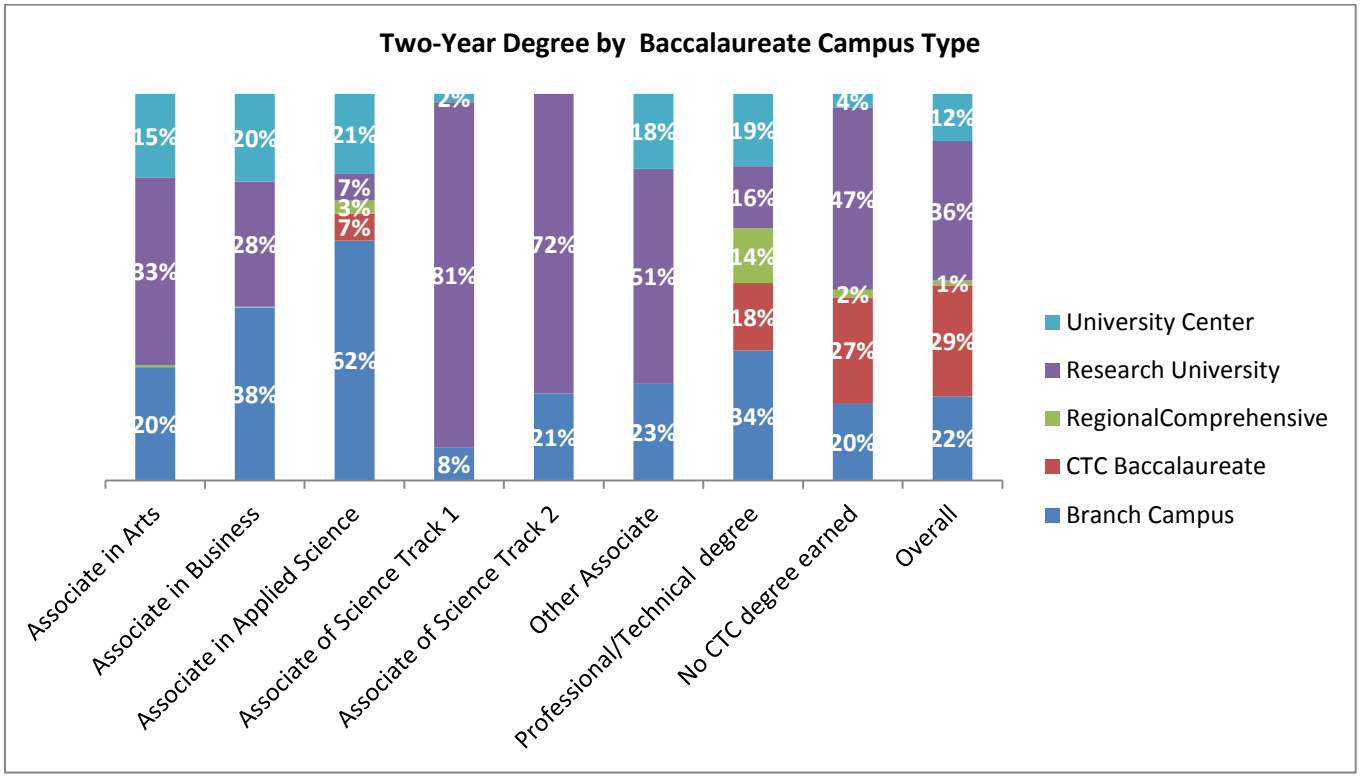
Figure 20



Two-Year Degree by Four-Year Campus Type

The DTA was successfully used by transfer students to all campus types. Associate in Science degrees were particularly significant for transfer to research universities. The largest portion of Associate in Applied Science degrees were used to transfer to branch campuses.

Figure 21



Two-Year Degree by Baccalaureate Major

The Associate in Arts - DTA degree was distributed across bachelor's degree majors. Specialized degrees were well targeted towards the articulated bachelor's degree major associated with it. Professional technical and transfer professional technical degrees were both focused on business and health. The former was also applied to the "upside down" degree, which rounds out the two year degree with general education coursework.

Figure 22

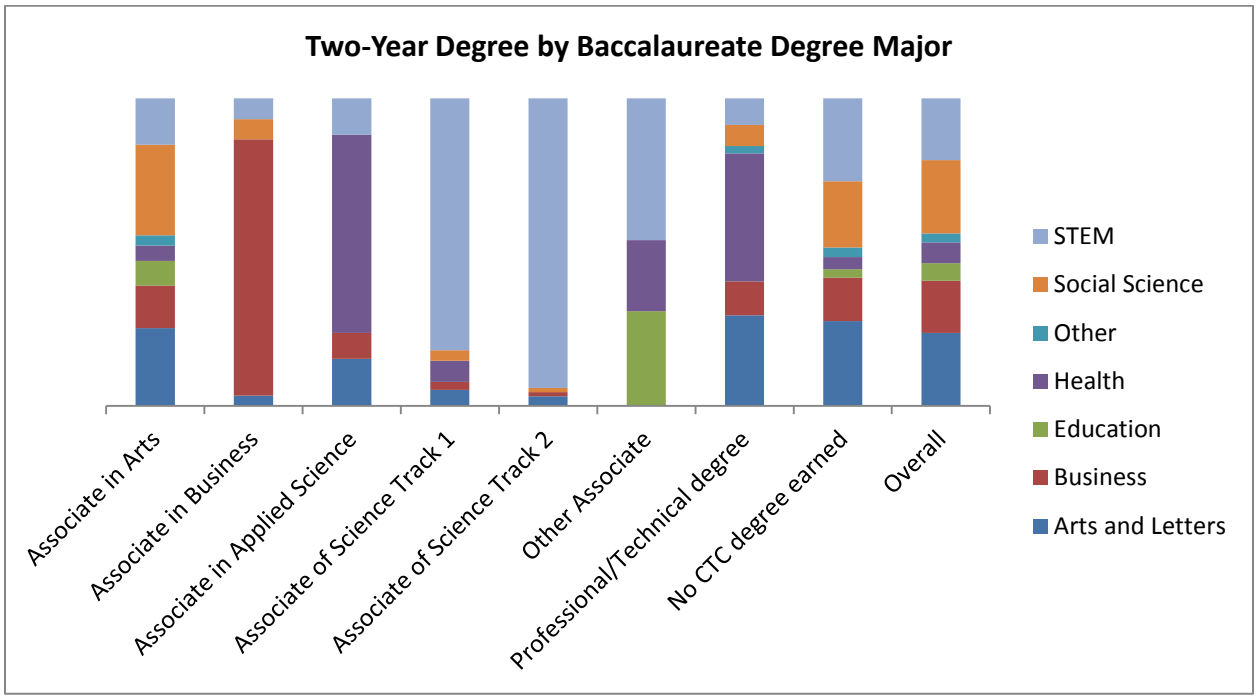


Figure 22.a
Two-Year Degree by Bachelor's Degree Major- Detailed Table

CTC Degree	Arts and Letters	Business	Education	Health	Other	Social Science	STEM
Associate in Arts (n=5,206)	25%	14%	8%	5%	3%	30%	15%
Associate in Business (n=461)	3%	83%				7%	7%
Associate in Applied Science (n=59)	15%	8%		64%			12%
Associate of Science Track 1 (n=116)	5%	3%		7%		3%	82%
Associate of Science Track 2 (n=225)	3%	1%				1%	94%
Other Associate (n=39)			31%	23%			46%
Professional/Technical degree (n=419)	29%	11%		42%	2%	7%	9%
No CTC degree earned (n=1,833)	28%	14%	3%	4%	3%	21%	27%
Overall (n=8,358)	24%	17%	6%	7%	3%	24%	20%

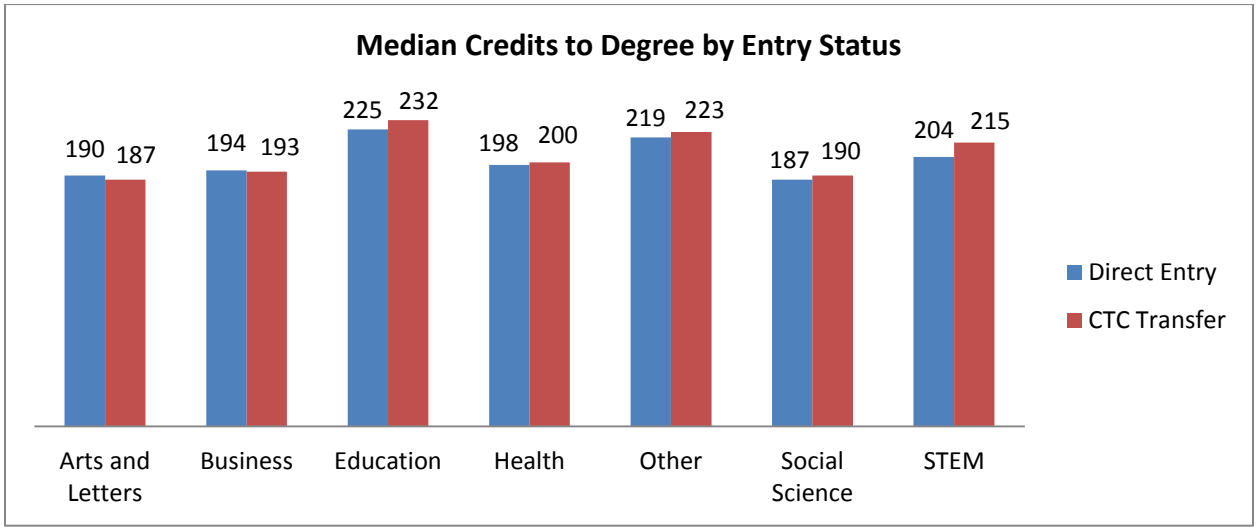
CTC Transfer Performance: Credits Earned For Bachelor's Degree Completion and Senior Year GP

This section describes CTC transfer and direct entry graduate performance along two dimensions: credits earned for the bachelor's degree and senior year GPA. Credits earned include "institutional credits earned" and "non-institutional credits earned" from PCHEES to create a "total credits to degree" field. An adjustment was made to the credits earned for all Washington State University campuses to normalize the semester credits to quarter credits. Graduates with more than one degree awarded were excluded from the analysis due to inconsistent application of credits to each completion record. Graduates from a CTC bachelor's degree institution were not included in the analysis of major pathways, nor were graduates who showed no total credits. Average senior GPA was compiled by averaging the term GPA of all terms where "bachelor's degree class standing" = senior.

All Graduates Median Credits Earned

Median credits earned for graduation was approximately the same for CTC transfer and direct entry graduates. The CTC transfer pathway judged by this dimension is equally efficient to direct entry for degree completion across degree majors.

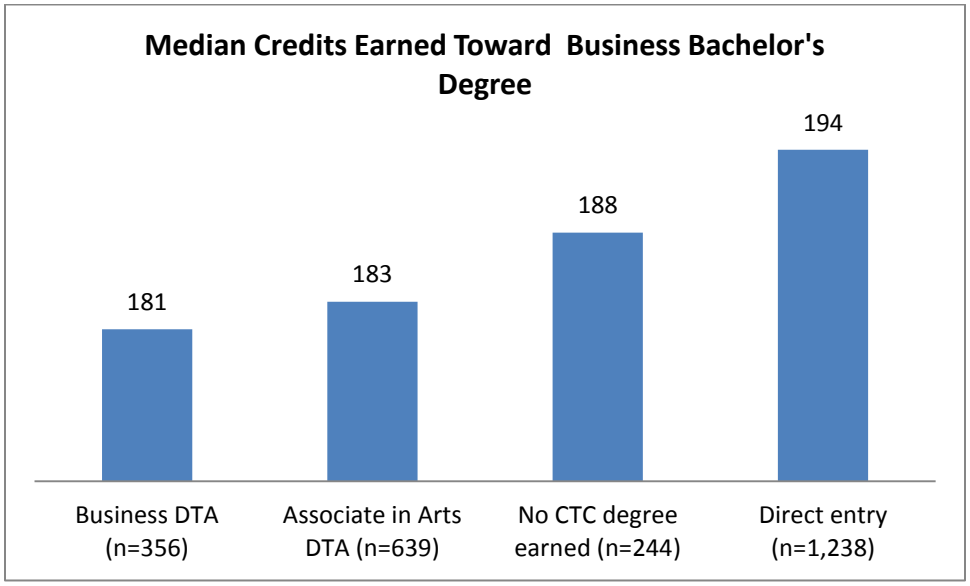
Figure 23



Baccalaureate Business Degree Median Credits Earned

For business majors, the specialized Business DTA degree was slightly more efficient than other CTC degrees, transferring without a degree, or even direct entry in terms of credits earned for degree completion.

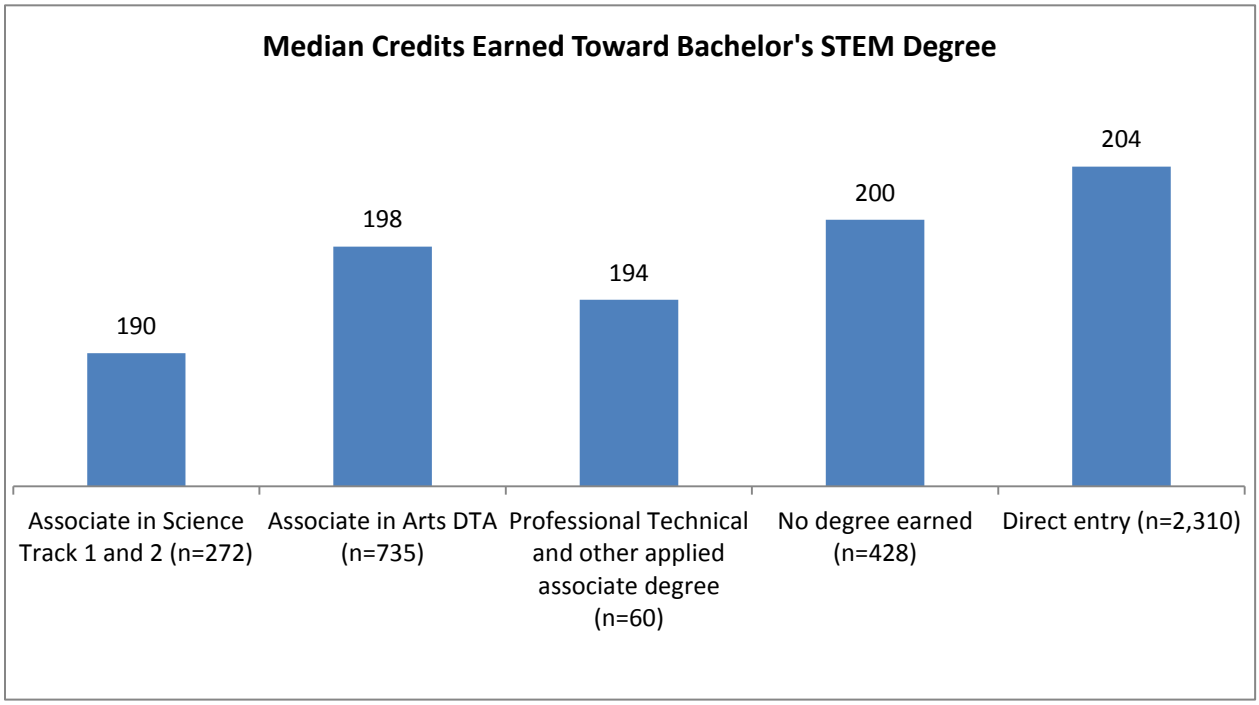
Figure 24



Baccalaureate STEM Graduates - Median Credits Earned

Associate in Science degrees were the most efficient pathway to Bachelor's degree completion based upon credits earned.

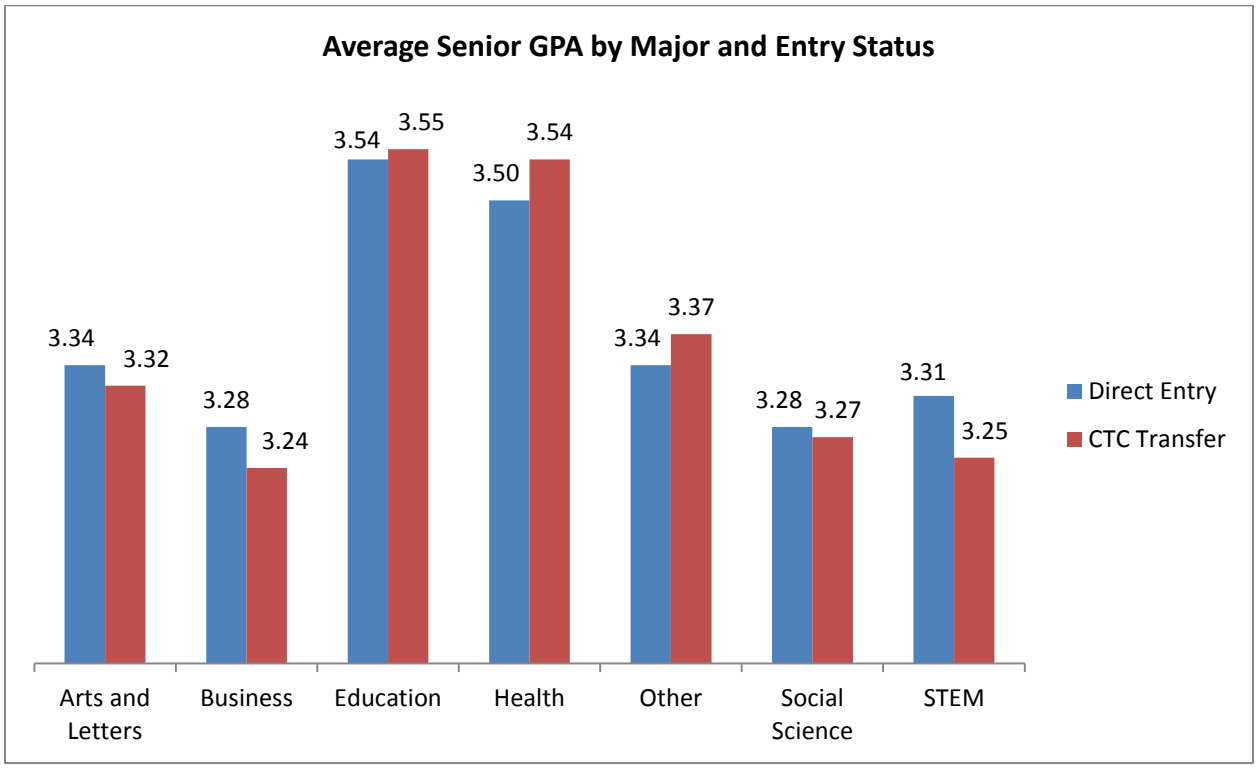
Figure 25



Senior Year GPA by Major

Senior year GPAs were similar for CTC transfer and direct entry students across majors.

Figure 26



Appendix A: Steering and Technical Workgroup Membership

Steering Group

Michelle Andreas, State Board for Community and Technical Colleges (SBCTC) Director of Student Services & Transfer Education

Darby Kaikkonen, SBCTC Policy Research Associate

David Prince, SBCTC Policy Research Director

Jan Yoshiwara, SBCTC Deputy Executive Director for Education Services

Wilma Dulin, CTC Research and Planning Commission President

Tomas Ybarra, CTC Instruction Commission President

Jane Sherman, Council of Presidents (COP) Associate Director for Academic Policy

Paul Francis, Council of Presidents (COP) Executive Director

Melissa Beard, Education Research and Data Center

Chadd Bennett, Independent Colleges of Washington Director Research and Publications

Randy Spaulding, Washington Student Achievement Council (WSAC) Director of Academic Affairs and Policy

Jim West, WSAC Associate Director Policy Planning and Research

Christy England-Siegerdt, WSAC Director Research and Planning

College and University Institutional Researchers

Patty James, Bellevue College

Colleen Gelatt, Central Washington University

Keith Klauss, Eastern Washington University

Hal Royaltey, Peninsula College

Kelley Cadman, Tacoma Community College

Laura Coghlan, The Evergreen State College

Nevena Lalic, University of Washington

Fran Hermanson, Washington State University

Corinna Lo, Washington State University

Chris Stark, Western Washington University

Appendix B: List of All Centers and the Related University Sites

Central Washington University	Big Bend Community College
	Edmonds Community College
	Edmonds Community College Partnership
	Everett Community College
	Green River Community College
	Highline Community College
	Pierce College Partnership
	Pierce Community College -- Fort Steilacoom
	Skagit Valley College
	U Center of N Puget Sound Partnership
	Wenatchee Valley College
	Yakima Valley College
Eastern Washington University	Bellevue College
	Clark College
	Clark College Partnership
	North Seattle Community College
	Pierce Community College -- Fort Steilacoom
	South Seattle Community College
	Spokane Community Colleges
	Spokane Falls Community College
The Evergreen State College	Grays Harbor College
	Muckleshoot Reservation
	Nisqually Reservation
	Northwest Indian College-Tulalip
	Port Gamble S'klallam Reservation
	The Evergreen State College-Tacoma
	U Center of N Puget Sound Partnership
University of Washington – Seattle and Bothell	U Center of N Puget Sound Partnership
Washington State University - Tri-Cities Campus	Walla Walla Community College
Washington State University - Vancouver Campus	Grays Harbor College
Western Washington University	Everett Community College
	North Seattle Community College
	Olympic College
	Peninsula College
	U Center of N Puget Sound Partnership

Appendix C: Majors Defined and Grouped

Each degree was associated with a Classification of Instructional Program (CIP) six digit code, which was used to identify a graduate's major. With the exception of some CIP codes for the STEM areas, most two-digit CIP's could be classified into a single major category. These categories were further grouped into clusters for the purposes of this report.

All bachelor's degree degrees earned were reported in the sections that counted total number of majors, even if a student earned two or sometimes three degrees. The first criteria for grouping majors came from the 2009 Role of Transfer study, Appendix 2. The criteria was applied first to all CIP codes, then the criteria for STEM degrees established in the dashboard reports from the Education Research and Data Center was applied. See below for all CIP codes earned by 2011 graduates and the major grouping assigned:

2 or 6-digit CIP code	Major Grouping for Report	CIP Title
01.	Other	Ag. & Natural Conservation
01.090.1	STEM	
01.10.01	STEM	
01.11.02	STEM	
01.11.03	STEM	
01.12.01	STEM	
03.	STEM	Ag. & Natural Conservation
04.	STEM	Engineering, CIS, & Architecture
05.	Arts and Letters	Humanities
09.	Arts and Letters	Communications
10.	Arts and Letters	Communications
11.	STEM	Engineering, CIS, & Architecture
13.	Education	Education & Teaching
14.	STEM	Engineering, CIS, & Architecture
15.	STEM	Engineering, CIS, & Architecture
16.	Arts and Letters	Arts & Letters
19.	Other	Ag. & Natural Conservation
19.05.01	STEM	
19.05.05	STEM	
22.	Other	Law
23.	Arts and Letters	Arts & Letters
24.	Arts and Letters	Humanities
26.	STEM	Science & Math
27.	STEM	Science & Math
30.01.01	STEM	Science & Math
30.08.01	STEM	Science & Math
30.11.01	Other	
30.15.01	STEM	
30.19.01	STEM	
30.20.01	Arts and Letters	Humanities
2 or 6-digit CIP code	**Major Grouping for Report**	**CIP Title**
30.24.01	STEM	Science & Math
30.99.99	Arts and Letters	Humanities
31.	Other	Ag. & Natural Conservation

38.	Arts and Letters	Humanities
40.	STEM	Science & Math
42.	Social Science	Psychology
43.	Social Science	Social Sciences- Applied
44.	Social Science	Social Sciences- Applied
45.	Social Science	Social Sciences- General
49.	Other	Trades
50.	Arts and Letters	Arts & Letters
51.	Health	Health
52.	Business	Business
54.	Social Science	Social Sciences- General
99.	Other	Unknown

Appendix D: Entry Status Definition

Students were given an entry status using the following criteria:

Code	Criteria
Direct Entry- no Transfer Credits	Previous Credits=0, no degree
Direct Entry< less than 40 Credits Transferred	Previous Credits <40, no degree
CTC Transfer with Two Year Degree	Has CTC Degree
CTC Transfer, no Degree	Previous Credits>=40, CTC credits>=20 , no degree
Other Transfer	Previous Credits>=40, CTC Credits <20, no degree

Based on the above, graduates were grouped into three categories of direct entry, CTC transfer, or other transfer for the comparisons within the report.

Research Report No. 13-6

Bachelor of Applied Sciences: Outcomes Evaluation

August 2013

Introduction

Community and technical colleges (CTCs) play an important role in producing baccalaureate degree graduates in Washington State. Baccalaureate degrees that build upon the professional-technical associate degree provide expanded opportunities for both graduates and employers by providing the upper-division coursework in an applied field. Programs developed at the CTCs provide a clear pathway for students who may be place-bound or have difficulty finding a transfer opportunity for their applied baccalaureate degree. The programs also help to address the gap found by some employers of successfully recruiting qualified applicants who have the job-specific technical skills as well as the skills learned through a baccalaureate program.[1] In addition to recruiting new personnel, BAS programs are beneficial to employees already working in a technical field who wish to be promoted to higher level management or specialized positions which may require a bachelor's degree.

The Washington State Board for Community & Technical Colleges (SBCTC) advocated for CTC applied baccalaureate programs because it would help:

- Meet state goals for increasing the total number of baccalaureate degrees awarded by 2019 to 42,400 per year. The community and technical college system will need to increase the number of students who transfer to a baccalaureate program, which includes increasing the number of applied baccalaureate programs at the CTCs.
- Expand the workforce mission of CTCs to serve the needs of local and state employers.
- Increase educational pathways for professional-technical associate graduates who have been limited in their ability to apply credits toward a bachelor degree. The workforce student population is comprised of a large portion of people of color, older working adults, and people (primarily women) who are place-bound with family responsibilities.

Applied baccalaureate programs originated from the 2005 Legislature passing E2SHB 1794, giving the State Board authority to select pilot programs at designated CTCs. Subsequently, the 2010 legislature passed Substitute House Bill 2655 giving the SBCTC authority to approve CTC applied baccalaureate degree programs. This removed the pilot status of the CTC applied baccalaureate programs.

As of the conclusion of academic year 2012-13, seventeen programs in ten colleges have been approved for applied baccalaureate degrees, with students enrolled in ten programs in eight colleges (seven programs are in development). The following evaluation describes the outcomes

[1] Workforce Training and Education Coordinating Board, *Employer Survey 2004*.

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Washington State Board for Community and Technical Colleges
TDD 800-833-6388

of students in the programs, such as enrollments and demographics over time, completions, and employment outcomes for students who have graduated and entered the workforce following their program. The ten programs described in this paper include:

- Bellevue College – Bachelor of Applied Science in Radiation and Imaging Sciences, 2007; Bachelor of Applied Arts in Interior Design, 2009; Bachelor of Applied Science in Health Care Technology and Management, 2011
- Centralia College – Bachelor of Applied Science in Applied Management, 2012
- Columbia Basin College – Bachelor of Applied Science in Applied Management, 2009
- Lake Washington Institute of Technology – Bachelor of Technology in Applied Design, 2009
- Olympic College – Bachelor of Science Nursing, 2007
- Peninsula College – Bachelor of Applied Science in Applied Management, 2007
- Seattle Central Community College – Bachelor of Applied Behavioral Science, 2009
- South Seattle Community College – Bachelor of Applied Science in Hospitality Management, 2007

Key Findings

Key findings for enrollments and graduates through 2013 show programs are growing by reaching out to their local communities. Employment and earnings for first graduates demonstrate strong gains made even more significant by occurring in the midst of the recession.

Programs are growing by meeting their local community needs:

- In 2013, colleges enrolled 475 full-time equivalents (FTE), 729 headcount enrollments. This is an increase from 77 FTES, 141 students in 2008, the first year that programs were offered.
- The number of BAS programs has increased from four to ten in the past six years.
- Throughout the recession, more students attended full-time.
- Student diversity in the BAS programs has increased over time and the gender gap is decreasing. Both populations of students who identify as African American and Hispanic represent a larger share of the enrollment. The percent of males has also increased as more programs in technical fields have been added. Along with these shifts, the average age of BAS students has come down to 34 years old from 37 at the start of the programs. The majority begin their baccalaureate studies already having earned an associate's degree from a WA CTC.
- Bellevue has been one of the most active colleges to offer programs within the CTC system, having placed an additional three programs under development, which should go online by fall 2014, bringing their total to eight programs.
- The management program at Columbia Basin College (CBC) has quadrupled since 2007 making it the largest BAS program. As a Hispanic serving institution, CBC has played an important role in increasing enrollments for this group. CBC has developed a model that centers on their initial BAS program in Applied Management. Through this, CBC has developed BAS programs in Cyber Security, Project Management, and soon Nursing.
- Lake Washington's Applied Design program has over time increased enrollments substantially for male students and students who identify as Hispanic. Lake Washington currently has five new programs in the queue for enrollment starting fall 2014.

- Peninsula's Applied Management program (one of the first BAS programs), continues to grow at a significant rate. One of the ways it has grown is by increasing the percent of students identifying as Native American from zero percent in 2008 to 11 percent in 2013. The percent of males has also increased.
- Seattle Central's Behavioral Science program serves a majority of students of color; more than one-third identify as African American. Additionally, nearly 90 percent of Central's students begin the program with an associate degree from a WA CTC. This suggests that the program provides a strong pathway to a baccalaureate degree for historically underserved students from the CTC system. The college has three more programs scheduled for implementation in fall 2014.

First Graduates have strong employment and earnings gains

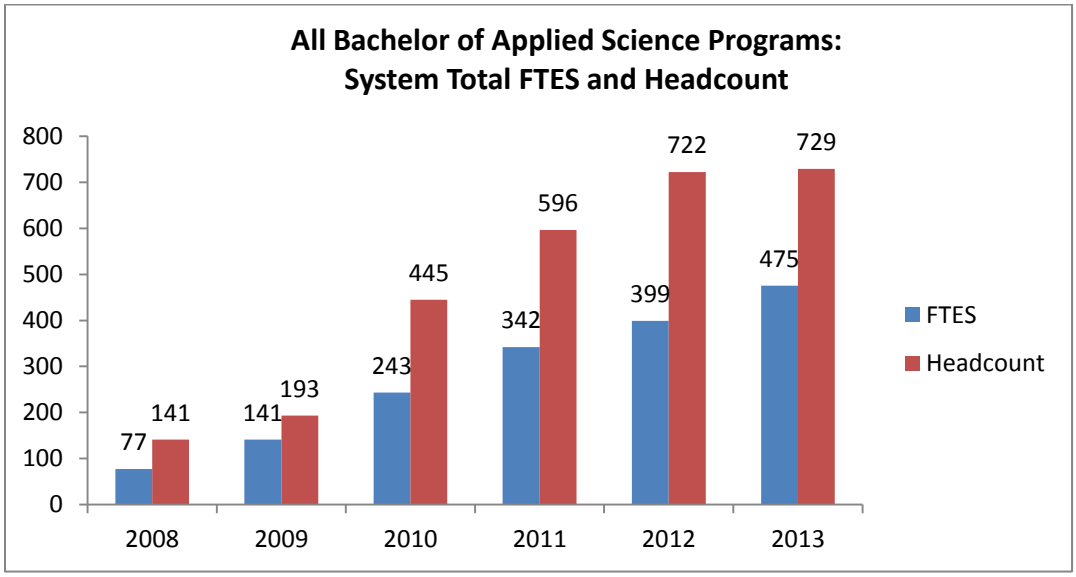
- The number of graduates in BAS programs has more than tripled from 52 in 2010 to 160 in 2012, due in part to high retention rates throughout the programs. Each year colleges retain or graduate an average of 86 percent of their fall enrollment by the end of the academic year. Centralia College, which started its first program in Applied Management in 2012, had a 100 percent retention rate for the year.
- The overall employment rate for BAS graduates in 2010 and 2011, seven quarters after graduating, was 82 percent. Columbia Basin had a 100 percent employment rate. The median annualized earnings for all BAS graduates is $32,253, with the highest earners coming from Bellevue's Radiology program ($85,936) and the lowest from Lake Washington's Applied Design program ($25,631)
- Graduates who were employed at the time of graduation were also evaluated for increases in median earnings seven quarters following their last quarter enrolled. For the graduates who had both pre and post earnings (Interior Design, Applied Management, Hospitality Management, Management, and Radiology), the earnings gain was $8,495 (26 percent), including a 48 percent increase for Bellevue's Interior Design program.
- These outcomes are made significantly more promising because the economy was in recession, hindering both employment and earnings.

Section One. Historical Enrollments and Demographics: All Programs

System Enrollments

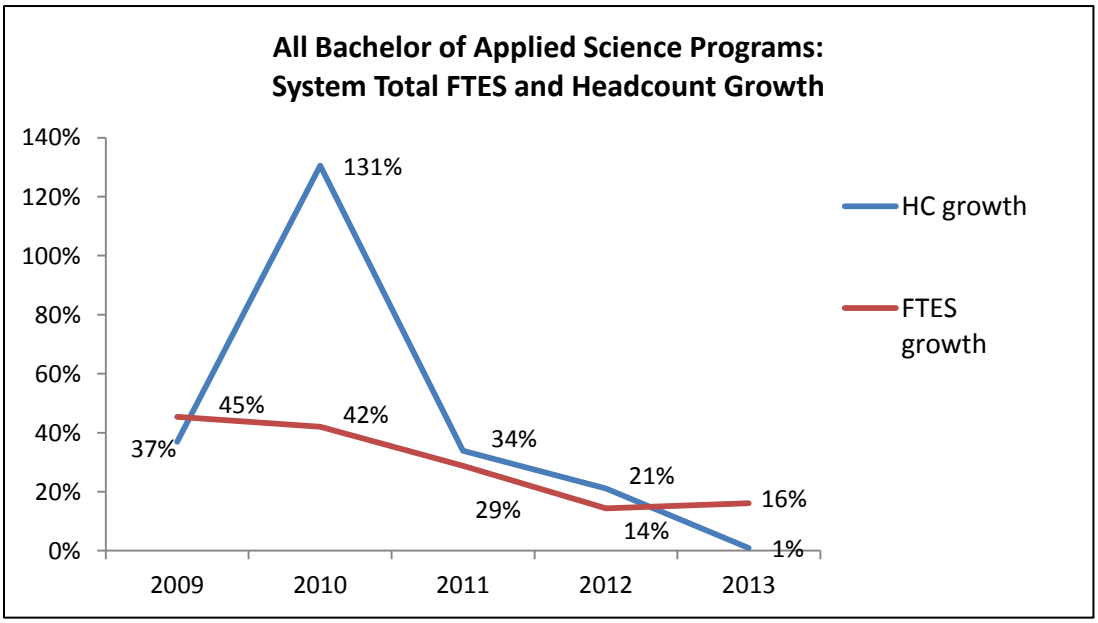
The first applied baccalaureate programs (BAS) were introduced in 2007. Over the six years that the programs have been in place, FTES and headcount have increased substantially. Figure 1 below shows the headcount and FTE of all matriculated[2] students in the system.

Figure 1



In comparing the patterns of headcount and FTE growth, the most significant growth of the BAS programs occurred between 2007 and 2010, after which growth has slowed. Figure 2 below shows the annual growth rates in both headcount and FTE between 2007 and 2013.

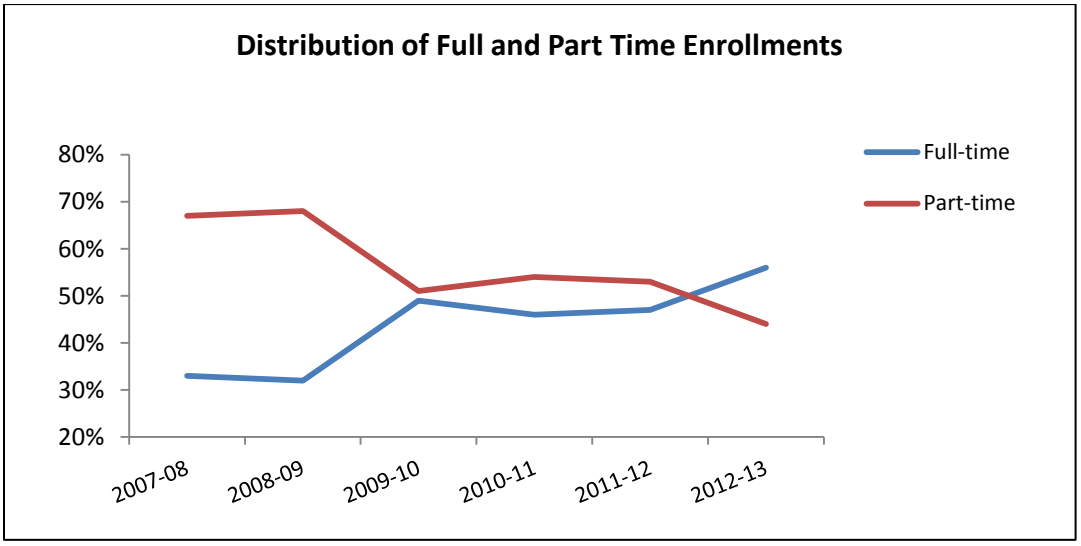
Figure 2



[2] "Matriculated" students are those who in a BAS program through meeting admission requirements and under the baccalaureate tuition schedule. Additional FTE are served to students not in a program, but who take upper division courses.

Of significant note is the growth in headcount is flat as of 2013, while FTES' growth rate have begun to increase after three years of decline. This can be explained in part by a major shift in enrollment status since the inception of the BAS programs. The average number of quarters attended in a year by students has not changed significantly over this time; however, the distribution of part time to full time has changed. When the BAS programs first began enrolling students in 2007, two-thirds of the enrollments were of part-time status. In 2009-10 that number decreased to 50 percent, then decreased to 44 percent of enrollments by 2012-13. This shift is demonstrated below in Figure 3.

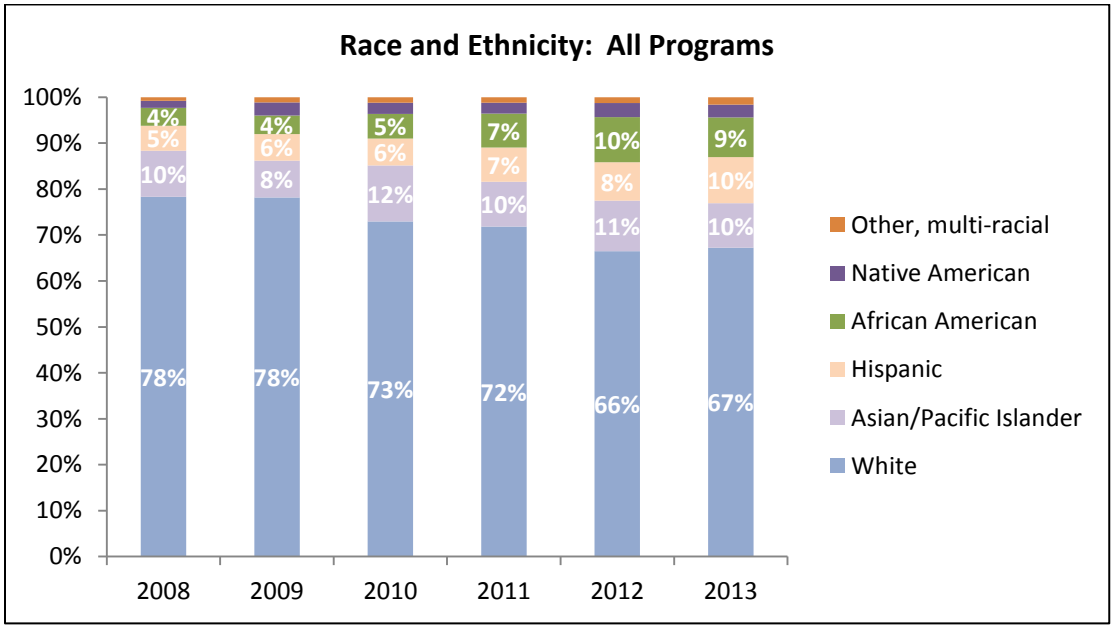
Figure 3



System Demographics

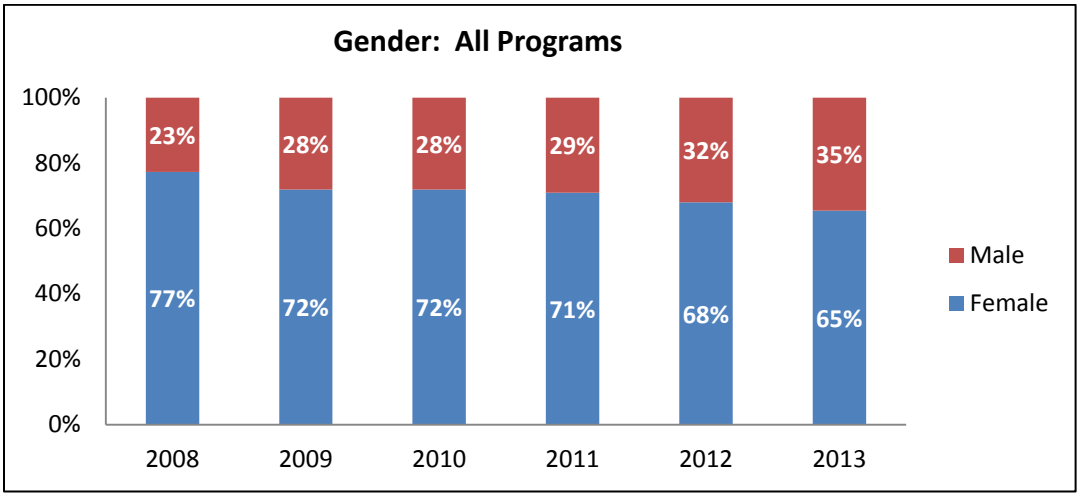
The next figures summarize the overall demographics of all BAS students in the years since the programs began.

Figure 4



Diversity of students in BAS programs has increased[3]. In 2007, students identifying as White made up 78 percent of all enrolled students, which has dropped to 67 percent as of 2013. The percent of participation for students identifying as African American and Hispanic has doubled between 2007 and 2013 for both groups, from 4% to 9% and 5% to 10%, respectively.

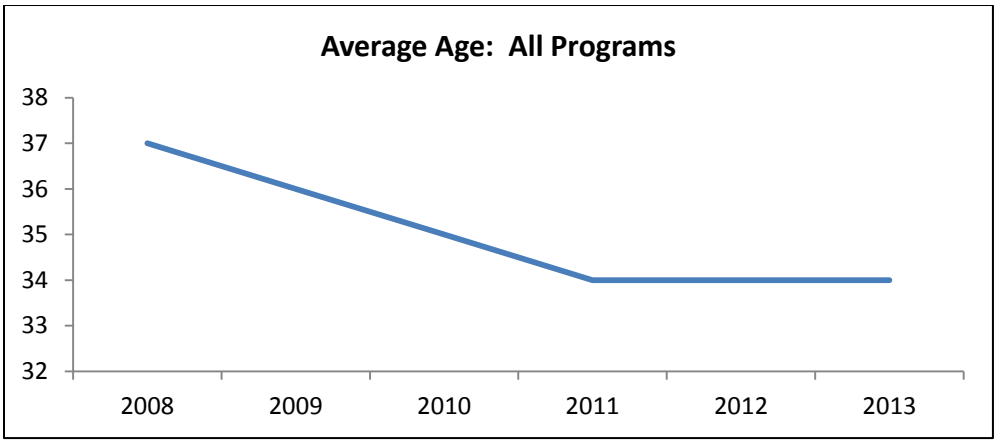
Figure 5



As noted in the introductory goals of BAS programs, one of the service populations of the programs is place bound females with family responsibilities. This is demonstrated by females making up more than three-fourths of the students in 2007. However, as new programs have come on board, particularly in the technical colleges, the diversity in gender has increased by the percent of female students served decreasing to two-thirds in 2013.

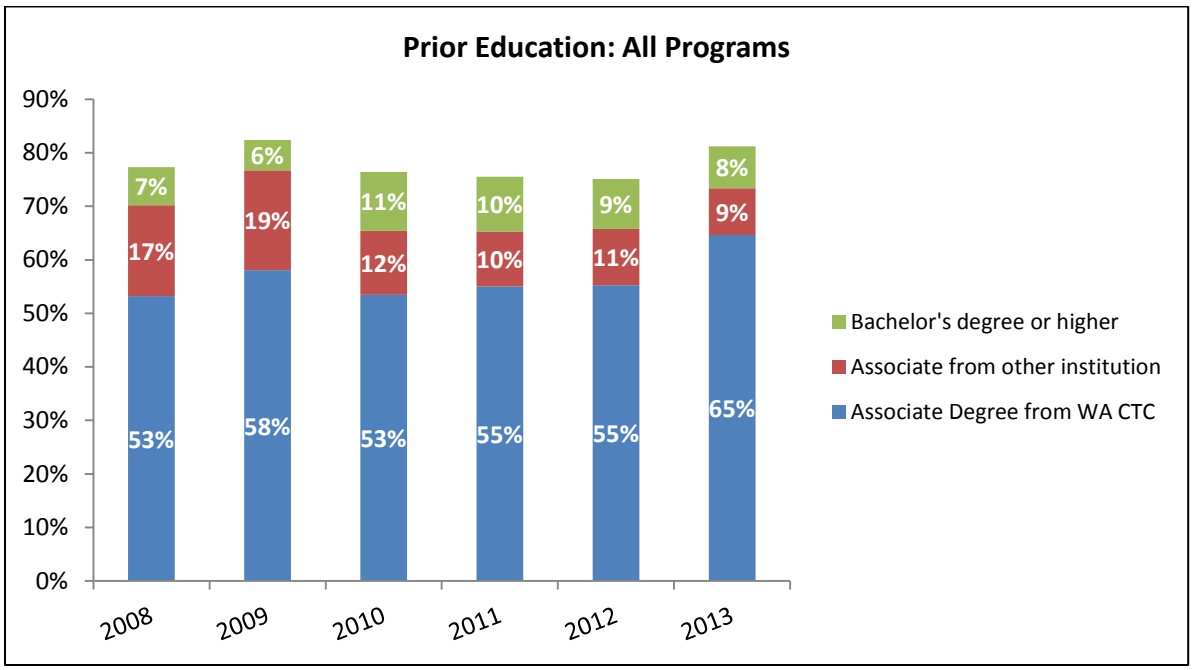
BAS students are typically older, although the average age dropped from 37 to 34 between 2007 and 2011. All students accepted into BAS programs are required to have at least an associate's degree. The data on prior education of BAS students shows that the majority of BAS students come into the program with an associate degree from a WA CTC.

Figure 6



[3] Students are counted in up to two reported race/ethnicities for the entirety of the report.

Figure 7


Prior Education: All Programs
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2008
2009
2010
2011
2012
2013
7%
17%
53%
6%
19%
58%
11%
12%
53%
10%
10%
55%
9%
11%
55%
8%
9%
65%
Bachelor's degree or higher
Associate from other institution
Associate Degree from WA CTC

Section Two: Program Historical Enrollments and Demographics

The following section summarizes the enrollment and demographic trends for each of the eight programs who have had enrollments for a minimum of three years. Figures 8 and 9 begin with the headcount and FTES for all programs with enrollments up through 2012-13.

Figure 8

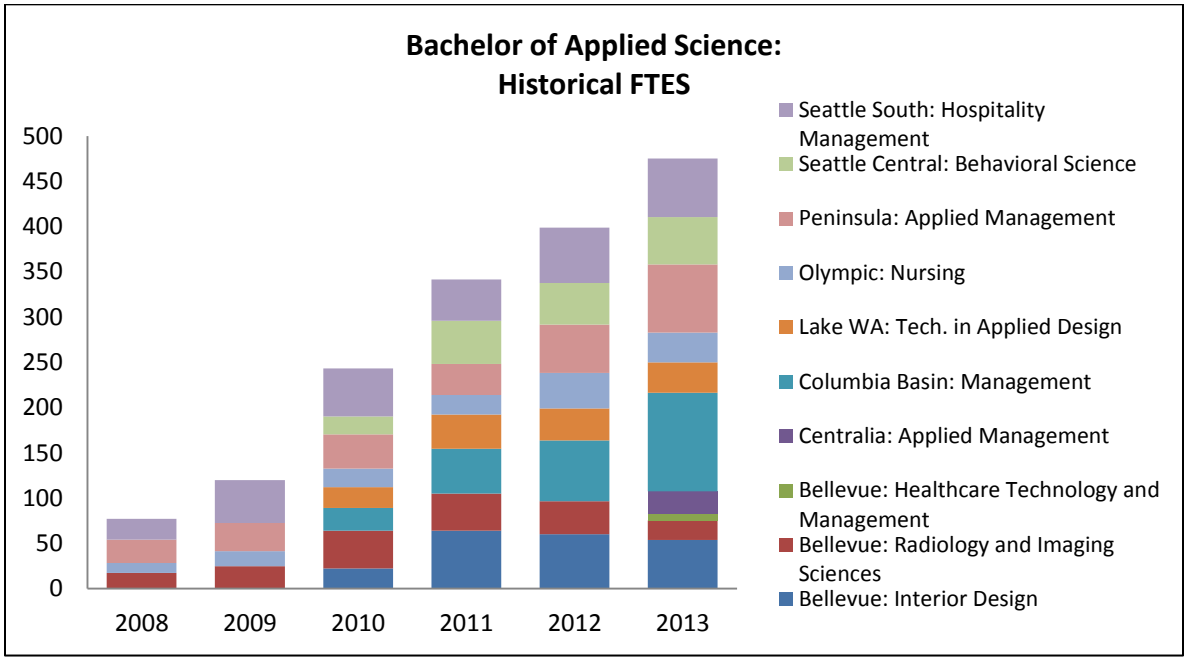
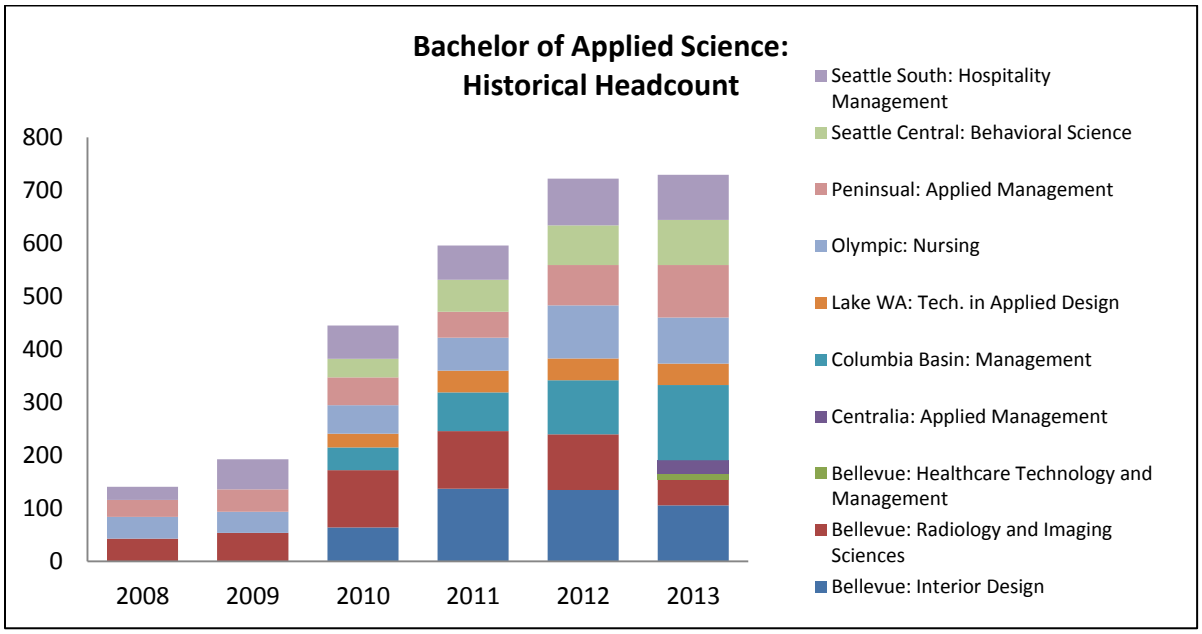


Figure 9



Bellevue College: Bachelor of Applied Arts in Interior Design

Bellevue's Bachelor of Applied Arts in Interior Design program began in 2010. Enrollments increased drastically in 2011, but began declining over the last two years. The program serves a relatively high percentage of students who identify as Asian, and a high percentage of females. Students are slightly younger than students in other BAS programs in the state, and also unlike other BAS programs, only about one-quarter come to the program with an associate degree from a WA CTC.

Figure 10

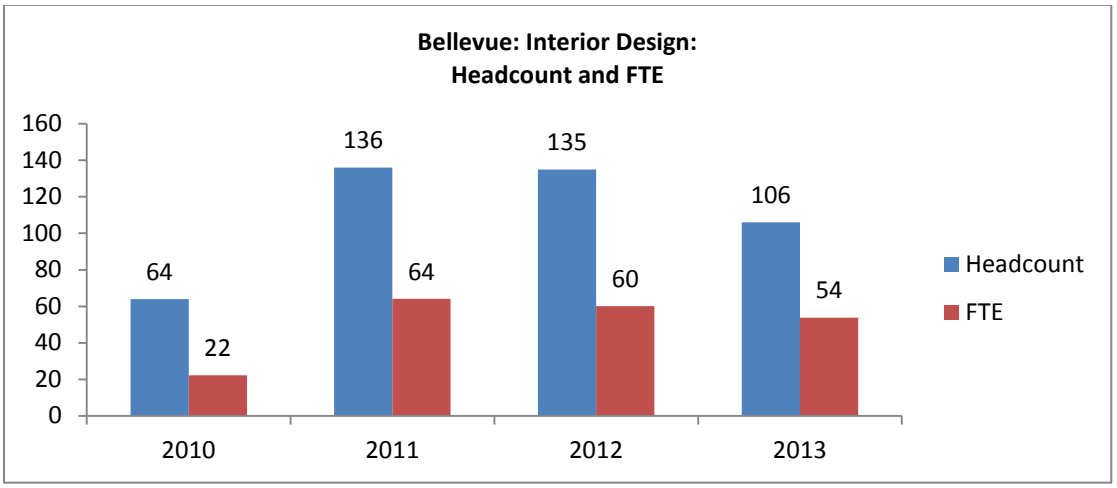


Figure 11

Race/Ethnicity	2010	2011	2012	2013
Asian/Pacific Islander	19%	13%	16%	22%
African American	2%	2%	0%	0%
Native American	0%	2%	2%	0%
Hispanic	3%	5%	9%	5%
Other, multi-racial	0%	1%	1%	1%
White	76%	78%	73%	72%
Gender				
Female	91%	95%	94%	90%
Male	9%	5%	6%	10%
Average age	34	32	31	32
Prior education				
Associate Degree from WA CTC	28%	24%	21%	31%
Associate from other institution	8%	7%	9%	7%
Bachelor's degree or higher	31%	24%	21%	23%
Other	33%	45%	50%	40%
Total Headcount	***64***	***136***	***135***	***106***

Bellevue College: Bachelor of Applied Arts Radiology and Imaging Services

Bellevue's Bachelor of Applied Arts in Radiology and Imaging Services program began in 2008. Enrollments increased drastically in 2010, but began declining in 2010-11. However, as enrollments have declined, the diversity in the program has increased, especially for students who identify as African American. The gender distribution of the students in the program has changed drastically since 2008, going from nearly three-fourths female to only about 40 percent of the enrollment in 2013. The average age of students has gone down from 37 in 2008 to 34 in 2013, and about half had an associate degree from a WA CTC.

Figure 12

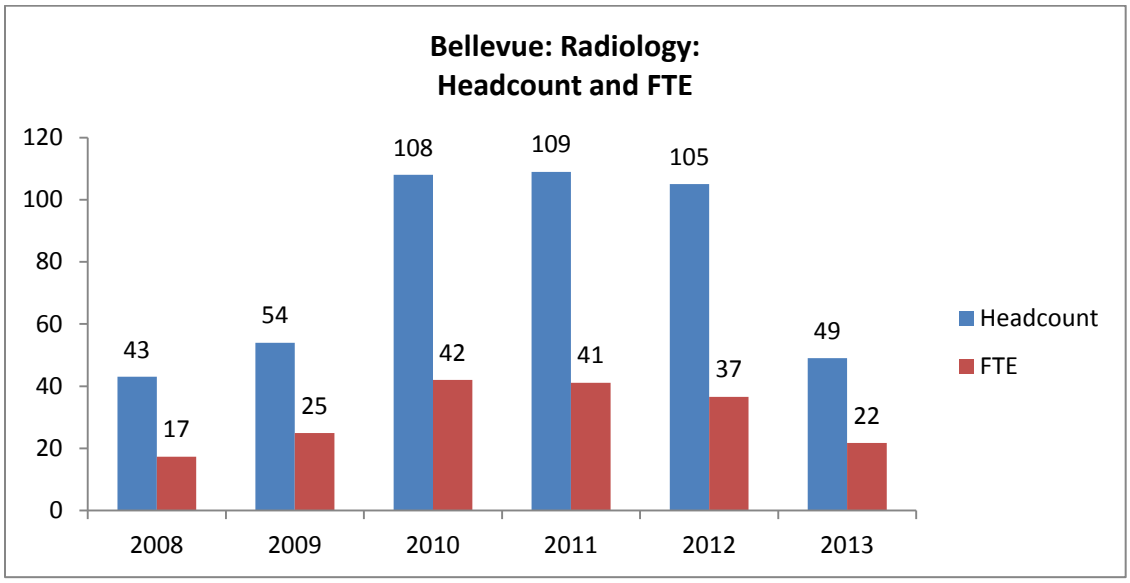


Figure 13

Race/Ethnicity	2008	2009	2010	2011	2012	2013
Asian/Pacific Islander	4%	6%	16%	15%	22%	15%
African American	0%	0%	5%	7%	6%	6%
Native American	0%	2%	0%	0%	0%	0%
Hispanic	7%	4%	6%	8%	5%	4%
Other, multi-racial	0%	0%	1%	1%	1%	0%
White	89%	88%	72%	70%	67%	74%
Gender						
Female	72%	70%	67%	63%	59%	41%
Male	28%	30%	33%	37%	41%	59%
Average age	37	36	33	33	31	34
Prior education						
Associate Degree from WA CTC	56%	59%	32%	35%	35%	49%
Associate from other institution	19%	31%	17%	18%	15%	31%
Bachelor's degree or higher	2%	2%	10%	11%	10%	6%
Other	23%	7%	41%	36%	40%	14%
Total Headcount	**43**	**54**	**108**	**109**	**105**	**49**

Columbia Basin College (CBC): Bachelor of Applied Science in Management
Columbia Basin's Bachelor of Applied Science in Management program began in 2010. Enrollment in the program has quadrupled, making it the largest BAS program in the system as of 2013. As the program has grown, so has the percentage of students of color, most notably students who identify as Hispanic (14 percent in 2010 to 27 percent in 2013). The gender distribution of the students in the program has not changed significantly, and the average age of students has gone down slightly. In 2013 more than three-fourths of students in the program had come in with an associate degree from a WA CTC.

CBC has been able to leverage significant support with its business community, such as the Department of Energy (DOE). With a strong internal BAS infrastructure, CBC has remained consistent with program and enrollment growth.

Figure 14

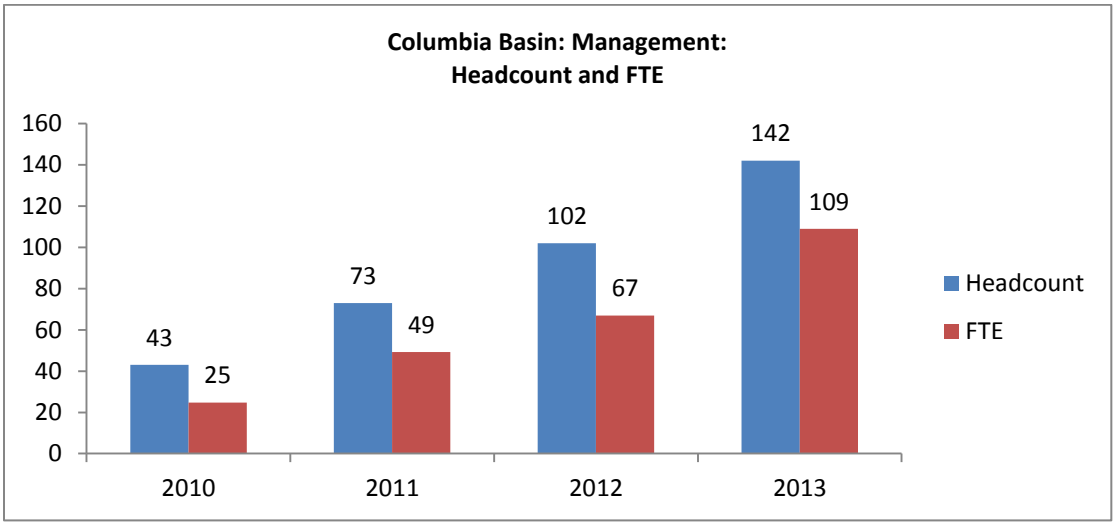


Figure 15

Race/Ethnicity	2010	2011	2012	2013
Asian/Pacific Islander	0%	3%	3%	2%
African American	0%	4%	3%	4%
Native American	0%	1%	2%	2%
Hispanic	14%	20%	24%	27%
Other, multi-racial	0%	1%	2%	3%
White	86%	70%	67%	63%
Gender				
Female	58%	52%	50%	55%
Male	42%	48%	50%	45%
Average age	36	36	34	34
Prior education				
Associate Degree from WA CTC	72%	78%	77%	77%
Associate from other institution	12%	12%	10%	6%
Bachelor's degree or higher	5%	1%	2%	1%
Other	12%	8%	11%	16%
Total Headcount	**43**	**73**	**102**	**142**

Lake Washington Institute of Technology: Bachelor of Technology in Applied Design
Lake Washington's Bachelor of Technology in Applied Science in Management program began in 2010. Enrollment in the program doubled in 2011 and has remained steady. The race/ethnic makeup of students has changed. In 2013, students who identify as African American, Native American, and Hispanic comprised 17 percent of the students in the program, whereas there were none at the start. The largest change in student characteristics is the increase in the percentage of male students from 42 percent in 2010 to 65 percent in 2013. The program has also begun serving a larger percentage of students with an associate degree earned outside of the WA CTC system.

Figure 16

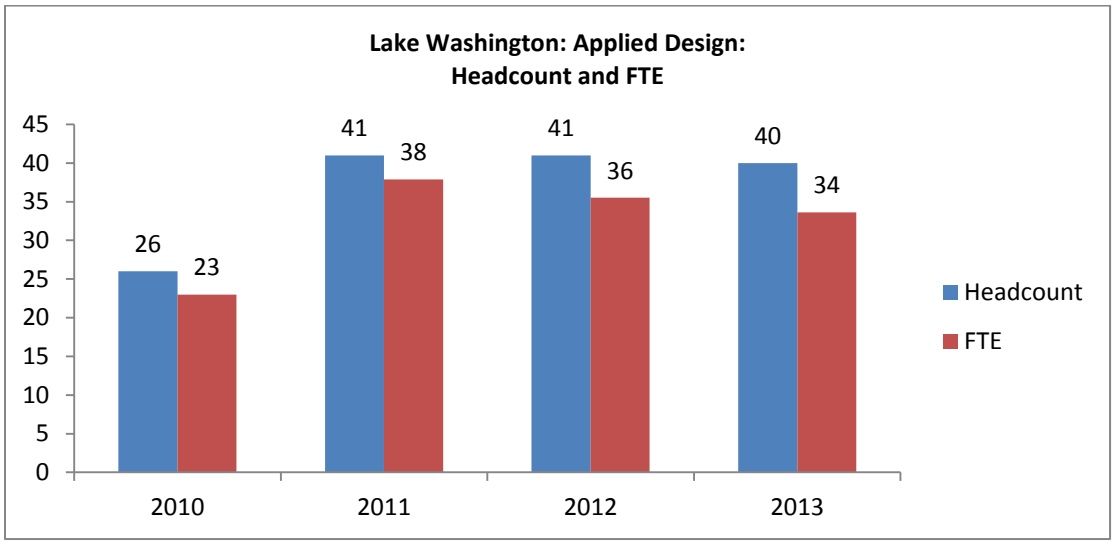


Figure 17

Race/Ethnicity	2010	2011	2012	2013
Asian/Pacific Islander	18%	19%	14%	6%
African American	0%	3%	2%	3%
Native American	0%	0%	2%	3%
Hispanic	0%	3%	5%	11%
Other, multi-racial	0%	0%	0%	0%
White	82%	76%	76%	78%
Gender				
Female	58%	46%	34%	35%
Male	42%	54%	66%	65%
Average age	31	32	34	32
Prior education				
Associate Degree from WA CTC	88%	83%	71%	73%
Associate from other institution	4%	5%	12%	10%
Bachelor's degree or higher	8%	5%	7%	8%
Other	0%	7%	10%	10%
Total Headcount	**26**	**41**	**41**	**40**

Olympic College: Bachelor of Science in Nursing

Olympic College's Bachelor of Science in Nursing program was one of the first beginning in 2007-08. Enrollment in the program rose steadily until 2013, and then began declining. The student characteristics have fluctuated over time, but in general the student body is comprised of students who identify as White, and are predominantly female. Sixty-three (63) percent of students in 2013 had earned an associate degree from a WA CTC.

Figure 18

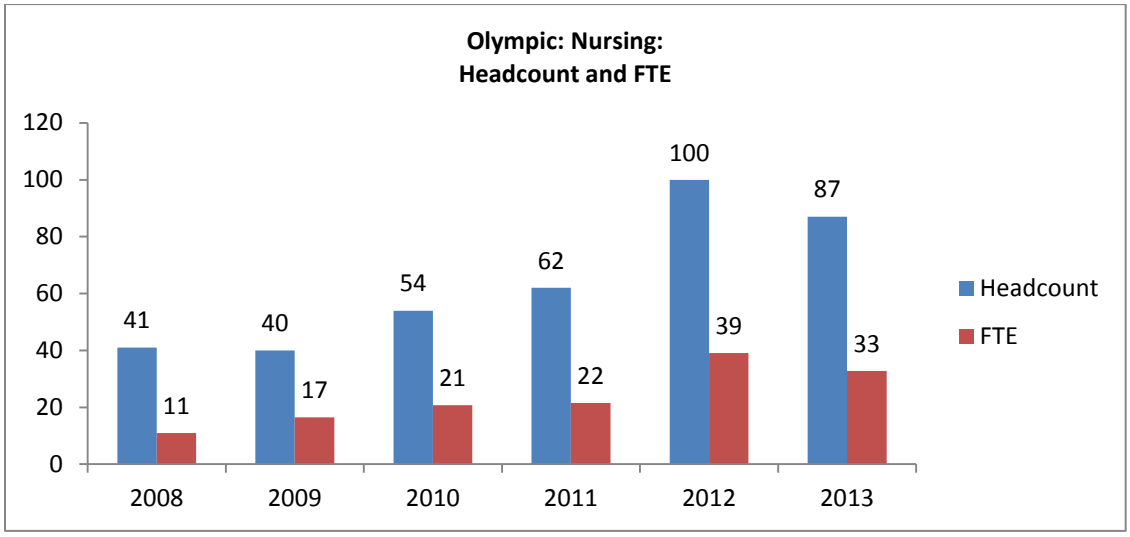


Figure 19

Race/Ethnicity	2008	2009	2010	2011	2012	2013
Asian/Pacific Islander	13%	5%	6%	0%	8%	12%
African American	5%	5%	0%	0%	9%	5%
Native American	0%	3%	0%	0%	3%	2%
Hispanic	5%	3%	10%	9%	10%	10%
Other, multi-racial	3%	5%	4%	4%	1%	2%
White	74%	78%	80%	88%	70%	68%
Gender						
Female	88%	88%	80%	85%	85%	86%
Male	12%	10%	20%	15%	15%	14%
Average age	38	39	38	37	36	34
Prior education						
Associate Degree from WA CTC	41%	45%	54%	61%	52%	63%
Associate from other institution	7%	15%	9%	11%	11%	8%
Bachelor's degree or higher	12%	8%	7%	5%	16%	11%
Other	39%	33%	30%	23%	21%	17%
Total Headcount	**41**	**40**	**54**	**62**	**100**	**87**

Peninsula College: Bachelor of Applied Science in Applied Management

Peninsula College's Bachelor of Applied Science in Applied Management was one of the first programs beginning in 2007-08. After a slight dip in 2011, enrollment in the program has increased substantially. Diversity has increased over time, particularly for students who identify as Native American, increasing from zero percent at the start of the program to 11 percent in 2013. Peninsula's program serves more than half of all students in BAS programs who identify as Native American, thus this growth accounts for much of the increase in diversity for this population for the system. The percent of male students has increased from 25 percent in 2008 to nearly 40 percent in 2013, and nearly three-fourths of students in the program had entered with an associate degree from a WA CTC.

Figure 20

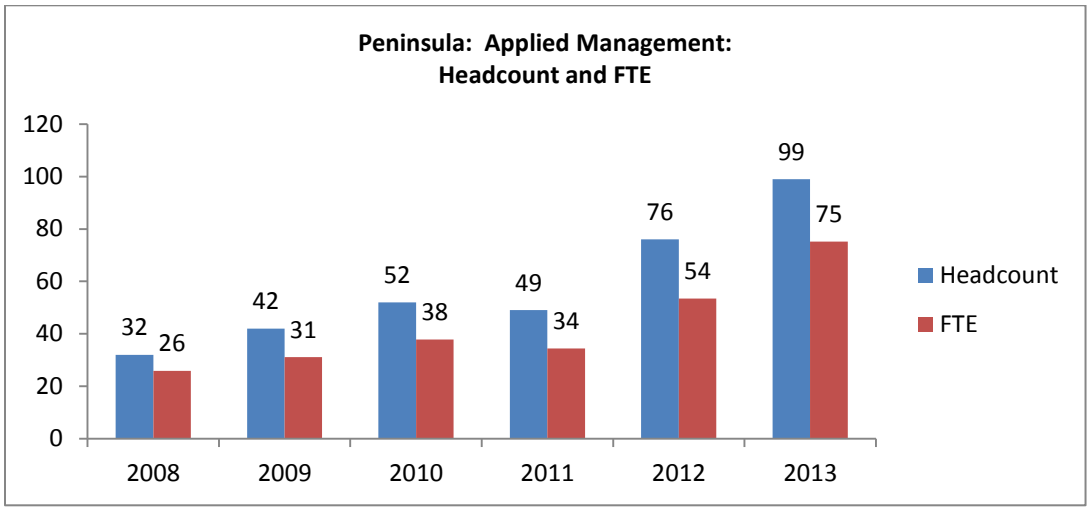


Figure 21

Race/Ethnicity	2008	2009	2010	2011	2012	2013
Asian/Pacific Islander	4%	5%	6%	2%	0%	1%
African American	0%	0%	0%	0%	6%	4%
Native American	0%	8%	9%	9%	14%	11%
Hispanic	7%	5%	4%	4%	1%	4%
Other, multi-racial	0%	0%	0%	0%	3%	3%
White	89%	83%	81%	85%	76%	75%
Gender						
Female	75%	69%	67%	51%	54%	61%
Male	25%	31%	33%	49%	46%	39%
Average age	40	35	38	36	35	34
Prior education						
Associate Degree from WA CTC	78%	76%	67%	76%	75%	73%
Associate from other institution	13%	10%	15%	10%	11%	11%
Bachelor's degree or higher	0%	0%	4%	2%	1%	1%
Other	9%	14%	13%	12%	13%	15%
Total Headcount	**32**	**42**	**52**	**49**	**76**	**99**

Seattle Central Community College: Bachelor of Applied Science in Behavioral Science
Seattle Central Community College's Bachelor of Applied Science in Behavioral Science began in 2010. In the four years the program has been in place, enrollment has more than doubled. The college has developed innovative student support practices that encourage student participation and retention from under-represented populations in their BAS programs. The program is currently the only program in the system that serves a majority students of color, more than one-third being students who identify as African American. Additionally, nearly 90 percent of Central's students begin the program with an associate degree from a WA CTC.

Figure 22

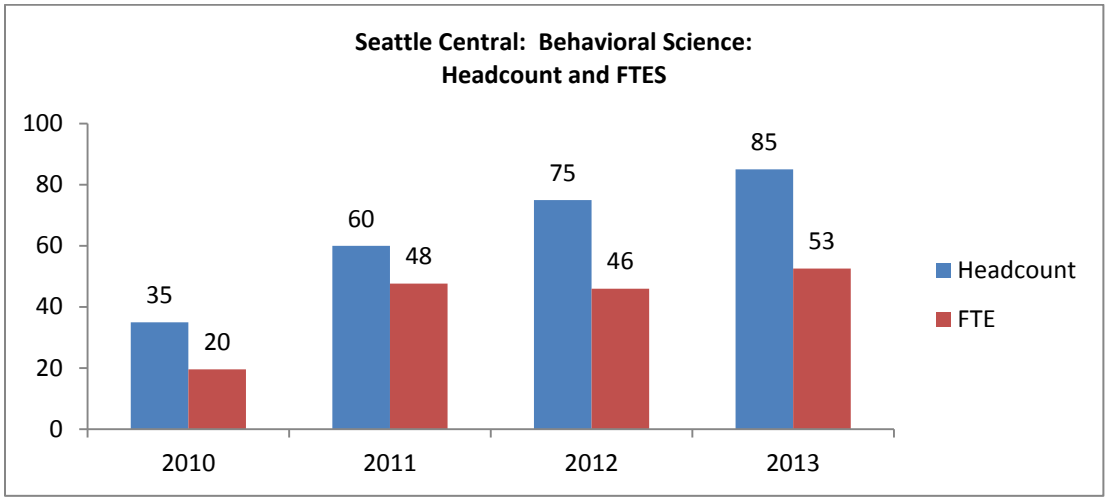


Figure 23

Race/Ethnicity	2010	2011	2012	2013
Asian/Pacific Islander	8%	3%	4%	4%
African American	33%	35%	45%	39%
Native American	6%	3%	1%	1%
Hispanic	3%	5%	7%	6%
Other, multi-racial	6%	2%	1%	1%
White	44%	52%	41%	49%
Gender				
Female	91%	80%	80%	78%
Male	9%	20%	20%	22%
Average age	39	41	40	39
Prior education				
Associate Degree from WA CTC	86%	87%	87%	88%
Associate from other institution	6%	5%	4%	2%
Bachelor's degree or higher	0%	0%	0%	2%
Other	9%	8%	9%	7%
Total Headcount	**35**	**60**	**75**	**85**

Seattle South Community College: Bachelor of Applied Science in Hospitality Management

Seattle South Community College's Bachelor of Applied Science in Hospitality Management was one of the first programs that began in 2007-08. Enrollment in the program has stair-stepped up, with a large increase in 2012. The program currently serves more than one-fifth students who identify as Asian and 14 percent students who identify as African American. The percent of students who identify as Hispanic has decreased substantially over time, down to just one percent in 2013 from 15 percent at the start of the program. The percent of male students has increased from 28 percent in 2008 to 44 percent in 2013. Currently, less than half of students in the program had come in with an associate degree from a WA CTC. South Seattle has made a concerted effort to develop a student mentoring program as to support retention for its program participants.

Figure 24

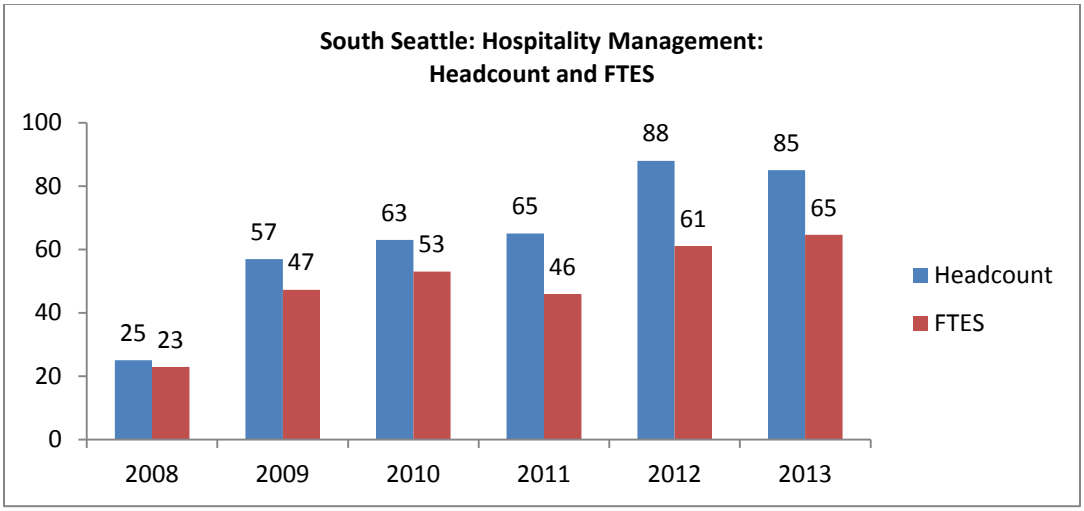


Figure 25

Race/Ethnicity	2008	2009	2010	2011	2012	2013
Asian/Pacific Islander	15%	15%	19%	19%	19%	21%
African American	15%	11%	8%	15%	14%	14%
Native American	5%	2%	6%	6%	3%	3%
Hispanic	15%	11%	4%	4%	1%	1%
Other, multi-racial	0%	0%	0%	2%	1%	0%
White	50%	62%	63%	56%	62%	61%
Gender						
Female	72%	63%	63%	63%	58%	56%
Male	28%	37%	37%	37%	42%	44%
Average age	34	32	30	28	30	32
Prior education						
Associate Degree from WA CTC	36%	53%	65%	62%	59%	49%
Associate from other institution	16%	16%	8%	8%	13%	11%
Bachelor's degree or higher	12%	12%	13%	14%	8%	11%
Other	36%	19%	14%	17%	20%	29%
Total headcount	**25**	**57**	**63**	**65**	**88**	**85**

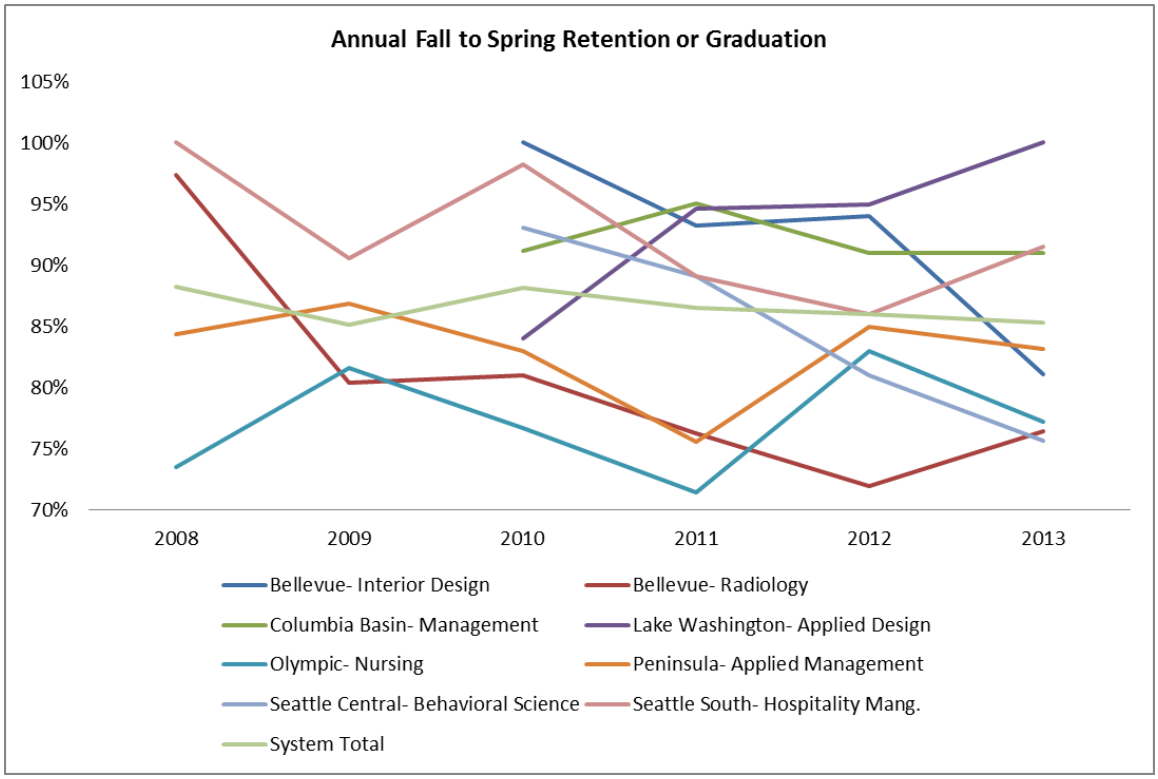
Section Three: Retention and Graduations

With some programs beginning in 2007, colleges began graduating students with applied baccalaureate degrees in 2010 (Figure 26). The number of graduates each year continues to grow, due in part to high retention rates throughout the programs. As show in Figure 27, each year colleges retain or graduate an average of 86% of their fall enrollment by the end of the academic year. Centralia College, who started their first program in Applied Management in 2012, had a 100 percent retention rate for the year.

Figure 26 Graduates by Program

College	Program	2010	2011	2012
Bellevue	Applied Arts in Inter. Design	0	39	38
	Radiology and Imaging Sciences	12	10	13
Columbia Basin	Management	0	23	17
Lake Washington	Applied Design	0	14	14
Olympic	Nursing	6	7	27
Peninsula	Applied Management	14	10	14
Seattle Central	Behavioral Science	0	16	16
Seattle South	Hospitality Management	20	22	21
System Total		52	141	160

Figure 27



Section Four: Employment and Earning of Applied Baccalaureate Degree Completers

Graduates from 2010 and 2011 were matched for employment rates as of seven quarters (two years) after completing their programs. The total employment rate for BAS graduates is 82%, with Columbia Basin having a 100 percent employment rate. The median annualized earnings for all BAS graduates is $32,253, with the highest earners coming from Bellevue's Radiology program ($85,936) and the lowest from Lake Washington's Applied Design program ($25,631).

Figure 28 Employment Rate and Earnings 7 Quarters after Graduation

	Graduates	Number Employed within 2 Years	Percent Employed	Median Adjusted Earnings
Bellevue- Interior Design	27	21	78%	$29,528
Bellevue- Radiology	21	17	81%	$85,936
Columbia Basin- Management	17	17	100%	$40,298
Lake Washington- Applied Design	13	11	85%	$25,631
Olympic- Nursing	13	10	77%	$49,857
Peninsula- Applied Management	22	21	95%	$27,420
Seattle Central- Behavioral Science	11	8	73%	*
Seattle South- Hospitality Mang.	39	28	72%	$27,431
Total	163	133	82%	$32,253
Average Annual Wages				***$39,951***
**Redacted due to group size*				

Graduates who were employed at the time of graduation were also evaluated for increases in median earnings seven quarters following their last quarter enrolled. For the graduates who had both pre and post earnings (Interior Design, Applied Management, Hospitality Management, Management, and Radiology), the earnings gain was $8,495 (26 percent), including a 48 percent increase for Bellevue's Interior Design program.

Figure 29 Earnings at Graduation and Two Years Following Graduation

	Graduates	Median Annualized Earnings at Graduation	Median Annualized Earnings 7 Quarters After Graduation	Percent Increase in Earnings
Bellevue- Interior Design	17	$15,319	$29,388	48%
Peninsula- Applied Management	12	$17,691	$30,594	42%
Seattle South- Hospitality Mang.	25	$17,563	$27,965	37%
Columbia Basin- Management	14	$31,630	$39,239	19%
Bellevue- Radiology	11	$67,042	$82,934	19%
Total	79	$23,753	$32,248	26%