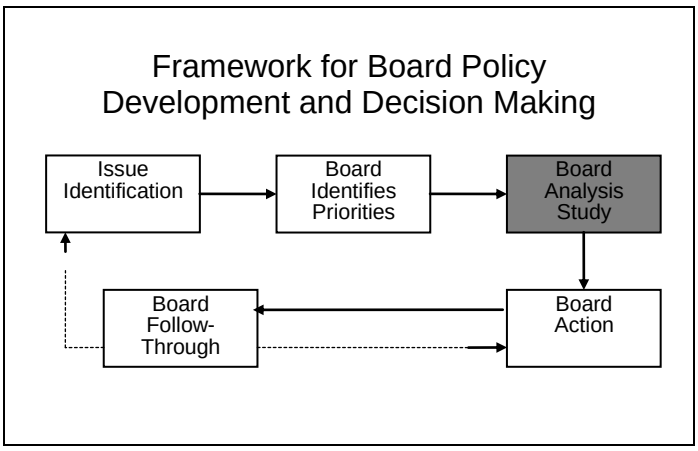
Iowa State Board of Education

Executive Summary

November 18, 2009



Agenda Item: 2009 Iowa Community Colleges Fall Enrollment Report

Iowa Goal: Individuals will pursue postsecondary education in order to drive economic success.

Equity Impact Statement: Community colleges support open access to students.

Presenters: Roger Utman, Ph.D., Administrator
Division of Community Colleges and Workforce Preparation

Tom Schenk, Jr., Consultant
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Attachments: 1

Recommendation: It is recommended that the State Board hear and discuss this information.

Background: This report serves as a demonstration of the capabilities of the community college MIS (Management Information System). Iowa's 15 community colleges electronically transmitted the fall 2009 enrollments to the Department of Education on the 10th business day of the fall semester. All data in the attached report, except where noted, are taken from the Department of Education's fall 2009 MIS electronic data files and were confirmed by the community college transmittal sheet.

Fall Enrollment Report 2009

Community Colleges &
Workforce Preparation

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Executive Summary

The Iowa Department of Education collects enrollment information from all 15 community colleges on the 10th business day of the fall semester. This report summarizes several aspects of community college enrollment. Some of the highlights of this report are:

- Enrollment grew at its fastest pace since 1975 to a record high of 100,736 students (Table 1).
- Year-to-year growth was 14.3 percent, which is over twice the average rate of growth since 1965 (Figure 1).
- Full-time students outnumber part-time students for the first time since 2006 (Table 1).
- Credit hours increased 15.3 percent since last year to a total of 966,945 credit hours this fall (Table 3).
- Average credit hours per student rose slightly to 9.59 credit hours, indicating that students are spending more time in courses (Table 2).
- Females still outnumber males, but the proportion of females dropped slightly from last year (Figure 2).
- Students are older this year, the average age increased to 23 years old due to a disproportional increase in students between 25 and 65 (Figure 3).
- Community colleges still serve a large share of "traditional age" students, 72 percent of enrollees are under 25 years old (Figure 3).
- Racial/ethnic minorities comprised 12 percent of fall enrollment (Figure 4).
- Enrollment in college parallel programs increased 26 percent while career and technical education programs only increased one percent (Figure 6).
- Health sciences is the largest career cluster, followed by business management and administration and manufacturing (Figure 9).
- Enrollment of high school students grew 13 percent to 26,111 students (Table 5) .
- On average, high school students enrolling in college courses enrolled in 5.13 credit hours (Table 5).
- Fall 2010 enrollment departed from projected enrollment (Table 6).
- Enrollment is expected to increase approximately 3.5 percent next fall based on current conditions (Table 6).

About this Report:

This report summarizes fall enrollment in Iowa's community colleges. Every year Iowa's 15 community college districts submit data on students enrolled on the 10th day of the fall semester.

Table of Contents

State Board Page	2
Executive Summary	3
Fall Enrollment	4
Credit Hours	6
Student Demographics	7
Academic Programs	10
Career Clusters	12
High School Students	14
Enrollment Projections	15

Fall Enrollment

Fall enrollment accelerated at the fastest pace since 1975, up 14.3 percent since fall 2008. By contrast, enrollment has grown at an average pace of 5.9 percent per year since the inception of the modern Iowa community college system in 1965. Much of the growth has come at the same time when the economic conditions in Iowa have deteriorated.

Enrollment grew to 100,736 students, surpassing expectations and passing the 100,000 mark for the first time ever. Enrollment growth was strong in nearly all major categories, especially those groups who may have left the workforce. No individual college had a decline in enrollment and enrollment growth varied between three and 28.6 percent (Table 1).

Beginning in 2006, part-time enrollment exceeded full-time enrollment for the first time in Iowa. The following years continued that trend, but this fall full-time students exceeded part-time students again. This fall 50.3 percent of students were enrollment full-time—12 or more credit hours.

- Enrollment accelerated at the fastest pace since 1975, up 14.3 percent since last year.
- Enrollment grew to a record level of 100,736 students.
- Full-time enrollment rebounded and now comprise a majority of students.

The growth in enrollment this year departs from the steady enrollment increases in the past. Enrollment during recessions tends to spike, but none have increased to this degree. The only larger increase in enrollment was in 1975 when enrollment spiked 21.5 percent as community colleges began to expand their mission in Iowa (Figure 2).

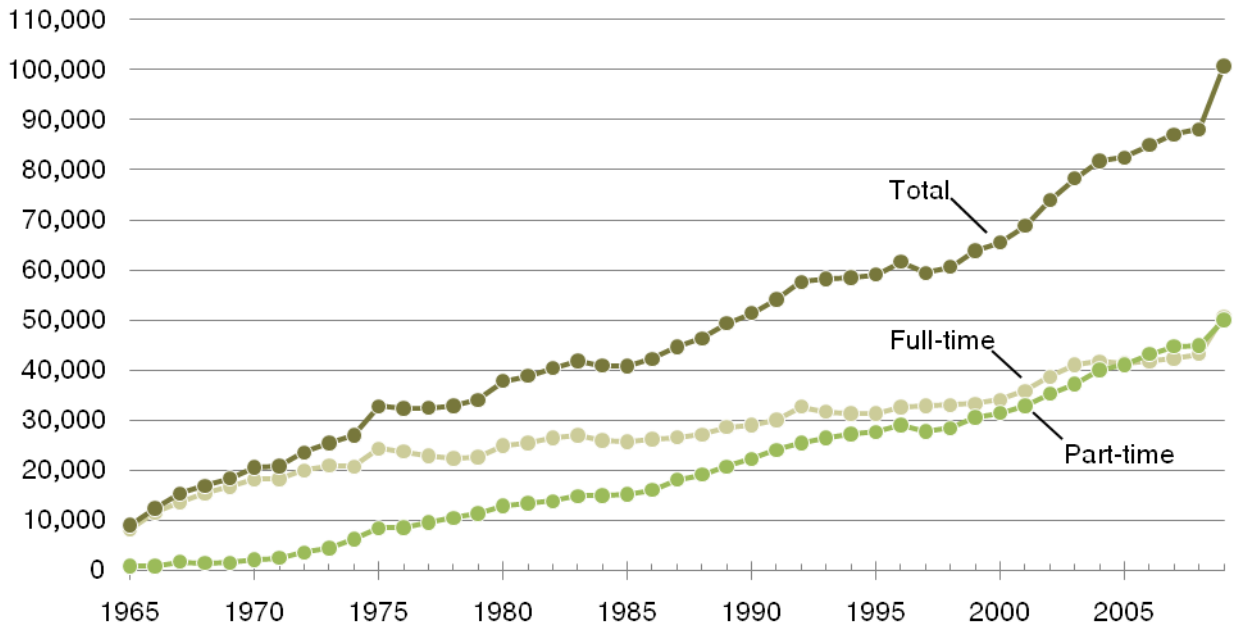
The remainder of this report will break down credit enrollment by credit hours, student demographics, the programs which students are enrolled, how the programs break down demographically, and joint enrollment.

Table 1 — Fall Enrollment by College and Attendance Status: 2009

College	Attendance Status			1-year Change
	Full-time	Part-time	Total	
Northeast	2,564 II	2,825 II	5,389 IIIII	13.3%
North Iowa Area	2,010 II	1,719 I	3,729 III	7.0%
Iowa Lakes	1,859 I	1,456 I	3,315 III	8.4%
Northwest Iowa	720	895	1,615 I	28.6%
Iowa Central	3,064 III	2,840 II	5,904 IIIII	3.0%
Iowa Valley	1,847 I	1,475 I	3,322 III	11.3%
Hawkeye	3,672 III	2,640 II	6,312 IIIIII	9.5%
Eastern Iowa	3,969 III	4,511 IIII	8,480 IIIIIIII	21.6%
Kirkwood	9,723 IIIIIIIII	8,118 IIIIIIII	17,841 IIIIIIIIIIIIIIII	17.2%
Des Moines Area	8,947 IIIIIIII	13,377 IIIIIIIIIIIII	22,324 IIIIIIIIIIIIIIIIIIII	19.4%
Western Iowa Tech	2,536 II	3,298 III	5,834 IIIII	7.5%
Iowa Western	3,574 III	2,526 II	6,100 IIIIII	8.1%
Southwestern	839	841	1,680 I	14.4%
Indian Hills	3,272 III	1,865 I	5,137 IIIII	21.5%
Southeastern	2,087 II	1,667 I	3,754 III	10.0%
Total	**50,683**	**50,053**	**100,736**	**14.3%**

Note: Students enrolled in 12 or more credit hours are counted as full-time. Negative values shown in parentheses Each "I" denotes 1,000 students.

Figure 2 — Fall Enrollment by Status: 1965-2009



Year	Full-time	Part-time	Total	Year	Full-time	Part-time	Total
1965	8,269	841	9,110	1988	27,192	19,144	46,336
1966	11,541	878	12,419	1989	28,614	20,737	49,351
1967	13,667	1,744	15,411	1990	29,102	22,326	51,428
1968	15,373	1,533	16,906	1991	30,095	24,065	54,160
1969	16,831	1,596	18,427	1992	32,715	25,477	57,652
1970	18,188	2,221	20,609	1993	31,711	26,462	58,173
1971	18,309	2,535	20,844	1994	31,297	27,217	58,514
1972	19,984	3,606	23,590	1995	31,417	27,694	59,111
1973	20,952	4,500	25,452	1996	32,602	29,040	61,642
1974	20,770	6,222	26,992	1997	32,889	27,731	59,414
1975	24,324	8,468	32,792	1998	33,048	28,431	60,620
1976	23,762	8,602	32,364	1999	33,283	30,526	63,809
1977	22,888	9,589	32,477	2000	34,047	31,426	65,473
1978	22,337	10,523	32,860	2001	35,857	32,933	68,790
1979	22,610	11,441	34,051	2002	38,660	35,287	73,947
1980	24,972	12,897	37,869	2003	41,028	37,253	78,281
1981	25,416	13,484	38,900	2004	41,778	40,025	81,803
1982	26,551	13,881	40,432	2005	41,435	41,064	82,449
1983	26,957	14,863	41,820	2006	41,759	43,202	84,961
1984	25,999	14,954	40,953	2007	42,307	44,765	87,072
1985	25,667	15,191	40,858	2008	43,209	44,895	88,104
1986	26,195	16,095	42,290	2009	50,683	50,053	100,736
1987	26,571	18,132	44,703				

Sources: Iowa Department of Education, Area College and Community College Fall Term Enrollment Reports, except 1997-1999 where data was drawn from the Iowa College and University Enrollment Report prepared by Jerald Dallam of the University Iowa.

Credit Hours

As more students enroll, community colleges deliver more contact hours. This fall, colleges are delivering 966,944.65 credit hours, which is a 15.3 percent increase since last year, outpacing the growth of students.

Thus, not only are more students enrolling, but students are spending more time on campus. Table 2 lists the average credit hours per student since 2006. Students enrolled in just over 9.5 credit hours in the fall semester, a slight rise from last year.

- Credit hours increased 15.3 percent since last year.
- Students have enrolled in a total 966,944.65 credit hours this fall
- Average credit hours per student rose again to 9.6 credit hours.

Each credit hour represents at least 800 minutes of scheduled work for a classroom course; 1,600 minutes for a laboratory course; 2,400 minutes for clinical work; and 3,200 minutes of work experience. Typically, classes at community colleges vary between three and six credit hours. A full-time student must take at least 12 credit hours a semester, which is at least 9,600 classroom hours a semester.

Table 2 — Average Credit Hours

Fiscal Year	Average Credit Hours per Student	
2006	9.63	
2007	9.51	
2008	9.46	
2009	9.51	
2009	9.59	

Note: Each "|" represents 0.25 credit hours.

Table 3 — Fall Credit Hours by College and Attendance Status: 2009

College	Attendance Status			1-year Change
	Full-time	Part-time	Total	
Northeast	36,127	15,592	51,719	15.1%
North Iowa Area	29,143	8,771	37,914	8.7%
Iowa Lakes	28,668	7,785	36,453	12.3%
Northwest Iowa	11,568	4,219	15,787	21.9%
Iowa Central	44,974	14,774	59,748	7.5%
Iowa Valley	26,900	7,589	34,488	13.5%
Hawkeye	51,486	14,052	65,538	9.1%
Eastern Iowa	53,337	25,044	78,381	21.3%
Kirkwood	132,935	45,036	177,971	16.9%
Des Moines Area	119,255	74,924	194,179	20.2%
Western Iowa Tech	35,030	18,150	53,180	13.7%
Iowa Western	51,015	14,286	65,301	11.4%
Southwestern	12,290	4,628	16,918	17.7%
Indian Hills	33,055	7,590	40,645	19.6%
Southeastern	29,298	9,427	38,725	11.2%
Total	**695,079**	**271,865**	**966,945**	**15.3%**

Note: Students enrolled in 12 or more credit hours are counted as full-time. Negative values shown in parentheses. Each "|" denotes 5,000 credit hours.

Student Demographics

Recessions impact entire economies, however, it impacts certain demographics harder than others. In particular, the 2008-09 recession has impacted males, minorities, and those with low educational attainment more than other segments. Colleges have seen disproportional increases in enrollment for these categories.

Just under 55 percent of students were female (Figure 2), which slipped a percent since last year. Nevertheless, female enrollment is consistent with state and national trends in community colleges and four-year colleges (U.S. Department of Education, 2007: Table 181).

Females have outnumbered males nationally in higher education since 1980. In Iowa, females have outnumbered males since the Iowa Department of Education began collecting data in 1998.

Figure 3 shows the distribution of ages enrolled in colleges. The average age increased slightly this year to 23.07 years old, but the median age stayed consistent at 19 years old, consistent with national data (Provasnik and Planty, 2008). Thus, half of Iowa community college students are still teenagers.

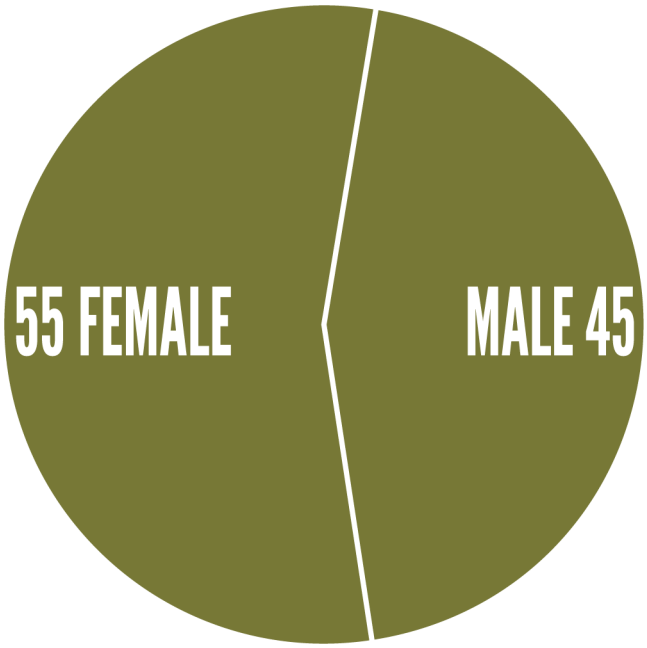
Moreover, 72 percent of students are traditional age students under 25 years old. Nationally, 58 percent of students in public two-year colleges are traditional age students (U.S. Department of Education, 2007: Table 181).

- The median student age is 19 years old, but the student body is older this year.
- Females comprised 55 percent of total enrollment.
- Minorities comprise 12 percent of fall enrollment.

Yet, there was a distinct change in the age of enrolled students. There was a decrease in the proportion of students between the ages 16 and 22, while the proportion of students between 25 and 65—traditional workforce age—increased 2.8 percent. Statistical tests show students are distinctly older this year compared to last year. It is very likely the increase in this demographic was caused by the 2008-09 recession.

This year, the Iowa Department of Education has begun reporting on new race and ethnicity enrollment categories in accordance with federal regulations. There is also a higher percentage of minorities in community colleges

Figure 2 — Enrollment by Gender: 2009

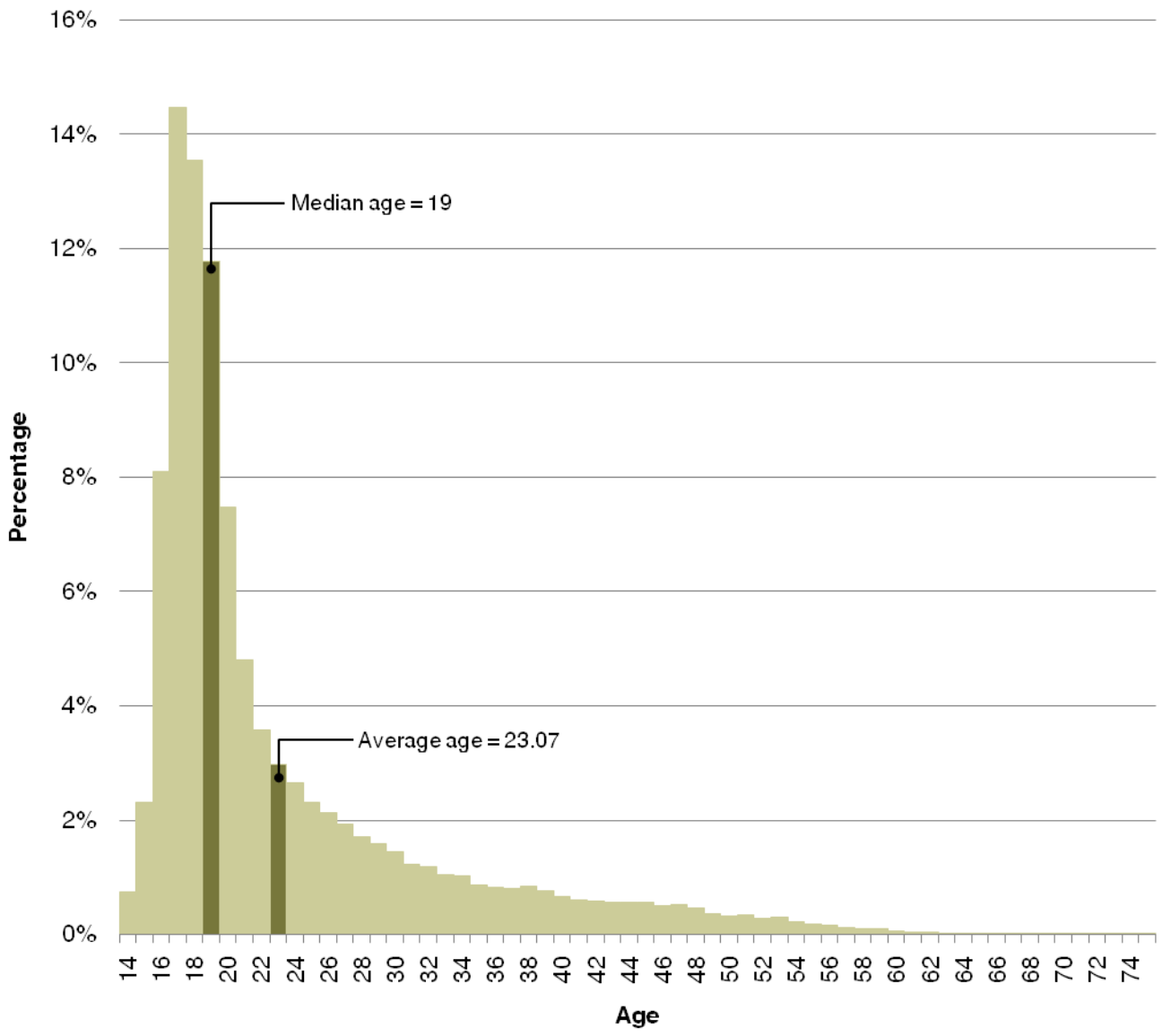


than in the state population. The U.S. Census (2008) estimates 10 percent of Iowans are non-white. This fall 11.9 percent of students are minorities. Community colleges typically serve a higher proportion of minorities, but direct national comparisons are difficult since many other states are significantly more diverse in racial and ethnic backgrounds.

Blacks were the second largest racial/ethnic group (5.6 percent), followed by Hispanic (3.7 percent), and Asian/Pacific Islander (1.9 percent). A fourth of one percent indicated they were part of multiple racial and ethnic groups.

Finally, over 93 percent of students are residents of Iowa, which has been a common trend ever since the department started collecting data in 1998 (Figure 5).

Figure 3 — Age Distribution: 2009



Note: The population standard deviation was 9.1 years. Ages 75 and over were combined into a single data point. There were 898 missing data points, which included respondents with incorrectly reported ages.

Figure 4 — Enrollment by Race/Ethnicity: 2009

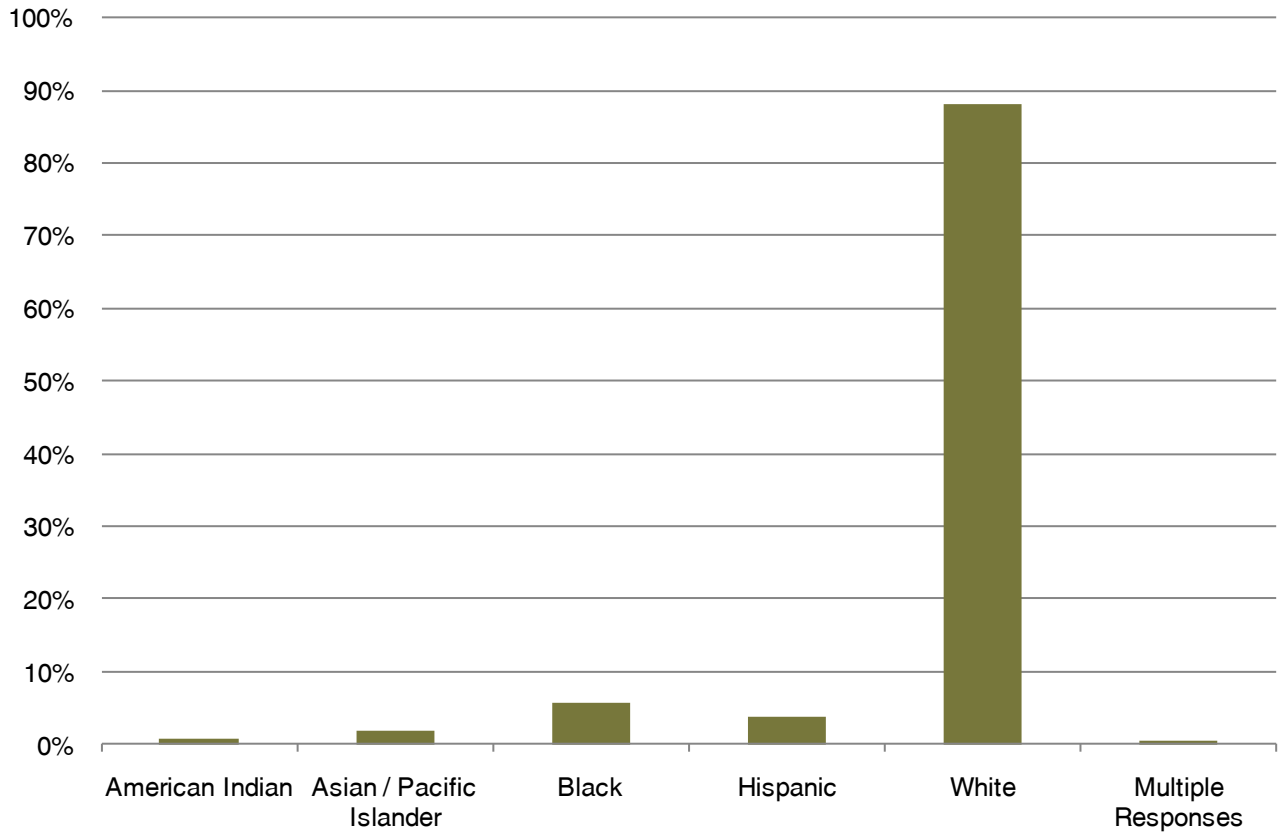
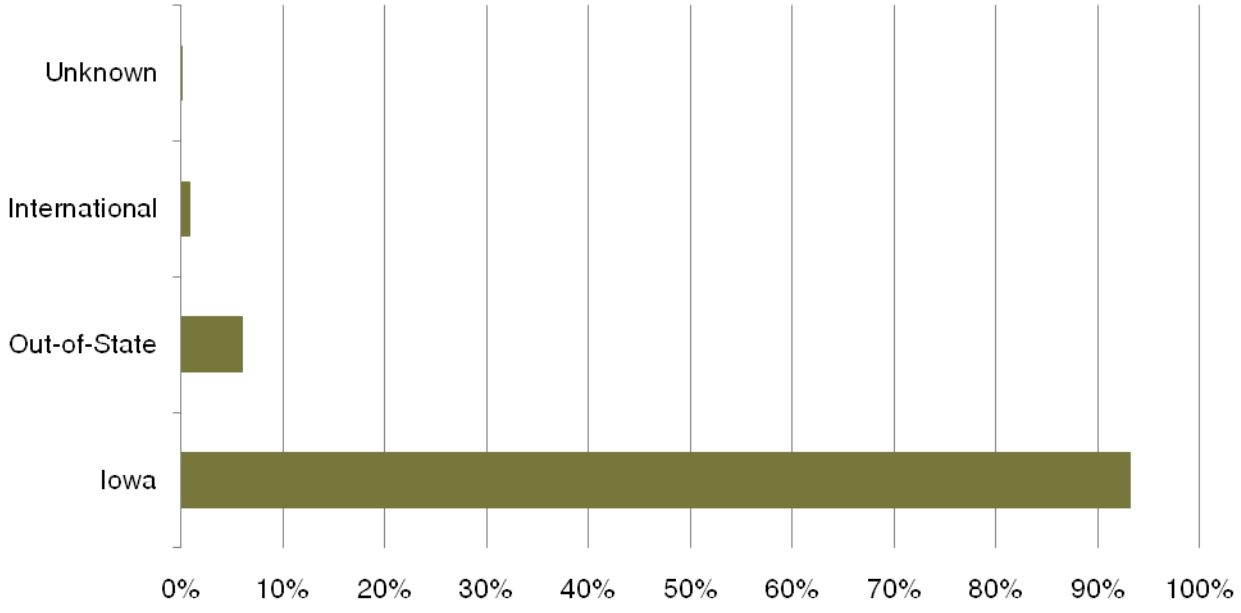


Figure 5 — Enrollment by Residency: 2009



Program Type

Community colleges offer several broad categories of programs:

- College parallel programs contain classes that articulate to a four-year university.
- Career option programs let students articulate to a four-year university or enter into a career field after graduation.
- Career and technical education (CTE) programs prepare students for the workforce.

College parallel programs are still the largest category of enrollment (Figure 1). Enrollment increased 25.8 percent to 64,121 students, outpacing the growth of all other program types (Table 4). Over 63 percent of students were enrolled in college parallel programs this past fall.

CTE enrollment increased at a slower pace this year, increasing 0.8 percent to 31,133 students. Over 30 percent of students were enrolled in CTE programs, which is lower than the national average. Nationally, at least 41 percent of enrollments in public two-year institutions are in CTE programs (Levesque et al. 2008).

All of the program types have increased last year with the exception of career option programs. Those programs, which let students either transfer or enter into a career field, declined 8.5 percent to 4,913 students.

- College parallel programs saw significant increase in enrollment since last year.
- Career option has the highest proportion of minorities, followed by college parallel, and CTE.

Enrollment in CTE programs by females marginally increased since 2005 (Figure 7), while males increased their enrollment. Meanwhile, there was a large growth within college parallel programs over the last five years. In line with prior trends, enrollment in career option programs has declined slightly for both genders.

Finally, Figure 8 shows the enrollment in each program type by minorities. Blacks comprised the largest share of minorities in each program type, followed by Hispanics and Asians/Pacific Islanders.

Figure 6 — Enrollment by Program Type: 2009

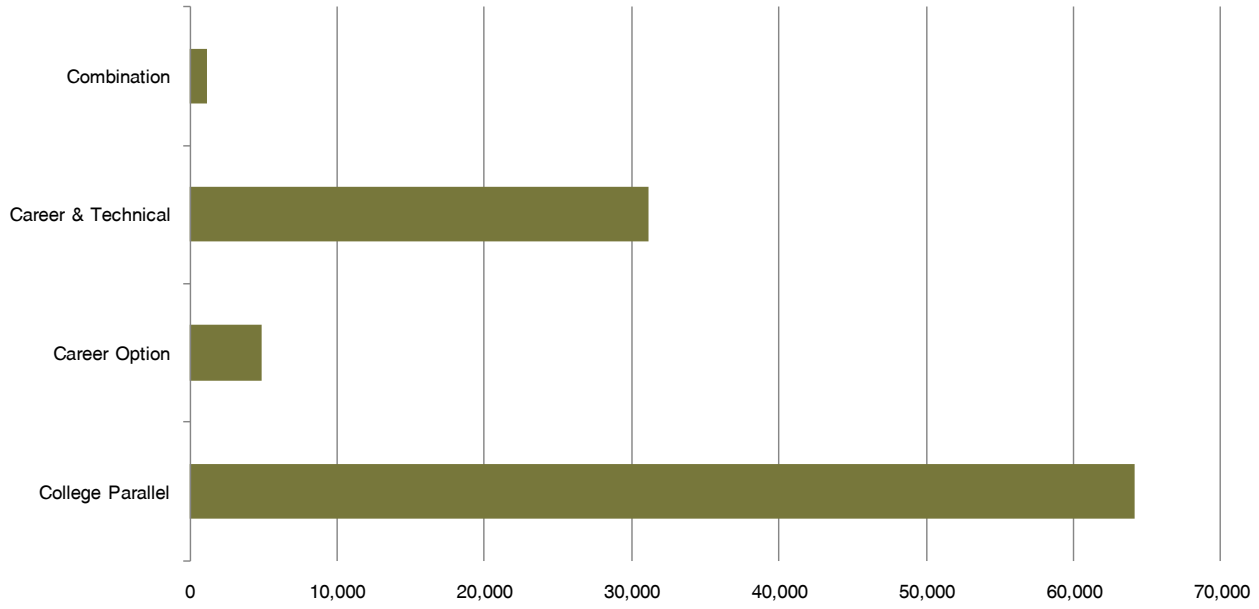


Figure 7 — Program Type Enrollment by Gender: 2005 & 2009

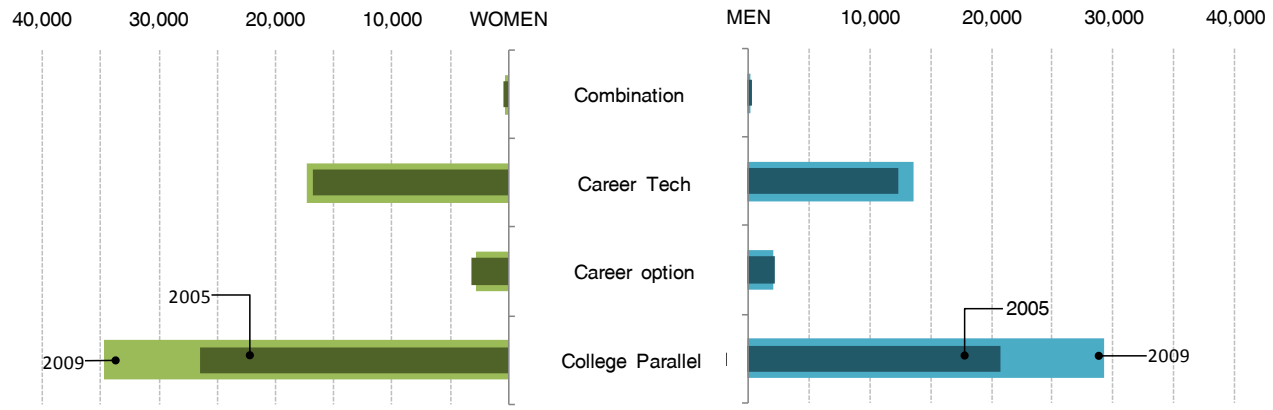
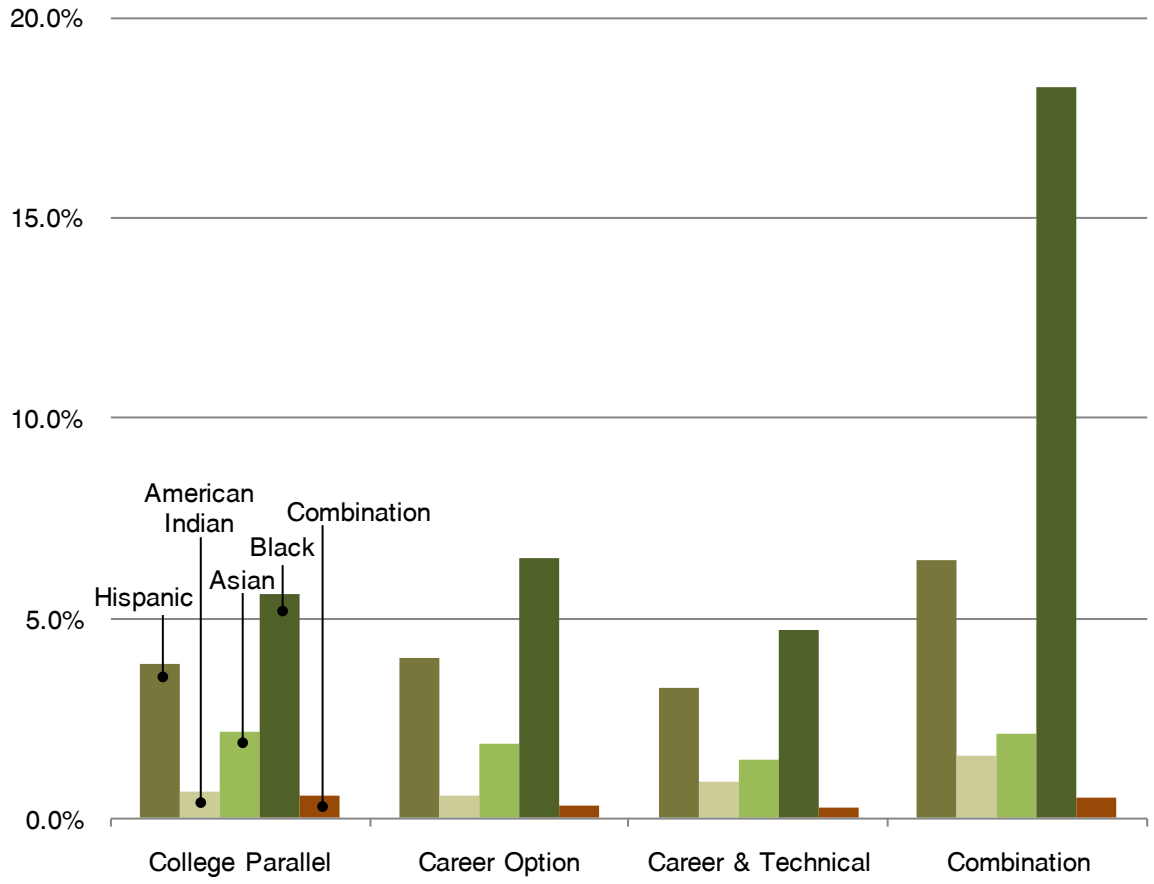


Figure 8 — Program Type Enrollment by Minorities: 2009



Note: Hispanic includes anyone who identified themselves as Hispanic, regardless of any other racial identification. Asian includes Asians and Pacific Islanders. Combination refers to any multiple identification of Asian, Black, or American Indians.

Career Clusters

Enrollment in CTE programs can be broken down to specific areas of study. Health science remains the largest career cluster in the community colleges (17,852), followed by business management and administration (8,782) and manufacturing (2,707). Unfortunately, the U.S. Department Education groups education programs by different standards so that national comparisons are not possible.

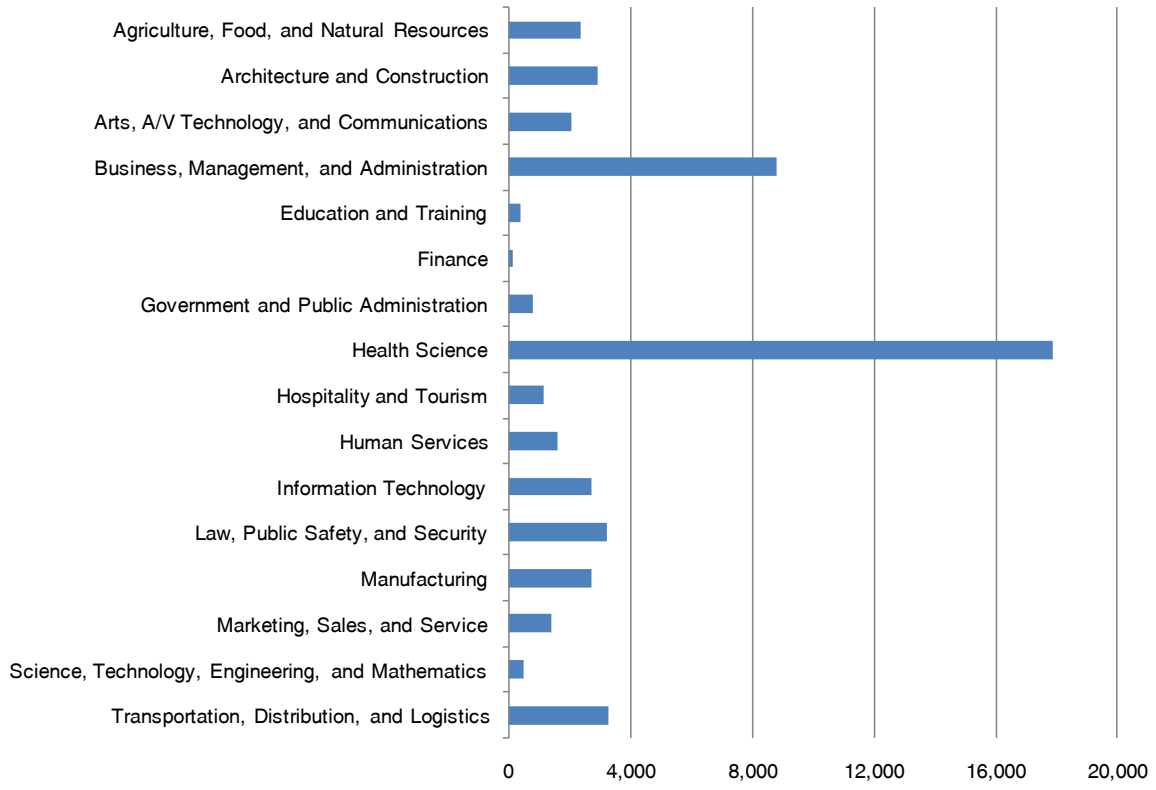
Marketing grew 66 percent since the prior year to 1,416, followed by education and training and business, management and administration (both grew 54 percent). Health science, the largest cluster, grew 45 percent.

Most of the jobs lost during the 2008-09 recession were in the manufacturing industry (Iowa Workforce Development, 2009). Therefore, it is not surprising that enrollment in manufacturing grew at a relatively small five percent since last year. Nevertheless, architecture and construction programs—which are associated with the hard-hit construction industry—grew 42 percent since last year.

- Health sciences is the largest career cluster.
- Business, management & administration is the second largest, followed by manufacturing.

The Iowa Department of Education will report CTE programs by the 16 career clusters. Each student major aligns to a career cluster with other similar programs. Page 13 lists all of the career clusters with a brief description. Information on career clusters can be obtained from www.careerclusters.org.

Figure 9 — Enrollment by Career Clusters: 2009



The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

Careers in designing, planning, managing, building, and maintaining the built environment.

Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

Business, management and administration careers encompass planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.

Planning, managing, and providing education and training services, and related learning support services.

Planning, services for financial and investment planning, banking, insurance, and business financial management.

Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.

Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Hospitality & Tourism encompasses the management, marketing and operations of restaurants and other foodservices, lodging, attractions, recreation events, and travel related services.

Preparing individuals for employment in career pathways that relate to families and human needs.

Building Linkages in IT Occupations Framework: for Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.

Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.

Planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

Planning, managing, and performing marketing activities to reach organizational objectives.

Planning, managing, and providing scientific research and professional and technical services including laboratory and testing services, and research and development services.

Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment, and facility maintenance.

High School Students

- High school student enrollment grew 13.2 percent.
- 26,111 high school students are enrolled for college credit at Iowa's community colleges.
- On average, students enroll in 5.13 credit hours.

Community colleges offer joint enrollment options to high school students who can earn college credit toward a one- or two-year degree or transfer to a four-year institution. There are several options available for students, including Postsecondary Enrollment Option (PSEO), contracted courses between high schools and community colleges, career academies, and tuition.

Joint enrollment increased 13.2 percent to 26,111 students. Joint enrollment accounts for 25.9 percent of total enrollment, which is down from last year. Nevertheless, joint enrollees are spending more time on campus. The average credit hours per student increased 0.07 credit hours to 5.13 credit hours.

According to the most recent study released by the U.S. Department of Education, 813,000 students enrolled in joint enrollment programs in the United States—roughly five percent of all high school students (Kleiner and Lewis, 2005). Nearly 16 percent of Iowa high school students participate in joint enrollment.

The Iowa Department of Education (2009) showed that joint enrollees tend to be either juniors or seniors in high school and, on average, do better on the ACT than students who did not jointly enroll. Additionally, almost a third of joint enrollees transition to a four-year college after graduating from high school.

Table 5 — Joint Enrollment by College: 2009

College	Unduplicated Enrollment	Percent of All Students	Credit Hours	Average Credit Hours per Student
Northeast	1,725	32.0%	8,631	5.00
North Iowa Area	1,028	27.6%	4,988	4.85
Iowa Lakes	1,008	30.4%	5,080	5.04
Northwest Iowa	682	42.2%	3,312	4.86
Iowa Central	2,246	38.0%	12,757	5.68
Iowa Valley	860	25.9%	4,649	5.41
Hawkeye	1,187	18.8%	4,793	4.04
Eastern Iowa	2,519	29.7%	16,549	6.57
Kirkwood	2,665	14.9%	11,064	4.15
Des Moines Area	6,583	29.5%	32,893	5.00
Western Iowa Tech	1,671	28.6%	7,918	4.74
Iowa Western	1,466	24.0%	8,149	5.56
Southwestern	499	29.7%	2,528	5.07
Indian Hills	1,238	24.1%	7,185	5.80
Southeastern	734	19.6%	3,580	4.88
Total	**26,111**	**25.9%**	**134,074**	**5.13**

Note: High school student includes Postsecondary Enrollment Option, contract courses, and tuition paying students. For the student count, each "|" denotes 500 students; for percentage of all student, each "|" denotes 10 percent; for credit hours, each "|" denotes 1,000 hours; finally, for average credit hours per student, each "|" denotes 0.25 hours.

Enrollment Projections

- Fall 2009 enrollment exceeded projected enrollment.
- Enrollment is expected to increase 3.5 percent next fall based on current conditions.

The 2008-09 recession was the steepest since the Great Depression in terms of lost output. Consequently, enrollment surged past projected enrollment by a considerable margin. Based on projected unemployment, population, and economic production, enrollment was projected to increase two percent, which is well short of the actual 14.3 percent increase.

The economy deteriorated more than what was projected as late as April 2008. For instance, the Congressional Budget Office (2008) projected 1.9 percent growth and 5.2 percent unemployment, however, the economy only grew 0.4 percent and unemployment has now grown to 9.8 nationally, 6.7 percent for Iowa (Bureau of Labor Statistics, 2009).

Even when accounting for a decline in Iowa's output and unemployment rate, students flocked to community colleges at a higher rate than past recessions.

Enrollment projections have been re-estimated through 2014 using the latest available data. Enrollment growth is projected to increase 3.5 percent in fall 2010 and enrollment gains are expected to stay above two percent as the economy is expected to recover (Congressional Budget Office, 2009).

Table 6 — Projected Enrollment: 2009-2013

Year	Actual Enrollment	Predicted Enrollment	Upper Estimate	Lower estimate	Predicted Percent Gain
2009	100,736	89,920	94,441	97,727	2.0%
2010		104,262*	108,752	99,772	3.5%
2011		107,150*	114,198	100,102	2.8%
2012		109,396*	118,417	100,375	2.1%
2013		111,623*	122,279	100,966	2.0%

Note: Estimates from 2010 through 2013 were revised in October 2009. Projections are based on previous year enrollment, high school enrollment, real U.S. gross domestic product (GDP), and Iowa unemployment rate.

Iowa's enrollment is projected to outpace overall growth of community colleges in the United States. Hussar and Bailey (2009) estimate community colleges will grow 1.2 percent this year and 0.8 percent next year.

Enrollment projections were developed by the Iowa Department of Education in late 2008. The forecasts account for prior year enrollment, a forecast of high school students (Iowa Department of Education, 2007) and U.S. gross domestic product (GDP) (Congressional Budget Office, 2009).

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