



Associate of Professional Studies Pilot Outcomes Report 2023

Background

The Associate of Professional Studies (APS) degree is awarded upon the completion of a state-approved program of study intended to prepare students for transfer into aligned baccalaureate programs or immediate related employment. The APS pilot degree was written into Iowa Administrative Code in 2013, primarily as an alternative to the Associate of Science-Career Option (AS-CO) degree being phased out by the end of Academic Year (AY) 2015-2016. Initially, a limited number of APS pilot programs were approved from colleges demonstrating that other award types could not meet their needs. Colleges that were initially approved to grant pilot APS awards included Northeast Iowa Community College (NICC), Iowa Central Community College (ICCC) and Iowa Valley Community College (IVCCD). Currently, only ICCC and IVCCD offer APS awards to their students.

According to Chapter 21 of Iowa Administrative Code 281, an APS degree shall consist of between 62 and 68 semester credit hours. The general education component shall consist of a minimum of 30 semester credit hours of general education, including three semester credit hours of each of the following: speech, mathematics, humanities, social and behavioral science and science; six semester credit hours of writing and 9 semester credit hours distributed among mathematics, social and behavioral sciences, humanities and science. The technical core of the APS degree shall consist of a minimum of 16 semester credit hours of career and technical coursework accepted by a receiving baccalaureate degree-granting institution with an aligned program as applying toward a specific major or program of study. The technical core of the degree shall also consist of a minimum of 16 additional semester credit hours of career and technical coursework accepted by the receiving institution as electives. An APS degree shall also have a minimum of three program-to-program articulation agreements with baccalaureate degree-granting institutions, at least one of which must be a public institution. The agreements shall provide for the application of no fewer than 60 semester credit hours toward the graduation requirements of each articulated baccalaureate degree program.

Enrollment and Award Data

Statewide APS Enrollment and Awards

2015 was the first year to have data for APS awards. Of the total unduplicated enrollment at Iowa's community colleges, a very small percentage of students were enrolled in programs granting APS awards (Table 1). Additionally, the number of APS degrees awarded as a percentage of all associate degrees was very low. It also appears that the number of students enrolled in APS programs and the number of students earning APS awards decreased over the last few academic years.

Table 1 – Statewide APS Enrollment and Awards

Academic Year	APS Unduplicated Enrollment	Percentage of Associate Total Unduplicated Enrollment	APS Degrees Awarded	Percentage of Associate Degrees Awarded
2014-2015	Data not available	N/A	36	0.30%
2015-2016	163	0.11%	29	0.24%
2016-2017	492	0.35%	77	0.69%
2017-2018	409	0.30%	45	0.43%
2018-2019	408	0.31%	73	0.69%
2019-2020	368	0.28%	59	0.57%
2020-2021	237	0.19%	56	0.55%
2021-2022	179	0.15%	35	0.35%

APS Enrollment and Awards by College

Iowa Central Community College (ICCC) and Iowa Valley Community College District (IVCCD) are the only two community colleges that currently offer programs that grant APS awards. From AY 2015 through AY 2022, there were 410 APS awards received by students at these two institutions.

Iowa Central Community College

Table 2 shows the enrollment in APS programs and the awards granted from these programs at ICCC from AY 2015 to AY 2021. ICCC initially offered APS awards in the areas of Social Work, Health/Health Care Administration/Management, Accounting, Business Administration and Management and Criminal Justice/Police Science (see Table 3). However, all but one of these programs have been converted to Associate of Applied Science (AAS) degree programs. The only APS degree program remaining at ICCC is the Health/Health Care Administration/Management program. Since AY 2015, 56 APS awards were granted in this program. The Accounting APS program at ICCC was converted to an Associate of Applied Science (AAS) program starting in Fall 2022 and the Business and Social Work APS programs were converted to AAS programs starting in Fall 2020. The Criminal Justice APS program was discontinued in 2016 and is now an AAS program. The college also offers Associate of Arts Transfer Major degrees in Business, Social Work and Criminal Justice. The decline in enrollment and awards in AY 2020 and AY 2021 in Table 2 are most likely attributed to the conversion of APS programs to AAS and Transfer Major programs at the college.

Table 2 –APS Enrollment and Awards at ICCC

Academic Year	APS Unduplicated Enrollment	Percentage of Associate Total Unduplicated Enrollment	APS Degrees Awarded	Percentage of Associate Degrees Awarded
2014-2015	Data not available	N/A	36	4.16%
2015-2016	163	1.81%	29	3.36%
2016-2017	487	5.85%	74	7.91%
2017-2018	392	5.00%	43	5.61%
2018-2019	392	5.51%	63	7.84%
2019-2020	346	5.08%	54	6.73%
2020-2021	215	3.49%	46	6.01%
2021-2022	163	2.52%	30	3.69%

Table 3 - APS Awards by Program at ICCC

Academic Year	Health/Health Care Administration/ Management	Social Work*	Accounting*	Business Administration and Management, General*	Criminal Justice/Police Science*
2014-2015	13	23	N/A	N/A	N/A
2015-2016	N/A	1	17	1	10
2016-2017	8	19	21	6	1
2017-2018	9	14	17	3	N/A
2018-2019	9	18	23	13	N/A
2019-2020	9	9	22	14	N/A
2020-2021	3	14	14	15	N/A
2021-2022	5	6	12	6	1

*No longer an APS program

Iowa Valley Community College District

Table 4 shows the enrollment in APS programs and the number of APS degrees awarded to students from AY 2017 to AY 2022. According to Table 5, there are currently two APS award programs at IVCCD: Agriculture and Pre-Veterinary Studies. The Agriculture program has granted 34 awards since AY 2015. The Pre-Veterinary Studies program was implemented in Fall 2022 and there is limited data for this program.

Table 4 – APS Enrollment and Awards at IVCCD

Academic Year	APS Unduplicated Enrollment	Percentage of Associate Total Unduplicated Enrollment	APS Degrees Awarded	Percentage of Associate Degrees Awarded
2016-2017	5	0.14%	3	0.77%
2017-2018	17	0.48%	2	0.58%
2018-2019	16	0.47%	10	2.81%
2019-2020	22	0.66%	5	1.41%
2020-2021	22	0.71%	10	3.08%
2021-2022	16	0.53%	5	1.41%

Table 5 - APS Awards by Program at IVCCD

Academic Year	Agriculture, General	Pre-Veterinary Studies
2016-2017	3	N/A
2017-2018	2	N/A
2018-2019	10	N/A
2019-2020	5	N/A
2020-2021	10	N/A
2021-2022	4	1

Employment and Transfer Outcomes

Statewide Outcomes

There were 188 students that earned APS degrees from 2017-2021 (5-year aggregated data). Of these 188 students, 82 students (43.6%) matched to enrollment the first academic year after completion of the award, meaning that these students went on to further their education at any institution. 106 of the 188 students did not go on to further their education (56.4%). 88 of the students that did not continue their education (83.0%) were matched to employment the first year following completion of the degree. The adjusted median wage for 4 quarters for these students was \$35,875.

Table 6 shows the percentage of students that were matched to enrollment the first year after receiving their APS award for cohort years 2017 through 2021. For the students who were not matched to enrollment, the percentage of those students who were matched to employment is shown. The percentage of students who went on to further their education the first academic year after earning an APS degree ranged between 35.3% and 50.0% depending on the cohort year. Between 76.2% and 90.5% of the students who did not continue their education entered the workforce the first year after receiving their award. According to Table 6, the adjusted median wage increased with each cohort year.

Of the students matched to enrollment the first year following completion of the APS degree (5-year aggregate), 13.8% of students continued their education at a 2-year institution and 86.3% of students continued their education at a 4-year institution. Of those that attended a 4-year institution, 63.8% enrolled at an in-state institution and 36.2% enrolled at an out-of-state institution. 72% of the students who went to out-of-state institutions attended a 4-year institution in California, New Hampshire, Alabama, Minnesota, Missouri, Utah and Wisc. The rest of the students attended a 4-year institution in Indiana, Kentucky, Maryland, Oklahoma, Pennsylvania, South Dakota and Tennessee. Of those students that went to 4-year institution, 53.6% attended a public institution and 46.4% attended a private institution.

From 2017 to 2021, 79 students of the students enrolled in a 4-year institution within one year after earning an APS degree graduated from a 4-year institution. The average time to graduation for these students was 2.36 years (2.38 years for those earning an Agriculture APS degree, 2.60 years for those earning a Social Work APS degree, 2.26 years for those earning a Health/Health Care Administration/Management APS degree, 1.91 years for those earning a Business Administration and Management APS degree and 2.53 years for those earning an Accounting APS degree). With the exception of those students who earned an APS award in Agriculture (100% of those students enrolled and graduated from a public institution), students enrolled and graduated from a mix of public and private institutions (50% of those earning a Social Work APS degree, 14.3% of those earning a Health/Health Care Administration/Management APS degree, 45.5% of those earning a Business Administration APS degree and 64.3% of those earning an Accounting APS degree enrolled and graduated from a public 4-year institution). Table 7 illustrates the different types of programs that students graduated from at the 4-year institutions.

For the students who were matched to employment the first year after receiving their APS award, Table 8 illustrates the types of industries that these students were employed in based

on the type of APS program they received an award from between 2017-2022. For example, 57.6% of students who received an award in Social Work entered the Health Care & Social Assistance industry. 16.7% of students who who received an APS degree in Health/Health Care Administration entered the Public Administration Industry. For those students who received an APS degree in Business Administration and Management, 17.4% entered the Finance & Insurance industry, 17.4% entered the Retail Trade industry and 13.0% entered the Educational Services industry.

Table 6 – Statewide APS Outcomes by Cohort

Cohort Year	Matched to Enrollment (1st Year After Award)	Matched to Employment (1st Year After Award)	Adjusted Median Wage (4 Quarters)
2017	44.7%	76.2%	\$31,662
2018	50.0%	78.6%	\$36,474
2019	45.1%	85.7%	\$37,592
2020	35.3%	81.8%	\$38,583
2021	43.2%	90.5%	\$40,052

Table 7 – 4-Year Graduation Major by APS Program (2017-2022)

APS Program	Major
Agriculture (IVCCD)	Agricultural Teacher Education (4 students) Farm/Farm and Ranch Management (3 students) Animal Sciences, General (2 students) Agribusiness/Agricultural Business Operations (1 student) Agricultural Mechanization, General (1 student) Agronomy and Crop Science (1 student) Education, General (1 student) Agricultural Engineering (1 student)
Social Work (ICCC)	Family and Community Services (3 students) Human Services, General (3 students) Social Work (3 students) Multi-/Interdisciplinary Studies, Other (2 students) Psychology, General (1 student) Social Sciences, General (1 student) Mental Health Counseling/Counselor (1 student)
Health/Health Care Administration (ICCC)	Unknown (4 students) Exercise Science and Kinesiology (1 student) Health Health/Health Care Administration/Management (1 student) Health and Medical Administrative Services, Other (1 student) Organizational Leadership (1 student)
Business Administration and Management, General (ICCC)	Business Administration and Management, General (4 students) Finance, General (1 student) Public Relations, Advertising, and Applied Communication (1 student) Liberal Arts and Sciences/Liberal Studies (1 student) Logistics, Materials, and Supply Chain Management (1 student) Investments and Securities (1 student) Marketing/Marketing Management, General (1 student) Unknown (1 student)
Accounting (ICCC)	Accounting (7 students) Management Services and Quantitative Methods, Other (2 students) Finance, General (1 student) Financial Planning and Services (1 student) Agribusiness/Agricultural Business Operations (1 student) Sport and Fitness Administration/Management (1 student) Unknown (1 student)

Table 8 – Industry of Employment by APS Program (5 Year Aggregate, 2017-2022)

APS Program	Industry
Agriculture (IVCCD)	Administrative & Support Services* Real Estate, Rental, & Leasing* Wholesale Trade*
Social Work (ICCC)	Health Care & Social Assistance (57.6%) Accommodation & Food Services* Administrative & Support Services* Arts, Entertainment, & Recreation* Educational Services* Finance & Insurance* Public Administration* Retail Trade*
Health/Health Care Administration (ICCC)	Public Administration (16.7%) Accommodation & Food Services* Educational Services* Health Care & Social Assistance* Retail Trade*
Business Administration and Management, General (ICCC)	Finance & Insurance (17.4%) Retail Trade (17.4%) Educational Services (13.0%) Accommodation & Food Services* Agriculture* Forestry, Fishing & Hunting* Health Care & Social Assistance* Management of Companies & Enterprises* Manufacturing* Professional, Scientific, & Technical Services* Public Administration* Wholesale Trade*
Accounting (ICCC)	Finance & Insurance* Manufacturing* Professional, Scientific, & Technical Services* Retail Trade* Transportation & Warehousing* Wholesale Trade*

*Less than three students in industry of employment

Outcomes by College

Iowa Central Community College

Table 9 shows the percentage of students who were matched to enrollment and employment and the adjusted median wage for students who earned a degree from APS programs at ICCC from 2017-2022. Students in the Accounting APS program were the most likely to continue their education the first academic year after receiving their award (58.3%). The students in the Business and Administration and Management program and the Health/Health Care Administration/Management program were the least likely to continue their education (27.0% and 32.4%, respectively). Additionally, of the students who were not matched to enrollment, 100% of the students who earned an Accounting APS degree were matched to employment the first year after receiving their award. The adjusted median wage for students earning an APS award in any APS program from ICCC ranged from \$33,817 to \$37,967. This is comparable to the adjusted median wage of \$35,875 for all students earning an APS degree in the state. Table 10 shows comparable programs that grant AAS awards to students.

Table 9 – APS Outcomes for ICCC by Program (5-Year Aggregate, 2017-2022)

Program	Matched to Enrollment (1 st Year After Award)	Matched to Employment (1 st Year After Award)	Adjusted Median Wage (4 Quarters)
Health/Health Care Administration/Management	32.4%	72.0%	\$33,817
Social Work*	40.3%	89.2%	\$36,694
Accounting*	58.3%	100.0%	\$37,967
Business Administration and Management, General*	27.0%	85.2%	\$35,390
Criminal Justice/Police Science*	0.0%	N/A	N/A

*No longer an APS program

Table 10 –Outcomes for Comparable AAS Programs (5-Year Aggregate, 2017-2022)

Program	Matched to Enrollment (1 st Year After Award)	Matched to Employment (1 st Year After Award)	Adjusted Median Wage (4 Quarters)
Health/Health Care Administration/Management	44.4%	100%	\$7,580
Social Work*	50.0%	100%	\$26,587
Accounting*	24.9%	89.8%	\$36,393
Business Administration and Management, General*	29.6%	90.5%	\$33,076
Criminal Justice/Police Science*	24.8%	95.2%	\$37,355

Iowa Valley Community College

Table 11 shows the outcomes data for IVCCD from 2017-2022. Almost 78% of students who earned an APS award in Agriculture from IVCCD continued their education one academic year after earning an APS award. Of the students who were not matched to enrollment, 66.7% of students were matched to employment one year after earning their degree. The adjusted median wage for students matched to employment is \$37,860. This is higher than the adjusted median wage of \$35,875 for all students earning an APS degree in the state. Since the Pre-Veterinary Studies was only implemented in Fall 2021, there is not enough data available for this program. Table 12 shows comparable programs that grant AAS awards to students.

Table 11 – APS Outcomes for IVCCD by Program (5-Year Aggregate)

Program	Matched to Enrollment (1 st Year After Award)	Matched to Employment (1 st Year After Award)	Adjusted Median Wage (4 Quarters)
Agriculture, General.	77.8%	66.7%	\$37,860
Pre-Veterinary Studies	N/A	N/A	N/A

Table 12 – Outcomes for Comparable AAS Programs (5-Year Aggregate, 2017-2022)

Program	Matched to Enrollment (1 st Year After Award)	Matched to Employment (1 st Year After Award)	Adjusted Median Wage (4 Quarters)
Agriculture, General.	17.3%	74.4%	\$37,114
Pre-Veterinary Studies	N/A	N/A	N/A

Recommendation

Chief academic officers (CAO) from the state’s community colleges met on May 19, 2023 to discuss the need for the APS degree program. The CAO from IVCCD indicated that this award type is meeting the need for their APS-granting programs, especially the Pre-Veterinary Studies program. Other CAOs expressed interest in exploring this degree program option in the future.

Based on the data presented in this report, as well as CAO discussions, it is recommended that the APS degree continue to be an option for Iowa community colleges on a special approval basis only. Community colleges wishing to add this award as an option for students in a particular subject area will need to demonstrate that other degree types are not viable options. Colleges will also need ensure compliance with Chapter 21 of Iowa Administrative Code 281 in regards to general education and technical core requirements and provide the minimum number of program-to-program articulation agreements upon submission to be considered for approval.

Appendix

Methodology

Wages

Wages used in this report originate from either the Iowa Unemployment Insurance (UI) wage database or the State Wage Interchange System (SWIS) network of state UI wage databases. “Adjusted Median Wage” means that wages were adjusted for inflation to academic year 2022 (October 2021 through September 2022) levels in order to make longitudinal comparisons more legitimate using the Consumer Price Index (CPI) as calculated by the U.S. Bureau of Labor Statistics. Wages are adjusted after they have been aggregated by academic year (using academic year average CPI values). The aggregate wages reported in this report do not include graduates who did not match the UI wage database (i.e., the median wages only include those who had wages covered by UI tax during that year). All wage estimates in the report include ALL wages in the UI wage database for that person in that year. Each individual is associated with just one industry sector and state in each year, and that assignment is based on the industry sector/state of the employer they earned the most wages with in that year. Median wages are used in this report rather than average wages to mitigate the effect of outliers. Wage distributions are typically right-skewed and the median is a better measure of center than the mean which is pulled in the direction of the skew (and is more affected by outliers, particularly with small sample sizes). Quarterly wages were aggregated from October 1 (Quarter 4) to September 30 (Quarter 3), which are the dates that most closely aligned with the community colleges’ academic year.