

Table 138.—Average number of Carnegie units earned by public high school graduates in various subject fields, by student characteristics: 1982 to 1998

Student characteristics	Total	English	History/social studies	Mathematics			Science					Foreign languages	Arts	Vocational education ¹	Personal use ²	Computer science ³
				Total	Less than algebra	Algebra or higher	Total	General science	Biology	Chemistry	Physics					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1982 graduates	21.58	3.93	3.16	2.63	0.90	1.74	2.20	0.73	0.94	0.34	0.17	0.99	1.47	4.62	2.58	0.12
Male	21.40	3.88	3.16	2.71	0.94	1.77	2.27	0.76	0.91	0.36	0.23	0.80	1.29	4.60	2.69	0.14
Female	21.75	3.98	3.15	2.57	0.86	1.71	2.13	0.71	0.97	0.33	0.12	1.17	1.63	4.64	2.48	0.11
Race/ethnicity																
White	21.69	3.90	3.19	2.68	0.77	1.91	2.27	0.73	0.97	0.38	0.20	1.06	1.53	4.53	2.52	0.13
Black	21.15	4.08	3.08	2.61	1.36	1.25	2.06	0.81	0.90	0.26	0.09	0.72	1.26	4.75	2.60	0.12
Hispanic	21.23	3.94	3.00	2.33	1.21	1.12	1.80	0.75	0.81	0.16	0.07	0.77	1.29	5.22	2.87	0.08
Asian	22.46	4.01	3.16	3.15	0.71	2.44	2.64	0.51	1.11	0.61	0.42	1.79	1.31	3.34	3.05	0.22
American Indian	21.45	3.98	3.25	2.35	1.23	1.12	2.04	0.67	0.84	0.42	0.12	0.48	1.72	4.77	2.84	0.06
Academic track																
Academic ⁴	21.75	4.11	3.32	3.04	0.73	2.30	2.65	0.73	1.13	0.53	0.26	1.54	1.91	2.55	2.62	0.10
Vocational ⁵	20.21	3.44	2.63	1.80	1.09	0.71	1.32	0.69	0.57	0.04	0.02	0.18	0.59	7.74	2.51	0.12
Both ⁶	22.89	4.04	3.33	2.69	1.02	1.67	2.17	0.79	0.94	0.29	0.14	0.75	1.41	6.03	2.47	0.18
Neither ⁷	18.73	3.58	2.70	1.73	1.08	0.65	1.33	0.69	0.59	0.03	0.02	0.22	0.85	5.23	3.06	0.05
1987 graduates	23.00	4.12	3.32	3.01	0.86	2.15	2.54	0.76	1.10	0.47	0.21	1.35	1.44	4.55	2.67	0.47
Male	22.88	4.08	3.29	3.05	0.91	2.14	2.57	0.79	1.05	0.47	0.26	1.16	1.24	4.64	2.83	0.47
Female	23.12	4.15	3.35	2.97	0.82	2.15	2.52	0.74	1.14	0.47	0.17	1.53	1.63	4.47	2.51	0.47
Race/ethnicity																
White	23.11	4.08	3.29	3.01	0.74	2.27	2.61	0.75	1.12	0.50	0.23	1.38	1.50	4.65	2.60	0.49
Black	22.40	4.22	3.34	2.99	1.40	1.59	2.32	0.90	1.01	0.31	0.10	1.08	1.20	4.52	2.73	0.39
Hispanic	22.84	4.30	3.22	2.81	1.30	1.50	2.24	0.78	1.07	0.29	0.10	1.25	1.34	4.49	3.19	0.42
Asian	24.47	4.37	3.65	3.72	0.53	3.18	3.13	0.59	1.17	0.87	0.50	2.07	1.18	3.11	3.23	0.58
American Indian	23.23	4.22	3.18	2.98	1.35	1.63	2.44	0.81	1.22	0.32	0.09	0.75	1.68	4.92	3.06	0.39
Academic track																
Academic ⁴	23.20	4.26	3.55	3.33	0.65	2.68	2.97	0.73	1.23	0.68	0.32	1.92	1.87	2.57	2.73	0.38
Vocational ⁵	21.07	3.62	2.59	2.00	1.29	0.71	1.48	0.74	0.70	0.03	0.01	0.18	0.47	8.07	2.67	0.39
Both ⁶	23.53	4.11	3.29	2.93	0.97	1.96	2.37	0.81	1.07	0.35	0.14	1.01	1.20	6.09	2.53	0.64
Neither ⁷	19.56	3.55	2.45	2.11	1.62	0.49	1.47	0.84	0.59	0.03	0.00	0.18	0.76	5.10	3.93	0.17
1990 graduates	23.53	4.19	3.47	3.15	0.90	2.25	2.75	0.85	1.14	0.53	0.23	1.54	1.55	4.19	2.68	0.54
Male	23.35	4.13	3.45	3.16	0.96	2.20	2.78	0.88	1.11	0.52	0.28	1.33	1.31	4.32	2.87	0.50
Female	23.69	4.25	3.50	3.14	0.85	2.29	2.73	0.83	1.17	0.53	0.19	1.72	1.76	4.08	2.51	0.57
Race/ethnicity																
White	23.54	4.12	3.46	3.13	0.80	2.33	2.80	0.84	1.15	0.55	0.25	1.58	1.61	4.22	2.61	0.52
Black	23.40	4.34	3.49	3.20	1.25	1.95	2.68	0.98	1.11	0.42	0.16	1.20	1.34	4.41	2.74	0.60
Hispanic	23.83	4.51	3.42	3.13	1.30	1.83	2.50	0.83	1.10	0.42	0.14	1.57	1.48	4.12	3.10	0.58
Asian	24.07	4.50	3.70	3.52	0.70	2.82	2.97	0.68	1.12	0.74	0.42	2.06	1.29	3.07	2.96	0.54
American Indian	22.64	4.08	3.34	3.04	1.03	2.01	2.48	0.83	1.09	0.42	0.15	1.15	1.11	4.62	2.81	0.60
Academic track																
Academic ⁴	23.53	4.30	3.65	3.37	0.68	2.70	3.06	0.81	1.23	0.70	0.32	2.02	1.93	2.41	2.78	0.42
Vocational ⁵	21.73	3.60	2.58	2.07	1.54	0.53	1.62	0.87	0.71	0.03	0.01	0.17	0.42	8.68	2.59	0.46
Both ⁶	23.92	4.14	3.38	3.02	1.12	1.90	2.51	0.92	1.09	0.36	0.14	1.07	1.17	6.10	2.53	0.73
Neither ⁷	19.81	3.63	2.59	2.01	1.57	0.44	1.47	0.79	0.60	0.04	0.03	0.21	0.79	5.81	3.29	0.36
1994 graduates	24.17	4.29	3.55	3.33	0.76	2.57	3.04	0.88	1.26	0.62	0.28	1.71	1.66	3.96	2.63	0.64
Male	24.00	4.26	3.51	3.32	0.85	2.48	3.03	0.91	1.20	0.59	0.32	1.49	1.43	4.13	2.83	0.63
Female	24.34	4.32	3.59	3.34	0.68	2.66	3.06	0.86	1.31	0.64	0.24	1.93	1.87	3.80	2.44	0.65
Race/ethnicity																
White	24.33	4.23	3.56	3.36	0.70	2.66	3.13	0.89	1.29	0.65	0.30	1.76	1.74	3.96	2.61	0.63
Black	23.59	4.36	3.51	3.23	1.09	2.14	2.80	0.92	1.21	0.49	0.17	1.35	1.36	4.29	2.69	0.64
Hispanic	24.06	4.61	3.45	3.28	0.96	2.32	2.69	0.83	1.19	0.49	0.17	1.73	1.51	3.87	2.93	0.76
Asian	24.47	4.60	3.66	3.66	0.67	2.98	3.35	0.80	1.22	0.81	0.48	2.09	1.32	3.01	2.78	0.71
American Indian	24.47	4.27	3.57	3.11	0.94	2.17	2.82	0.91	1.28	0.50	0.13	1.30	2.01	4.27	3.12	0.53
Academic track																
Academic ⁴	24.07	4.37	3.69	3.52	0.58	2.94	3.32	0.83	1.34	0.77	0.37	2.14	2.05	2.28	2.71	0.50
Vocational ⁵	21.60	3.70	2.49	2.20	1.56	0.64	1.69	0.80	0.83	0.03	0.02	0.14	0.34	8.64	2.41	0.55
Both ⁶	24.61	4.23	3.45	3.17	0.96	2.21	2.78	0.96	1.19	0.45	0.17	1.24	1.21	6.01	2.52	0.85
Neither ⁷	21.28	3.54	2.24	2.25	1.71	0.54	1.53	0.82	0.63	0.05	0.02	0.19	0.56	6.51	4.47	0.33

Table 138.—Average number of Carnegie units earned by public high school graduates in various subject fields, by student characteristics: 1982 to 1998—Continued

Student characteristics	Total	English	History/ social studies	Mathematics			Science					Foreign languages	Arts	Vocational education ¹	Personal use ²	Computer science ³
				Total	Less than algebra	Algebra or higher	Total	General science	Biology	Chemistry	Physics					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1998 graduates	25.14	4.25	3.74	3.40	0.67	2.73	3.12	0.89	1.26	0.66	0.31	1.85	1.90	3.99	2.89	0.74
Male	24.93	4.19	3.68	3.37	0.74	2.64	3.09	0.93	1.20	0.62	0.33	1.62	1.61	4.25	3.12	0.78
Female	25.36	4.31	3.80	3.42	0.62	2.80	3.17	0.87	1.32	0.70	0.28	2.06	2.15	3.77	2.67	0.71
Race/ethnicity																
White	25.21	4.19	3.77	3.40	0.57	2.84	3.18	0.87	1.28	0.69	0.33	1.90	2.00	3.97	2.80	0.73
Black	24.83	4.28	3.69	3.42	0.90	2.53	3.03	0.97	1.24	0.58	0.22	1.58	1.57	4.33	2.94	0.84
Hispanic	25.08	4.51	3.60	3.28	1.05	2.23	2.81	0.97	1.13	0.50	0.20	1.78	1.78	3.97	3.36	0.71
Asian	25.23	4.37	3.92	3.62	0.65	2.97	3.43	0.81	1.26	0.83	0.51	2.29	1.52	3.15	2.95	0.67
American Indian	24.43	4.18	3.67	3.10	0.90	2.20	2.68	0.98	1.07	0.49	0.15	1.45	1.94	4.02	3.40	0.67
Academic track																
Academic ⁴	24.91	4.33	3.87	3.54	0.53	3.00	3.34	0.84	1.33	0.78	0.38	2.24	2.41	2.22	2.97	0.52
Vocational ⁵	22.60	3.46	2.55	2.17	1.30	0.87	1.69	1.05	0.59	0.03	0.01	0.14	0.47	9.12	3.01	0.81
Both ⁶	25.64	4.20	3.66	3.30	0.81	2.49	2.94	0.96	1.20	0.54	0.23	1.45	1.31	6.06	2.73	1.03
Neither ⁷	21.50	3.21	2.32	2.19	1.59	0.60	1.58	0.88	0.58	0.04	0.08	0.20	0.55	5.64	5.82	0.51

¹ Includes nonoccupational vocational education, vocational general introduction, agriculture, business, marketing, health, occupational home economics, trade and industry, and technical courses.

² Includes personal and social courses, religion and theology, and courses not included in the other subject fields.

³ Computer courses are included in mathematics and vocational categories.

⁴ Includes students who complete at least 12 Carnegie units in academic courses, but less than 3 Carnegie units in any specific labor market preparation field.

⁵ Includes students who complete at least 3 Carnegie units in a specific labor market preparation field, but less than 12 Carnegie units in academic courses.

⁶ Includes students who complete at least 12 Carnegie units in academic courses and at least 3 Carnegie units in a specific labor market preparation field.

⁷ Includes students who complete less than 12 Carnegie units in academic courses and less than 3 Carnegie units in a specific labor market preparation field.

NOTE: The Carnegie unit is a standard of measurement that represents one credit for the completion of a 1-year course.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "High School and Beyond," First Followup survey; "1990 High School Transcript Study," "National Education Longitudinal Study of 1988," Second Followup survey; "1994 High School Transcript Study;" and "1998 High School Transcript Study." (This table was prepared February 2000.)

Table 139.—Average number of Carnegie units earned by public school graduates in vocational education courses, by student characteristics: 1982 to 1998—Continued

Student characteristics	Total	General labor market preparation	Consumer and home-making education	Specific labor market preparation								
				Total ¹	Agriculture	Business	Marketing	Health	Occupational home economics	Trade and industrial	Technical/communications	Other
1	2	3	4	5	6	7	8	9	10	11	12	13
1990 graduates ...	4.19	0.73	0.57	2.89	0.20	0.88	0.16	0.04	0.10	0.87	0.41	0.10
Male	4.32	0.70	0.33	3.28	0.31	0.57	0.14	0.02	0.07	1.59	0.43	0.02
Female	4.08	0.76	0.79	2.53	0.09	1.16	0.18	0.06	0.13	0.22	0.39	0.17
Race/ethnicity												
White	4.22	0.71	0.55	2.97	0.24	0.85	0.16	0.04	0.09	0.95	0.40	0.09
Black	4.41	0.82	0.80	2.79	0.06	1.05	0.17	0.04	0.15	0.64	0.40	0.16
Hispanic	4.12	0.75	0.53	2.85	0.15	0.93	0.19	0.02	0.11	0.75	0.41	0.18
Asian	3.07	0.69	0.31	2.07	0.04	0.65	0.05	0.01	0.03	0.72	0.48	0.03
American Indian	4.62	0.74	0.72	3.16	0.36	0.95	0.15	0.02	0.07	0.95	0.44	0.02
Academic track												
Academic ²	2.41	0.67	0.55	1.19	0.03	0.46	0.04	0.01	0.04	0.22	0.34	0.02
Vocational ³	8.68	1.00	0.74	6.95	0.86	1.22	0.28	0.10	0.26	3.10	0.28	0.30
Both ⁴	6.10	0.72	0.57	4.81	0.35	1.47	0.33	0.08	0.16	1.50	0.53	0.19
Neither ⁵	5.81	2.81	1.26	1.74	0.10	0.46	0.04	0.04	0.08	0.54	0.32	0.04
1994 graduates ...	3.96	0.64	0.52	2.79	0.24	0.88	0.18	0.08	0.13	0.70	0.35	0.09
Male	4.13	0.70	0.35	3.08	0.37	0.66	0.14	0.03	0.08	1.25	0.36	0.03
Female	3.80	0.58	0.69	2.52	0.11	1.09	0.22	0.12	0.18	0.17	0.34	0.15
Race/ethnicity												
White	3.96	0.63	0.51	2.81	0.27	0.87	0.19	0.08	0.11	0.72	0.35	0.07
Black	4.29	0.72	0.62	2.94	0.13	1.01	0.20	0.11	0.23	0.60	0.29	0.18
Hispanic	3.87	0.64	0.48	2.75	0.13	0.93	0.15	0.07	0.14	0.65	0.36	0.17
Asian	3.01	0.51	0.36	2.13	0.14	0.70	0.11	0.06	0.10	0.50	0.46	0.03
American Indian	4.27	0.85	0.65	2.77	0.41	0.75	0.06	0.18	0.15	0.53	0.41	0.06
Academic track												
Academic ²	2.28	0.58	0.49	1.20	0.04	0.51	0.05	0.03	0.05	0.20	0.28	0.02
Vocational ³	8.64	1.00	0.78	6.86	0.90	1.17	0.34	0.08	0.26	2.89	0.26	0.29
Both ⁴	6.01	0.66	0.54	4.82	0.48	1.41	0.37	0.16	0.23	1.25	0.46	0.18
Neither ⁵	6.51	3.91	1.08	1.52	0.05	0.48	0.08	0.02	0.07	0.46	0.16	0.06
1998 graduates ...	3.99	0.61	0.51	2.87	0.20	0.70	0.16	0.14	0.16	0.78	0.51	0.07
Male	4.25	0.67	0.35	3.23	0.27	0.59	0.15	0.06	0.10	1.37	0.53	0.02
Female	3.77	0.57	0.66	2.54	0.14	0.80	0.18	0.22	0.21	0.23	0.49	0.12
Race/ethnicity												
White	3.97	0.58	0.49	2.90	0.24	0.69	0.15	0.11	0.14	0.83	0.51	0.06
Black	4.33	0.70	0.68	2.95	0.09	0.83	0.24	0.29	0.23	0.56	0.47	0.11
Hispanic	3.97	0.66	0.49	2.82	0.16	0.64	0.18	0.16	0.17	0.75	0.51	0.10
Asian	3.15	0.58	0.27	2.30	0.09	0.64	0.13	0.15	0.14	0.57	0.49	0.02
American Indian	4.02	0.54	0.55	2.92	0.19	0.70	0.14	0.06	0.14	0.98	0.51	0.03
Academic track												
Academic ²	2.22	0.54	0.49	1.19	0.03	0.41	0.05	0.03	0.07	0.22	0.33	0.02
Vocational ³	9.12	1.40	0.75	6.97	0.62	0.64	0.29	0.11	0.36	3.36	0.66	0.29
Both ⁴	6.06	0.62	0.52	4.92	0.41	1.10	0.31	0.29	0.27	1.39	0.74	0.14
Neither ⁵	5.64	2.91	1.20	1.53	0.10	0.43	0.06	0.02	0.07	0.31	0.19	0.06

¹ Includes unclassified courses not shown separately.

² Includes students who complete at least 12 Carnegie units in academic courses, but less than 3 Carnegie units in any specific labor market preparation field.

³ Includes students who complete at least 3 Carnegie units in a specific labor market preparation field, but less than 12 Carnegie units in academic courses.

⁴ Includes students who complete at least 12 Carnegie units in academic courses and at least 3 Carnegie units in a specific labor market preparation field.

⁵ Includes students who complete less than 12 Carnegie units in academic courses and less than 3 Carnegie units in a specific labor market preparation field.

NOTE: The Carnegie unit is a standard of measurement that represents one credit for the completion of a 1-year course.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "High School and Beyond," First Followup survey; "1990 High School Transcript Study," "National Education Longitudinal Study of 1988," Second Followup survey; "1994 High School Transcript Study;" and "1998 High School Transcript Study." (This table was prepared February 2000.)