

Skill improvement training among currently employed workers

In the face of changing technologies, work methodologies, and markets, firms and workers benefit from education or training that upgrades or reorients workers' skills. The proportion of workers participating in skill improvement training for their current job is one indicator of the extent to which firms invest in the re-education of the employed work force. Differences in the proportions of workers who receive training provide an indication of which professions view training as a valuable investment.

- Between 1991 and 1995, the percentage of employed workers who participated in skill improvement training for their current job rose from 30 to 32 percent, increasing for both full- and part-time workers.
- In 1995, females were more likely than males to participate in skill improvement training for their current job.
- Individuals aged 35–54 years old were more likely to participate in skill improvement training for their current job than workers in other age groups in 1995.
- The percentage of workers who participate in skill improvement training is related to their education, occupation, and work status. In both 1991 and 1995, college graduates, workers in executive, professional, and technical occupations, and those employed full time were more likely than other workers to participate in training to improve their current job skills.

Percentage of employed individuals who took one or more courses during the previous 12 months to improve their current job skills, by work status and worker characteristics: 1991 and 1995

Worker characteristics	All workers		Full-time		Part-time	
	1991	1995	1991	1995	1991	1995
Total	29.5	32.0	33.1	35.7	16.4	20.2
Sex						
Male	29.3	31.0	32.3	33.0	8.9	12.5
Female	29.7	35.3	34.2	39.5	19.7	23.6
Age ¹						
20–24	20.4	22.3	26.0	25.9	9.5	14.8
25–34	29.7	33.7	32.0	35.5	19.4	22.7
35–44	36.1	38.0	38.4	39.6	23.9	27.8
45–54	29.9	38.1	32.4	39.9	15.8	24.8
55–64	28.4	26.6	32.3	28.2	17.3	19.8
65 and older	18.6	13.2	29.1	15.7	9.2	10.9
Educational attainment						
High school graduate or less	16.6	20.4	18.8	22.4	9.0	11.8
Some postsecondary education	33.5	35.5	39.3	38.6	16.7	24.3
College graduate	48.0	47.0	50.9	49.4	33.3	30.1
Occupation ²						
Executive, professional, technical	49.9	49.9	51.2	51.4	41.2	39.9
Sales and administrative support	24.0	29.4	28.4	33.0	11.2	15.5
Service	17.8	24.6	22.4	28.9	12.0	16.7
Farming	7.0	13.8	7.3	15.2	4.0	7.1
Precision production, craft, and repair	21.4	27.4	22.4	29.5	9.9	2.5
Operators, fabricators, laborers	19.2	17.2	21.7	17.8	8.0	10.8

¹ Age as of December 31, 1990 for 1991 data, and as of December 31, 1994 for 1995 data.

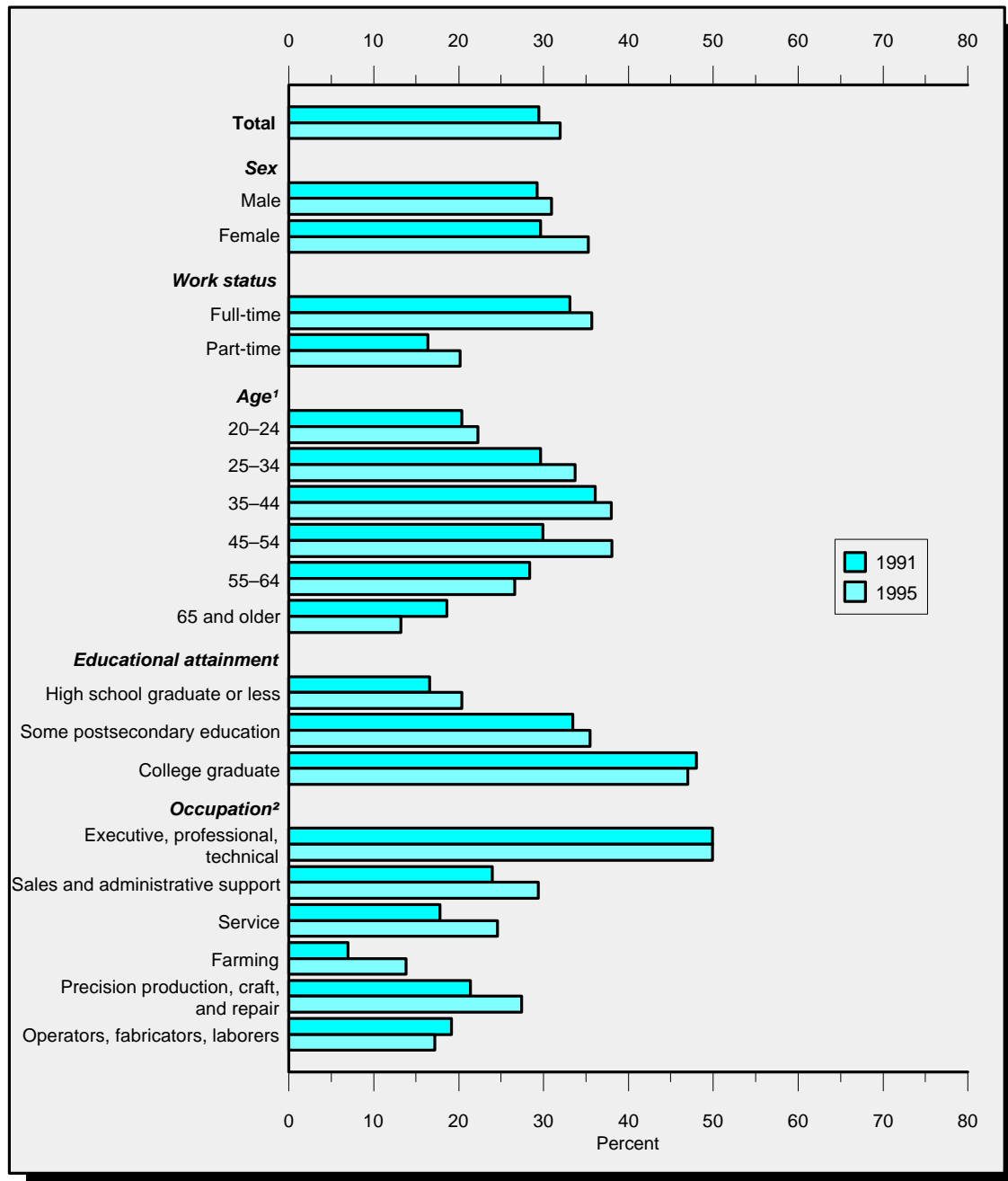
² If respondent had more than one job, "occupation" was based on the job reported first.

NOTE: The survey questions were constructed differently in 1995. However, the response categories used in this analysis were similar

to those used in the 1991 survey. See the supplemental note to this indicator for further discussion.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey, 1991 and 1995 (Adult Education Component).

Percentage of employed individuals who took one or more courses during the previous 12 months to improve their current job skills, by work status and worker characteristics: 1991 and 1995



¹ Age as of December 31, 1990 for 1991 data, and as of December 31, 1994 for 1995 data.

² If respondent had more than one job, "occupation" was based on the job reported first.

NOTE: Survey questions were constructed differently in 1995. However, the response categories used in this analysis were similar to those used in the 1991 survey. See the supplemental note to this indicator for further discussion.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey, 1991 and 1995 (Adult Education Component).

Note to Indicator 14: Skill improvement training

Change between NHES 1991 and 1995

In 1995, the National Household Education Survey (NHES) questionnaire items on adult education and skill improvement training were constructed differently than those in the NHES 1991 questionnaire. In NHES 1991, different types of adult education courses and the main reasons for taking these courses could be obtained from the following item: "What was your main reason for taking (name 1 course)?" Response categories for this question included the following:

- A personal, family, or social reason;
- To improve, advance, or keep up-to-date on current job;
- To train for a new job or a new career;
- To improve your basic reading, writing, or math skills;
- To meet a requirement for a diploma, degree, or certificate of completion;
- Some other reason.

The participation rates for skill improvement training for 1991 were based on the number of respondents who chose the second response category, "to improve, advance, or keep up-to-date on current job."

In NHES 1995, respondents were asked about the different types of adult education courses they had taken in the last 12 months in each of five separate sections of the survey questionnaire: English as a Second Language; Basic Skills and GED preparation; Credential; Personal; and Career or Job related

activities. Within each section, the respondents were also asked to choose the main reason for participating in that type of course. Response categories for this question include the following:

- To improve, advance, or keep up-to-date on current job;
- To train for a new job or a new career;
- To improve your basic reading, writing, or math skills;
- To meet a requirement for a diploma, degree, or certificate of completion;
- A personal, family, or social reason;
- Some other reason.

The participation rates for skill improvement training for 1995 were based on the number of respondents who chose the first response category in each of the five sections "to improve, advance, or keep up to date on current job."

Currently employed workers

Currently employed workers were defined as individuals who were employed during the survey week and who were not full-time students. Individuals who were on vacation during the survey week were not included in this analysis.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey, 1991 and 1995 (Adult Education Component).

Table 14-1 Percentage of employed individuals who took one or more courses during the previous 12 months to improve their current job skills, by work status and worker characteristics: 1991 and 1995

Worker characteristics	All workers		Full-time		Part-time	
	1991	1995	1991	1995	1991	1995
Total	29.5	32.0	33.1	35.7	16.4	20.2
Sex						
Male	29.3	31.0	32.3	33.0	8.9	12.5
Female	29.7	35.3	34.2	39.5	19.7	23.6
Race/ethnicity						
White	31.6	35.0	35.3	37.7	18.0	22.4
Black	20.1	29.7	22.6	33.3	7.5	11.3
Hispanic	22.7	19.0	26.8	20.4	10.7	12.7
Asian/Pacific Islander	20.6	26.8	22.4	30.4	15.1	10.4
Age						
16-19	7.3	11.4	10.4	17.4	4.8	5.6
20-24	20.4	22.3	26.0	25.9	9.5	14.8
25-34	29.7	33.7	32.0	35.5	19.4	22.7
35-44	36.1	38.0	38.4	39.6	23.9	27.8
45-54	29.9	38.1	32.4	39.9	15.8	24.8
55-64	28.4	26.6	32.3	28.2	17.3	19.8
65 and older	18.6	13.2	29.1	15.7	9.2	10.9
Educational attainment						
Less than high school graduate	6.8	12.9	8.2	14.8	2.8	5.4
High school graduate	19.0	23.4	21.2	25.3	10.8	14.6
Vocational/trade school	36.7	35.7	39.4	38.0	23.4	24.1
Some college	33.1	35.4	39.4	38.7	16.1	24.3
Bachelor's degree	46.6	44.9	49.4	47.5	32.4	27.4
Advanced degree	50.3	49.9	53.4	52.0	34.9	34.1
Occupation						
Executive, professional, technical	49.9	49.9	51.2	51.4	41.2	39.9
Executive, administrative, managerial	47.1	43.1	47.8	44.5	34.3	25.5
Professional	51.3	54.9	53.2	57.2	42.8	42.9
Technical	49.7	49.9	52.2	50.9	36.9	45.7
Sales and administrative support	24.0	29.4	28.4	33.0	11.2	15.5
Sales	23.5	24.8	28.0	29.5	10.1	10.9
Administrative support	24.3	32.8	28.6	35.4	11.9	20.5
Service	17.8	24.6	22.4	28.9	12.0	16.7
Farming	7.0	13.8	7.3	15.2	4.0	7.1
Precision production, craft, and repair	21.4	27.4	22.4	29.5	9.9	2.5
Operators, fabricators, laborers	19.2	17.2	21.7	17.8	8.0	10.8
Machine operators, assemblers, inspectors	21.9	17.9	24.3	18.7	3.8	1.3
Transportation and material movers	17.2	18.3	19.9	18.2	8.3	19.4
Handlers, equipment cleaners, laborers	15.4	11.8	16.7	12.8	12.2	5.7
Industry						
Agriculture, forestry, and fisheries	9.6	17.0	10.2	18.9	6.5	7.9
Mining	28.5	41.7	28.5	42.3	—	—
Construction	18.5	20.5	20.1	22.5	2.5	7.2
Manufacturing	28.7	27.1	30.8	27.8	9.1	12.1
Transportation, communications, public utilities	29.2	38.2	30.7	39.1	17.3	29.8
Trade	18.4	16.0	22.2	19.1	10.0	8.0
Finance, insurance, and real estate	43.8	44.2	49.8	48.0	20.4	21.6
Services	32.5	39.2	37.4	43.1	20.9	27.0
Public administration	47.3	52.9	49.2	53.8	22.5	41.6

— Too few sample observations for a reliable estimate.

included in the total but not shown separately are other racial/ethnic groups.

Age as of December 31, 1990 for 1991 data, and as of December 31, 1994 for 1995 data.

In 1995, among those currently employed workers who were categorized as less than high school graduate, 27 percent responded that they had obtained a high school diploma or a GED equivalency.

If respondent had more than one job, occupation and industry were based on the first job reported.

NOTE: The survey questions were constructed differently in 1995. However, the response categories used in this analysis were similar to those used in the 1991 survey. See the supplemental note to this indicator for further discussion.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey, 1991 and 1995 (Adult Education Component).

Table 14-Z Percentage of employed and unemployed individuals aged 25–64 who participated in job related training during the previous 12 months, by highest education level, country, and sex: 1995

Country and sex	Education level					All levels
	Primary	Lower Secondary	Upper secondary	Non-university tertiary	University-level	
Employed						
Australia ¹	20	33	35	53	67	38
Male	18	32	33	50	66	37
Female	21	34	38	57	69	40
Canada	6	12	25	35	43	28
Male	6	13	22	36	40	27
Female	5	11	28	34	47	30
Finland ²	(³)	27	40	61	61	41
Male	(³)	26	37	58	58	38
Female	(³)	29	44	63	65	44
France ⁴	8	28	42	72	57	40
Male	7	26	40	76	46	38
Female	8	30	46	69	75	43
Germany ⁵	(³)	15	28	43	50	33
Male	(³)	—	29	44	50	35
Female	(³)	14	28	40	50	31
Switzerland	—	16	39	51	53	38
Male	—	(14)	41	52	52	42
Female	—	17	37	45	56	34
United States ⁶	7	13	24	36	49	34
Male	8	11	21	34	45	31
Female	6	15	27	38	54	36
Unemployed						
Australia ¹	12	25	25	43	53	24
Canada	6	6	15	24	30	16
France ⁴	14	22	38	66	75	35
Germany ⁵	8	10	19	24	21	16
Switzerland	—	—	—	—	—	33
United States ⁶	6	10	11	17	24	14

—Not available.

¹ Estimates of continuing education and training include studying part time, enrolling for the whole year or part of the year in external courses, and attending training courses organized within or outside of the work place (including some government training programs). Individuals who enrolled only in full-time programs at any time during the 12 months preceding the survey and those who pursued only on-the-job training are excluded.

² Only employer-sponsored training is included.

³ Data included in another category of the question or in another question.

⁴ 1994 data. Employees of small enterprises who received training were included.

⁵ 1994 data. Initial training of students over age 25 in vocational schools and in the dual system is not

included. Forms of continuing vocational training other than formal courses were excluded.

These activities may include participation in short events such as lectures or half-day seminars, familiarization at the work place, computer-aided learning at the work place, workshop circles, or learning workshops. Data on training for those unemployed include formal training as well as on-the-job training if the training was subsidized by the Federal Labor Agency.

⁶ 1995 data. Data do not include full-time students. Individuals who completed upper secondary education

but did not obtain a diploma were included in "lower secondary education." Employed persons who

were on vacation during the survey week were included in the total number of persons employed.

SOURCE: Organization for Economic Co-operation and Development, *Education at a Glance:*

OECD Indicators, Indicator P8, 1996.

Table S14 Standard errors for the text table in *Indicator 14*

Worker characteristics	All workers		Full-time		Part-time	
	1991	1995	1991	1995	1991	1995
Total	1.0	0.5	1.2	0.5	1.4	0.8
Sex						
Male	1.4	0.8	1.6	0.8	1.1	1.5
Female	1.2	0.6	1.7	0.6	1.7	1.0
Age						
20–24	2.3	1.4	3.4	1.9	1.7	2.0
25–34	1.7	1.1	1.9	1.2	4.6	2.3
35–44	2.2	0.8	2.5	1.0	3.3	2.1
45–54	2.5	1.1	3.3	1.2	4.1	2.5
55–64	3.3	1.4	4.2	1.5	5.9	3.4
65 and older	4.8	2.0	8.9	3.1	3.2	2.3
Educational attainment						
High school graduate or less	1.1	0.6	1.3	0.7	2.4	1.0
Some postsecondary education	1.7	0.8	2.4	0.8	2.1	1.5
College graduate	2.3	1.0	2.4	1.0	5.0	1.9
Occupation						
Executive, professional, technical	2.0	0.9	2.1	1.0	2.5	2.5
Sales and administrative support	1.2	0.7	1.4	0.8	1.7	1.4
Service	2.2	1.3	3.0	1.7	4.4	1.5
Farming	2.8	2.5	3.1	3.0	3.7	4.4
Precision production, craft, and repair	2.6	1.5	2.8	1.6	4.8	1.2
Operators, fabricators, laborers	2.3	1.1	2.7	1.2	3.1	3.2

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey, 1991 and 1995 (Adult Education Component).

Table S14-1 Standard errors for table 14-1

Worker characteristics	All workers		Full-time		Part-time	
	1991	1995	1991	1995	1991	1995
Total	1.0	0.5	1.2	0.5	1.4	0.8
Sex						
Male	1.4	0.8	1.6	0.8	1.1	1.5
Female	1.2	0.6	1.7	0.6	1.7	1.0
Race/ethnicity						
White	1.1	0.6	1.3	0.6	1.7	1.0
Black	2.4	1.5	2.9	1.7	2.6	2.3
Hispanic	2.9	1.2	3.5	1.3	3.8	2.5
Asian/Pacific Islander	4.3	2.9	5.7	3.6	7.3	3.2
Age						
16-19	2.2	1.8	4.8	3.2	1.5	1.5
20-24	2.3	1.4	3.4	1.9	1.7	2.0
25-34	1.7	1.1	1.9	1.2	4.6	2.3
35-44	2.2	0.8	2.5	1.0	3.3	2.1
45-54	2.5	1.1	3.3	1.2	4.1	2.5
55-64	3.3	1.4	4.2	1.5	5.9	3.4
65 and older	4.8	2.0	8.9	3.1	3.2	2.3
Educational attainment						
Less than high school graduate	1.2	1.4	1.7	1.8	1.1	1.4
High school graduate	1.3	0.9	1.6	1.0	3.1	1.6
Vocational/trade school	5.9	2.6	6.8	2.8	5.7	5.7
Some college	1.8	0.9	2.6	0.9	2.2	1.7
Bachelor's degree	2.8	1.2	2.8	1.3	6.4	2.2
Advanced degree	3.3	1.5	3.8	1.5	6.0	3.6
Occupation						
Executive, professional, technical	2.0	0.9	2.1	1.0	2.5	2.5
Executive, administrative, managerial	3.3	1.7	3.3	1.8	8.9	4.4
Professional	2.8	1.3	3.1	1.5	3.2	3.1
Technical	5.2	2.1	6.0	2.2	6.3	5.6
Sales and administrative support	1.2	0.7	1.4	0.8	1.7	1.4
Sales	2.1	1.2	2.5	1.3	2.1	2.2
Administrative support	1.7	1.0	2.0	1.1	2.6	2.1
Service	2.2	1.3	3.0	1.7	4.4	1.5
Farming	2.8	2.5	3.1	3.0	3.7	4.4
Precision production, craft, and repair	2.6	1.5	2.8	1.6	4.8	1.2
Operators, fabricators, laborers	2.3	1.1	2.7	1.2	3.1	3.2
Machine operators, assemblers, inspectors	3.2	1.3	3.5	1.4	2.0	1.4
Transportation and material movers	6.1	2.4	8.0	2.4	3.7	6.6
Handlers, equipment cleaners, laborers	6.4	2.6	8.6	2.9	9.5	4.3
Industry						
Agriculture, forestry, and fisheries	3.3	2.1	3.8	2.2	5.3	4.0
Mining	14.6	9.8	14.6	9.9	—	—
Construction	3.7	1.9	3.9	2.2	1.4	3.7
Manufacturing	2.4	1.3	2.5	1.3	3.6	6.4
Transportation, communications, public utilities	5.2	1.8	6.0	1.9	6.3	5.3
Trade	1.9	1.0	2.1	1.1	3.1	1.4
Finance, insurance, and real estate	4.2	2.1	4.6	2.4	9.4	4.4
Services	1.7	0.6	2.2	0.8	2.5	1.3
Public administration	4.1	1.9	4.5	2.0	8.3	7.2

— Not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey, 1991 and 1995 (Adult Education Component).

Percentage of employed individuals who took one or more courses during the previous 12 months to improve their current job skills, by work status and worker characteristics: 1991 and 1995

Worker characteristics	All workers		Full-time		Part-time	
	1991	1995	1991	1995	1991	1995
Total	29.5	32.0	33.1	35.7	16.4	20.2
Sex						
Male	29.3	31.0	32.3	33.0	8.9	12.5
Female	29.7	35.3	34.2	39.5	19.7	23.6
Age						
20-24	20.4	22.3	26.0	25.9	9.5	14.8
25-34	29.7	33.7	32.0	35.5	19.4	22.7
35-44	36.1	38.0	38.4	39.6	23.9	27.8
45-54	29.9	38.1	32.4	39.9	15.8	24.8
55-64	28.4	26.6	32.3	28.2	17.3	19.8
65 and older	18.6	13.2	29.1	15.7	9.2	10.9
Educational attainment						
High school graduate or less	16.6	20.4	18.8	22.4	9.0	11.8
Some postsecondary education	33.5	35.5	39.3	38.6	16.7	24.3
College graduate	48.0	47.0	50.9	49.4	33.3	30.1
Occupation						
Executive, professional, technical	49.9	49.9	51.2	51.4	41.2	39.9
Sales and administrative support	24.0	29.4	28.4	33.0	11.2	15.5
Service	17.8	24.6	22.4	28.9	12.0	16.7
Farming	7.0	13.8	7.3	15.2	4.0	7.1
Precision production, craft, and repair	21.4	27.4	22.4	29.5	9.9	2.5
Operators, fabricators, laborers	19.2	17.2	21.7	17.8	8.0	10.8

* Age as of December 31, 1990 for 1991 data, and as of December 31, 1994 for 1995 data.

† If respondent had more than one job, "occupation" was based on the first job reported.

NOTE: The survey questions were constructed differently in 1995. However, the response categories used in this analysis were similar to those used in the 1991 survey. See the supplemental note to this indicator for further discussion.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey, 1991 and 1995 (Adult Education Component).