Adults who have low levels of education often lack the skills needed to succeed in the labor market (OECD and Statistics Canada 2000). One way for adults to overcome this skill disadvantage is to participate in learning activities offered through the formal education system, at the workplace, or by other organizations. This Issue Brief uses data from the Adult Education Survey of the National Household Education Surveys Program (AE-NHES), conducted by the National Center for Education Statistics (NCES), to examine the participation of adults with different levels of education in formal (i.e., instructor-led) learning activities. Adults with low levels of education are of particular concern in this Issue Brief, and are defined here as adults who did not complete high school or who completed it via a General Educational Development (GED) credential. Specifically, the current analysis examines two aspects of the participation of adults in formal learning: the extent to which adults participate in different types of formal learning activities and who pays the costs associated with this participation.

For this analysis, two years of AE-NHES data (2001 and 2005) were combined to provide a sample large enough to produce reliable estimates for adults with low levels of education. The AE-NHES surveys include adults ages 16 or older, who are no longer enrolled in high school. To focus specifically on the working-age populations in 2001 and 2005, this analysis was restricted to adults ages 16–64.

**Participation in Formal Learning Activities**

The AE-NHES surveys measured participation in the following six types of formal learning activities that took place during the 12 months preceding the survey: (1) English as a Second Language (ESL) classes; (2) adult basic education classes; (3) GED preparation classes; (4) college, university, and vocational/technical degree or certificate programs; (5) apprenticeship programs; and (6) courses self-defined by the participant as taken mainly for work or for personal interest (referred to here as work-related and personal interest courses, respectively). The survey assessed adults’ current education attainment, and thus reflects the completion of any education programs taken during the previous 12 months.

In the combined sample of working-age adults in 2001 and in 2005 (hereafter, “adults”), 54 percent participated in at least one of these formal learning activities during the past 12 months (table 1). As in previous studies (Creighton and Hudson 2002; Kim et al. 2004), this analysis found that participation rates in formal learning increased among adults who had higher levels of education at the end of the survey, rising from 26 percent for adults with no high school credential (no diploma or GED) to 72 percent for adults with at least a bachelor’s degree. This finding reflects the pattern of participation in the two most common activities (work-related and personal interest courses) and, to a lesser extent, the third most common activity (college/vocational programs). For college/vocational programs, participation rates increased up to the level of “some college.”

No consistent pattern was found for participation in apprenticeship programs by education level. Participation rates in apprenticeship programs by adults without a high school credential at the end of the survey did not differ from adults with higher levels of education. However, participation rates for the types of formal learning activities that are typically targeted to adults with low levels of education—GED, adult basic education, and ESL classes—were highest among adults who did not have a high school credential by the end of the survey. Participation rates in GED classes were also higher among adults whose highest education level was a GED than for adults at higher levels of education.

Returning to work-related courses, participation was eight times higher among adults with at least a bachelor’s degree at the end of the survey than for adults with no high school credential (table 1). This difference in participation may arise, in part, because adults with less education are less likely to be employed than are adults with more education, and employed adults are more likely than adults who are not employed to participate in work-related courses (Kleiner et al. 2005). However, when the comparison is limited to employed adults, there is still a positive relationship between participation in work-related courses and education level, with participation ranging from 10 percent for adults without a high school credential at the end of the survey to 59 percent among adults with at least a bachelor’s degree at the end of the survey (table 1). Thus, differences in employment rates alone do not appear to account for the higher rates of participation in work-related courses among adults with higher education levels.

The remainder of this Issue Brief focuses on work-related and personal interest courses—the two most common formal learning activities, which are also the activities in which adults with low levels of education participate less frequently than do adults with higher levels of education.
### Participation in Work-Related and Personal Interest Courses

**Average number of courses taken.** Not only did the annual rate of participation in work-related courses increase with education level, but the number of courses taken by participants, on average, increased with education level (from 1.5 courses for participants with no high school credential to 2.2 courses for those with at least a bachelor’s degree) (table 1). The participation rate in personal interest courses—as well as the average number of courses taken—also increased with education level. More specifically, participants in personal interest courses who had no high school credential, as well as participants whose highest level of education was a GED, took fewer courses on average than did participants with at least some college education. Thus, the lower the education level adults had attained, the less frequently they participated in work-related and personal interest courses, and the fewer courses they took when they did participate.¹

**Paying for participation.** Costs are a frequently cited barrier to participation in learning (Darkenwald, Kim, and Stowe 1998) and may be a particular barrier for adults with low levels of education whose earnings tend to be relatively low (Decker, Rice, and Moore 1997). It is thus informative to examine how often participants pay their own costs. The AE-NHES surveys permit an analysis of the percentage of course participants who used their own or their families' money to pay for some or all of their course tuition and fees (i.e., the percentage who paid at least some costs).⁴ Overall, 24 percent of work-related course participants and 54 percent of personal interest participants paid at least some of their own costs (not in tables).

For both types of courses, the percentage of participants who paid their own costs increased with the education level of the participant (figure 1). For those in work-related courses, the percentage paying their own costs rose from a low of 15 percent for participants whose highest level of education was a GED to a high of 27 percent for those with at least a bachelor's degree; for personal interest courses, the corresponding increase was from 30 percent to 65 percent.² Compared to those in personal interest courses, participants in work-related courses were less likely to pay their own costs, both overall and at each education level. The lower rates of cost-paying for participants in work-related courses may reflect in part the influence of employer requirements and incentives, which often result in employers paying for their employees’ work-related course-taking (Hudson et al. 2005).

**Summary**

Participation rates in adult basic education, ESL, and GED classes were highest among adults who did not have a high school credential by the end of the survey. For the most common types of formal learning activities—work-related courses and personal interest courses—adults with low levels of education tend to participate at lower rates and at lower levels of intensity than do adults with higher levels of education. Participation costs may be a factor contributing to this pattern. Among adults who do participate in work-related and personal interest courses, those with lower levels of education are less likely than those with higher levels of education to pay at least some course expenses themselves.

### References


### Table 1. Percentage of adults ages 16 to 64 at each education level who participated in a formal learning activity and the average number of courses taken by participants, by type of learning activity: 2000–01 and 2004–05

<table>
<thead>
<tr>
<th>Educational activity</th>
<th>All adults</th>
<th>No high school credential</th>
<th>GED certificate</th>
<th>High school diploma</th>
<th>Some college¹</th>
<th>Bachelor’s degree or higher</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percentage participating</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total, all activities</td>
<td>53.9</td>
<td>26.1</td>
<td>35.7</td>
<td>39.8</td>
<td>66.0</td>
<td>71.5</td>
</tr>
<tr>
<td>English as a Second Language classes</td>
<td>1.3</td>
<td>4.4</td>
<td>0.41</td>
<td>0.9</td>
<td>1.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Adult basic education classes</td>
<td>1.0</td>
<td>4.9</td>
<td>0.51</td>
<td>0.5</td>
<td>0.8</td>
<td>—</td>
</tr>
<tr>
<td>GED classes</td>
<td>1.3</td>
<td>8.2</td>
<td>1.01</td>
<td>0.4</td>
<td>0.21</td>
<td>—</td>
</tr>
<tr>
<td>Apprenticeship program</td>
<td>1.5</td>
<td>0.9</td>
<td>2.6</td>
<td>1.6</td>
<td>2.2</td>
<td>0.8</td>
</tr>
<tr>
<td>College degree/Vocational diploma program</td>
<td>13.7</td>
<td>1.3</td>
<td>6.7</td>
<td>8.4</td>
<td>24.5</td>
<td>14.6</td>
</tr>
<tr>
<td>Personal interest course</td>
<td>21.9</td>
<td>10.7</td>
<td>11.6</td>
<td>16.6</td>
<td>25.8</td>
<td>30.1</td>
</tr>
<tr>
<td>Work-related course</td>
<td>33.3</td>
<td>6.9</td>
<td>19.5</td>
<td>22.2</td>
<td>38.4</td>
<td>54.0</td>
</tr>
<tr>
<td><strong>Percentage of employed adults in work-related courses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>38.8</td>
<td>9.6</td>
<td>23.5</td>
<td>25.7</td>
<td>43.5</td>
<td>58.6</td>
</tr>
<tr>
<td><strong>Average number of courses taken by participants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal interest courses</td>
<td>1.5</td>
<td>1.3</td>
<td>1.2</td>
<td>1.4</td>
<td>1.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Work-related courses</td>
<td>2.1</td>
<td>1.5</td>
<td>1.8</td>
<td>1.9</td>
<td>2.1</td>
<td>2.2</td>
</tr>
</tbody>
</table>

¹ Not available. Individuals with at least a bachelor’s degree were not asked about their participation in adult basic education or GED classes.

² Includes those with some college but no degree and those with a degree below the bachelor’s level.

³ Interpret data with caution. Standard errors are more than one-third as large as the estimate.

¹ Includes those with some college but no degree and those with a degree below the bachelor’s level.

NOTES: GED stands for General Educational Development. Participation rates include participation in one or more of the listed activities during the 12 months preceding the survey interview. Columns may sum to more than 100 because adults can participate in more than one activity. The 2001 and 2005 Adult Education Surveys of the National Household Education Surveys Program were combined to provide a sample large enough to produce reliable estimates for adults with low levels of education. See the technical appendix for details. The technical appendix and standard errors can be found at [http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008041](http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008041).


Endnotes

1 Formal learning activities are those that involve an instructor, including courses delivered online. They exclude informal learning activities such as reading manuals, attending conferences, and looking up information on the Internet.

2 Adults with a GED are considered here as having a lower level of education than those with a high school diploma because past research has shown that GED recipients have educational persistence rates and labor market outcomes that are below those of high school completers (Boesel, Alsalam, and Smith 1998).

3 This merging means that the statistics in this Issue Brief do not represent participation rates during any one period of time; they more accurately represent average rates of participation across 2000-01 and 2004-05. A separate technical appendix, available online at http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008041 provides more detail on the merging of these datasets.

4 Participation rates were lower for adults with at least a bachelor’s degree than for adults with “some college,” possibly because the “some college” category includes students currently enrolled in college. The participation rate in college/vocational programs found in this Issue Brief is likely to be larger than in other NHES reports, because the latter typically exclude full-time college students from their participation counts.

5 The AE-NHES does not ask adults who have at least a bachelor’s degree about participation in basic education or GED classes; their participation is assumed to be zero. The findings for participation in formal learning activities by education level may have been different if education attainment had been assessed at the beginning of the 12-month survey period rather than at the end. For example, some adults with a GED at the end of the period are likely to have obtained the GED as a result of their GED program participation during the previous 12 months.

6 Although not shown in table 1, employment rates increased with education level, rising from 66 percent for those with no high school credential to 90 percent for those with at least a bachelor’s degree.

7 This analysis does not take into account the length of each course taken, which could differ across the education groups.

8 This analysis does not take into account the amount of money paid by participants, which could yield different findings. Other than costs paid by participants, the AE-NHES does not collect other information on the cost of learning activities or who paid those costs.

9 For both types of courses, no measurable difference was found between adults who had not completed high school and adults who had a GED in terms of the percentage who paid their own costs.

The Issue Brief series presents information on education topics of current interest. All estimates shown are based on samples and are subject to sampling variability. All differences are statistically significant at the .05 level using two-tailed Student’s t-tests and analysis of variance. No adjustments were made for multiple comparisons. In the design, conduct, and data processing of National Center for Education Statistics (NCES) surveys, efforts are made to minimize the effects of nonsampling error; such as item nonresponse, measurement error, data processing error, or other systematic error. For more information on the National Household Education Surveys program, visit http://nces.ed.gov/nhes.

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