



EUROPEAN COMMISSION
EUROSTAT

Directorate F: Social Statistics and Information Society
Unit F-4: Education, science and culture statistics



METHODOLOGICAL NOTES

Data from labour force survey and adult
education survey

14.03.2011

RESULTS FROM AES AND LFS - METHODOLOGICAL NOTES

SUMMARY

Results from the Adult Education pilot survey were published in November 2008. Analyses of the results from the first 18 countries indicate systematically higher rates of participation in almost all the countries in the AES than the LLL-2003 (ad hoc module) and the LFS 2006. Difference in participation rates seems to be higher in non-formal than in formal education and training. Countries with high participation rates have comparatively lower differences in participation between AES and LLL-2003. Countries with high levels of participation in the LLL-2003 also had high levels of participation in the AES and countries with low participation in LLL-2003 were among countries with low participation rates in the AES.

The AES surveys were in many countries stand-alone surveys, proxies were not allowed in most cases, questions were well structured, variables were defined and interviewers better trained. Apart from this there is also a reference period difference between the AES and the LFS. The AES and the LLL-2003 have 12 months reference periods while the LFS has 4 weeks reference period. One of the factors that has been analysed is the coverage of non-formal activities in the AES and the LFS. The AES covered: private lessons or courses, distance/open learning, seminars/workshops and guided on the job training. AES activities were dominated by private course/lessons but a considerable proportion took part in guided on-the-job-training.

Guided on the job training is not specified in LFS and the AES data have been analysed to determine the impact of guided on the job training on the participation rates in AES. Results show lower participation rates in the AES when guided on the job training is excluded. The generated rates/results are similar to the LLL-2003 (same reference period) in a number of countries though significant differences still exist for other countries.

Conclusion from the analyses of the available data indicates that results of the AES are higher than results from other surveys in lifelong learning mainly because of the differences in reference periods and the coverage of learning activities particularly guided on the job-training. The AES also have courses with short duration that would not have been included in the LFS. The minimum duration for formal education in the UOE and LFS is one semester or half-year of studies. There is no such minimum duration in the AES.

EXPLANATORY NOTES ON DIFFERENCES BETWEEN LFS AND AES

INTRODUCTION

Information from the data available so far shows systematic higher rates of participation in education in the AES compared with other similar surveys including the 2003 LFS ad hoc module, the LFS structural indicator, and data from the UOE. The differences appear not only aggregated levels but also within variables and sub-groups. Data from the Adult Education survey cannot be directly compared with other life long learning data from the LFS and ad hoc modules. There are significant methodological differences that account for the disparity in participation rates.

1. COMPARISONS of LFS, AES and UOE data

1.1. FORMAL EDUCATION

There are differences in participation rates between the Adult Education Survey and other data sources. Participation rates are higher in the AES than the other data sources. These differences are consistent in almost all the 18 countries represented in both formal and non formal education and training. There are a few differences in the trends especially in formal education where Sweden, Hungary and Italy have higher rates in the ad hoc module of 2003 than the AES for the age group 25-64 while the other countries have lower participation rates in both the LFS and LLL 2003.

Table1. Participation in formal/regular education for age group 25-34 by data source as a % of the population aged 25-34)

	UOE-06	AES	LLL-03	LFS-06
BG	5.1	7.5	3.9	4.5
DE	9.3	14.8	11.8	11.5
EE	11.3	11.3	11.0	8.5
GR	11.1	5.8	4.2	4.6
ES	8.0	11.8	9.6	6.6
IT	6.1	12.5	12.0	9.5
CY	3.8	7.8	6.1	4.8
LV	10.6	10.8	11.6	8.1
LT	12.3	16.4	8.2	10.4
HU	10.0	7.2	8.0	4.8
AT	8.4	11.5	9.7	9.2
PL	9.3	13.4	11.6	8.0
SK	5.6	12.7	2.6	3.8
FI	24.0	24.0	23.3	20.1
SE	20.6	26.5	27.2	13.8
UK	8.2	23.1	13.3	11.8
NO	12.7	20.9	6.1	13.1

Note: LFS-06 (SE): one reference week is used instead of four for the other countries

There are a few significant cases in age group 25-34 where other sources or surveys have higher participation rates than AES. In Hungary both the UOE and LLL-2003 are higher than AES, in Latvia LLL-2003 rates are higher than AES, in Greece the UOE rates are higher and in Estonia the rates for AES and UOE are the same. Estonia is also the country with the most even distribution of participation rates in all the 3 data sources.

1.2. NON FORMAL EDUCATION

Participation in non-formal education and training has the same trend as formal education in terms of difference in participation rates in the AES and the LLL-2003 though the differences are much higher. There are systematically higher rates of participation in all the countries in the AES than the LLL-2003 and the LFS 2006 with a shorter reference period (4 weeks).

Countries with high participation rates like UK, Norway, Finland and Sweden seems to have comparatively lower differences in participation between AES and LLL-2003.

Table2. Participation in non formal education and training by type of survey as a % of the population aged 25-64)

	AES	LLL-03	LFS-06
AT	39.8	25.3	10.8
BG	35.2	1.7	0.5
CY	39.5	20.6	10.1
DE	43.1	12.7	4.7
EE	40.2	14.8	3.0
ES	27.2	10.3	10.2
FI	51.2	41.3	15.5
FR	34.1	20.1	6.9
GR	12.7	4.9	3.5
HU	6.8	4.8	1.7
IT	20.2	5.1	3.2
LT	30.9	7.8	1.9
LV	30.7	13.4	3.6
NO	50.6	32.9	12.6
PL	18.6	9.8	2.0
SE	69.4	48.0	15.7
SK	41.2	20.5	2.7
UK	40.3	34.5	26.6

It is important to note however that countries with high levels of participation in the LLL-2003 also had high levels of participation in the AES and countries with low participation in LLL-2003 were among countries with low participation rates in the AES.

2. POSSIBLE EXPLANATORY FACTORS

2.1. REFERENCE PERIODS

2.2 CHARACTERISTICS of the SURVEY

In an attempt to find the differences between the participation rates in AES and other surveys and data sources, we begin first by comments offered by the National Statistical Institutes in the quality reports. All the countries acknowledge the differences and consistently higher rates of participation in the Adult Education Survey. The NSIs concentrated their explanations on mainly structural factors like the interview methods, type of survey, proxy answers, training of interviewers, questionnaire, definitions of variables and types of learning activities, reference periods. According to the quality reports part of the explanation for the high AES participation rates can be accounted for by the fact that most of the AES surveys were stand-alone surveys, proxies were not allowed in most cases, questions were well structured, variables were defined and interviewers better trained.

These factors can however not explain or provide all the answers for the differences in rates of participation. A second way of trying to find possible causes is looking at the coverage of the learning activities in the Adult Education Survey and the Labour Force Survey.

2.3. COVERAGE OF LEARNING ACTIVITIES

In this section we would attempt to look at the coverage of learning activities in both the Adult Education Survey and the Labour Force. The definition of formal education and training is basically the same and expected to cover the same types of formal learning activities. The duration of these activities would however be significant in mapping out the differences in the two types of surveys. The main focus here will be to determine whether the AES has a comparatively high share of short duration courses (5-10 hours duration).

For non formal activities, guided on the job training has been identified as one of the factors that need further investigation and analysis in explaining the differences in coverage between the two surveys.

Non formal education and training activities:

Non formal education and training activities in the AES are categorised into the following types of activities:

- Private lessons or course
- Distance education
- Seminars/workshops
- Guided on the job training

The next table shows the participation rate among the non formal education and training participants by type of activity.

Table3. Participation in non formal education and training by type of activity as a % of the population participating in non-formal learning activity, age 25-64), AES-2007

	Private lessons or course	Distance/open learning	Seminar / workshops	Guided on the job training
AT	70.7	3.4	52.2	25.3
BG	23.5	1.3	14.3	81.3
CY	34.4	1.2	41.3	47.5
DE	67.2	2.1	48.4	24.5
EE	64.7	3.8	24.7	40.8
ES	42.3	8.5	41.6	19.3
FI	84.4	8.6	24.1	21.1
FR	72.5	14.5	23.1	24.0
GR	73.2	1.6	:	33.7
HU	51.6	9.1	9.1	38.0
IT	72.4	9.4	17.1	50.6
LT	62.2	4.8	46.0	26.5
LV	52.6	2.8	60.4	15.3
NO	:	:	:	26.3
PL	30.9	6.0	17.6	72.2
SE	69.8	:	60.9	35.1
SK	27.9	3.8	24.0	84.0
UK	89.6	25.4	:	45.4

Table 4 shows the participation in non formal education and training by type of activity. The reference population consist of the total participants in non formal education and training and not of the full target population of the AES. The results show that a large share of the participants took part in private lessons and seminar/workshops. Almost 90% of participants in UK had private lessons or courses and this is closely followed by Finland, Sweden, Austria, France and Germany.

Seminars and workshops is the second largest category and here Sweden Latvia and Austria dominate with participation rates above 50% each. A considerable proportion is found in the category of guided on the job training especially in Slovakia, Bulgaria and Poland.

Distance and open learning/education has the lowest values but a distinction from the trend is UK where a quarter of all participants in non formal education took part in at least one open/distance learning activity.

Guided on the job training

Participants in non formal education and training can be categorised by the type of guided on the job training. The three main categories are those who took part in only guided on the job training, those who did not take part in guided on the job training and the rest whose activities are both guided on the job training and other activities.

Table 4. Participation in non formal education and training by type of guided on the job training, as a % of the population participating in non-formal learning activity, age 25-64, AES-2006

	Only guided on the job training NFE activities	Only non guided on the job training NFE activities	Both types of NFE activities
AT	9.9	78.6	11.6
BG	66.6	19.0	14.4
CY	32.5	52.5	15.0
DE	8.1	75.5	16.4
EE	24.1	65.6	10.3
ES	16.4	80.7	2.9
FI	5.6	79.3	15.1
FR	12.1	76.3	11.6
GR	25.8	66.3	7.9
HU	33.6	62.9	3.6
IT	19.5	80.5	:
LT	14.9	72.9	12.2
LV	27.4	63.7	8.9
NO	7.8	73.8	18.4
PL	81.3	12.4	6.2
SE	6.7	65.2	28.1
SK	73.2	17.1	9.7
UK	44.2	55.8	:

A significant number of participants in non formal education and training took part in only guided on the job training activities as illustrated on table 4. Over 80% of participants from Poland took part in only guided on the job training. Slovakia and Bulgaria have equally high rates of participants taking part in only guided on the job training. Participants from Norway, Germany, Sweden, Finland and Austria have low rates in 'guided on the job training'. Some participants took part in both guided on the job training and other activities though the percentages are much lower than the first two categories. Almost 30% of the participants in non formal education and training from Sweden took part in both types of activities.

Impact of guided on the job training on participation rates

This section attempts to find out the impact of guided on the job training on participation rates in the AES non formal education and training. The goal being to find some possible answers to explain some of the differences in participation rates in AES and LFS especially in non formal education and training. The structural explanations from the quality reports have already been discussed and found not adequate enough to explain the differences.

The coverage especially the impact of guided on the job training therefore is important in the search for answers. One of such attempts consist in separating guided on the job training from the population of the non formal participants to ascertain participation levels. This new level will be compared to participation rates from other sources like the LLL-03 and LFS-06.

Earlier tables presented illustrate the differences between the various sources of data on non formal education and training. The AES, the LFS ad hoc module 2003 (with 12 months reference) period, as well as LFS 2006 (4 weeks reference period).

Table 5. Participation in non formal education and training by data source as a % of the population aged 25-64

	AES	AES_adj	LLL-03	LFS-06
AT	39.8	31.3	25.3	10.8
BG	35.2	6.7	1.7	0.5
CY	39.5	20.7	20.6	10.1
DE	43.1	32.5	12.7	4.7
EE	40.2	26.4	14.8	3.0
ES	27.2	21.9	10.3	10.2
FI	51.2	40.6	41.3	15.5
FR	34.1	26.0	20.1	6.9
GR	12.7	8.4	4.9	3.5
HU	6.8	4.2	4.8	1.7
IT	20.2	16.3	5.1	3.2
LT	30.9	22.5	7.8	1.9
LV	30.7	19.5	13.4	3.6
NO	50.6	37.4	32.9	12.6
PL	18.6	2.3	9.8	2.0
SE	69.4	45.3	48.0	15.7
SK	41.2	7.1	20.5	2.7
UK	40.3	22.5	34.5	26.6

Table 5 shows participation in non formal education and training by the various sources of data. The second category (AES_adj) is AES rates without guided on the job training. It is evident from the table that differences still exist between the AES and the other sources of data. The AES rates without guided on the job training is however lower and much closer to the LFS 2003 ad hoc module rates.

Some countries have much closer rates for the two surveys when guided on the job rates are excluded. Cyprus (20.7, 20.6), Finland (40.6, 41.3), Hungary (4.2, 4.8), Sweden (45.3, 48), Norway (37.4, 32.9).

Excluding guided on the job training gives a much lower participation rates for AES and more comparable with the LFS especially the 2003 ad hoc module. This however does not explain all the differences but gives us a good start in understanding the differences between the two surveys.

2.4 OTHER FACTORS

Other factors would have to be investigated and analysed to get other explanations for the differences. Among others are the duration and intensity of activities (short, long courses) and distribution of job-related and non job-related participation between the two surveys. The fields of education will also be looked into.

2.5 CONCLUDING REMARKS

Conclusion from the analyses of the available data indicates that results of the AES are higher than results from other surveys in lifelong learning mainly because of the differences in reference periods and the coverage of learning activities particularly guided on the job-training. The AES also have courses with short duration that would not have been included in the LFS. The minimum duration for formal education in the UOE and LFS is one semester or half-year of studies. There is no such minimum duration in the AES.