Adult education and training in Portugal: a statistical portrait of a decade

In the decade 2007-2016, the participation rate in lifelong learning (LLL) activities increased by 20 percentage points (pp), from 30.9% to 50.2% and covering 2.1 and 3.2 million people, respectively. This increase was mainly due to the participation in non-formal education, which doubled between 2007 and 2016 (from 23.1% to 45.2%).

The non-formal activities were mainly job related.

The participation of the adult population in informal learning activities became widespread, having more than doubled in the decade under review (from 40.8% to 89.4%).

By 2016, more than 70% of the adult population knew at least one foreign language, having this proportion increased by 19.8 pp compared to 2007. English was the best-known foreign language.

Wage premiums increase with education levels, but were lower in 2016 than in 2011.

The association between parents' and children’s education level - intergenerational transmission of education - is particularly strong in the case of mothers.

Statistics Portugal publishes the results of the 2016 Adult Education Survey (AES), the third wave of this statistical operation (following the 2007 and 2011 waves), conducted in all Member States of the European Union (EU-28). This dissemination includes a comparative study of the 2007 and 2016 data for the common age group (population aged 18-64) and a set of indicators that describes the developments in education, training and adult learning between 2007 and 2016, made available in Statistics Portugal website (www.ine.pt).

What has changed in ten years in terms of the adult population's participation in education and training? What changes have occurred in the knowledge of foreign languages? What impact do education and training have on people's lives, particularly on their income? What are the effects of parents' educational background on children's education? These are some of the questions that guide the analysis of the results.

1. Lifelong learning: formal and non-formal education

   Participation in lifelong learning activities increased by around 20 pp in the decade 2007-2016

The concept of lifelong learning (LLL) comprises participation in formal education activities - delivered in educational institutions, leading to an education level - or non-formal education activities - organized training activities, professional or otherwise, in a given area but which do not amount to an education level.

Between 2007 and 2016 there was an increase of 19.3 pp in the proportion of people who participated in LLL activities: from 30.9% in 2007 to 50.2% in 2016, having covered 2.1 and 3.2 million of people, respectively.
For the increase in the relative importance of LLL contributed, to a greater extent, the participation in non-formal education, which doubled from 23.1% in 2007 to 45.2% in 2016 (a further 22.1 pp).

In 2016, the majority of participants in non-formal education activities stated that at least one of the activities was job related (86.4%).

Regarding the participation in formal education, after an increase between 2007 and 2011 (from 12.0% to 16.6%), there was a decrease in 2016 to 11.3%.

In 2016, approximately two thirds (65.7%) of those who participated in formal education activities did a tertiary education activity and 29.9% an upper secondary or post-secondary non-tertiary education activity.

In 2016, participation rates in LLL activities were highest in the Lisbon Metropolitan Area and in the Centre region (56.1% and 52.9%, respectively), among the younger population (80.7% of people aged 18 to 24), among the more educated (72.6% of the population with tertiary education); among students (98.1%), among the most qualified professional groups (76.1%) and among the population with book (60.9%) and newspaper (56.0%) reading habits.

However, the analysis of the decade shows greater increases in the participation rate in LLL in other regions and in other population groups:

- The Autonomous Region of Madeira recorded the highest increase in LLL participation of the decade, increasing by 25.0 pp in ten years: from 19.9% in 2007 to 44.9% in 2016.
- Men increased by 20.4 pp between 2007 and 2016 (from 31.1% to 51.5%), while women increased by 18.3 pp in the same period (from 30.7% to 49.0%).
- People in the 35-44 age group had the highest increase in the decade (25.4 pp).
- In terms of education level, the highest increases between 2007 and 2016 were observed among those with lower levels of education (19.9 pp for those without any education level).
- Employees and self-employed workers registered the highest relative increases in LLL participation over the 2007-2016 decade, respectively 23.4 pp and 22.9 pp.

Portugal was the EU country where LLL participation increased the most between 2007 and 2016.
2. Informal learning

*Participation in informal learning activities became widespread*

Informal learning stems from activities of daily life related to work, family, social life or leisure, on a self-learning basis, but with a deliberate intention to learn. This type of activity differs from formal and non-formal education because it does not involve a teacher, monitor or equivalent, and above all because of its intrinsically individual, voluntary and self-organized nature.

Between 2007 and 2016, participation in informal learning activities more than doubled, reaching 5.7 million people in 2016 (2.8 million in 2007). The proportion of individuals aged 18-64 who participated in informal learning activities increased by 48.6 pp in the same period, from 40.8% in 2007 to 89.4% in 2016.

3. Knowledge of foreign languages

*More than 70% of the population knew at least one foreign language*

In 2016, 71.8% of people aged 18 to 64 stated that they knew a language other than their native language. In 2007 that proportion was 52.0% and increased to 61.3% by 2011.

As for the most well-known foreign languages, English stands out, accounting for 59.6% of the population who knew a language other than their native language, followed by French (21.5%) and Spanish (14.8%). Considering English only, 33.8% of those who knew this language were able to understand and communicate reasonably and produce simple texts and 25.6% mastered it perfectly (both in oral and written forms).

Knowledge of foreign languages was higher for the younger population (91.6% of the population aged 18-24), student (97.7%) and more educated (97.4% for the population with tertiary education).

In 2016, Portugal occupied an intermediate position among all European countries in terms of knowledge of foreign languages but was the one where the proportion of the population with knowledge of foreign languages increased the most (20.3 pp) between 2007 and 2016.
4. Non-participation in education, training and learning

Adults not participating in formal, non-formal and informal learning have declined considerably in the decade under review

The rate of non-participation in any education, training and learning activity decreased by 40.0 pp in the observed decade: in 2007 non-participants were 48.2%, decreasing to 8.2% in 2016.

Over the decade, the socio-demographic profile of non-participants has remained the same: they are the oldest, the least educated, and whose parents are also less educated, inactive (excluding students), who speak only their native language and have books or newspaper reading habits which are non-existent or non-regular.

However, the reduction in non-participation was more significant among the elderly, the less educated, and the non-student inactive (non-participation decreased in 53.2 pp, 59.2 pp and 52.5 pp, respectively).

5. Education wage premiums

Increasing wage premiums with education level, but lower in 2016 than in 2011

The wage premiums increase with education levels, from 15% to those who have completed primary education, to 71% for a person who has completed secondary or post-secondary education and to 136% (more than double) for a person who completed tertiary education (compared to the wage income of a person who did not complete any education level).

In 2016 there was a general decrease in wage premiums, especially in tertiary education. In this case, the wage premium was below what had been observed in 2007, contrary to what happened for other education levels, which may be associated with the strong increase in the number of people who have completed tertiary education in recent years.

Participation in non-formal education contributed to wage increases, but less noticeable than the ones observed for a complete education level (formal education).
6. Intergenerational transmission of education

The education level of the mother has a greater impact on the probability of a person completing tertiary education than that of the father.

The mother having a complete education level corresponding to tertiary education has a stronger relation, compared with the father, with the probability that her descendants (from 25 to 44 years) will also complete tertiary education: in 2016, having a mother with tertiary education increased, on average, by 39.1 pp a person’s probability of having completed tertiary education (by 28.8 pp in the case of the father).

The relationship between tertiary education of mothers and tertiary education of their offspring became stronger between 2007 and 2016, whereas the same cannot be said for the father or for other education levels (of the father or mother).

Figure 3: Variation in probability (in p.p.) of completing tertiary education by mother and father’s level of education

[Graph showing variation in probability of completing tertiary education by educational level and year]

- Primary 1st cycle
- Primary 2nd cycle
- Lower secondary
- Upper secondary
- Tertiary

- 2007
- 2011
- 2016
METHODOLOGICAL NOTE

The Adult Education Survey (AES) is a Community survey conducted by Statistics Portugal under Eurostat methodological recommendations. Its main purpose is to analyze the participation of the adult population in education, training and learning activities. Participation in any kind of learning activity, including formal and non-formal education activities, as well as informal learning activities, is considered in the 12 months prior to the interview.

The AES 2016 is the third wave of this statistical operation, following those carried out in 2007 and 2011. In the statistical operation of 2016, the resident population aged between 18 and 69 was interviewed, living in private households.

Although the target population of the European survey concerns people aged 25-64, in Portugal the age range of the population has been widened to include the population aged 18 to 24 and 64 to 69.

The data collection took place from November 2016 to March 2017. This sample survey collected data directly in the observation units - people - through a computer-based questionnaire - Computer-Assisted Personal Interview (CAPI).

The geographical scope of the survey refers to NUTS II (Mainland, Autonomous Regions of the Azores and Madeira). The sample was scaled at national level. Estimates were obtained through a sample of 12 063 housing units, which corresponded to 14 211 people aged 18 to 69.

For a more detailed analysis of the methodology followed, the methodological document of the AES is available at: http://smi.ine.pt/DocumentacaoMetodologica/Details/1441.

Main concepts:

**Lifelong learning:** it is a concept that aggregates participation in formal education - delivered in educational institutions, conducive to a level of schooling - and / or non-formal education - organized training activity, professional or otherwise, in a given but does not amount to a level of education.

**Formal education:** education or training provided in educational or training institutions, where learning is organized, evaluated and certified under the responsibility of qualified professionals. It is a hierarchical succession of education or training, in which completion of a given level allows progression to higher levels.

**Non-formal education:** training that usually takes place in institutional structures, and must confer a certificate of attendance. This certification is not normally recognized by the national authorities and does not allow progression in the hierarchical succession of education and training levels.

**Informal learning:** training that derives from the activities of daily life related to work, family, social life or leisure. Usually, it takes place outside institutional structures, resulting in a learning environment that the learner (or another person) can organize and structure freely. It does not confer certification, although the skills acquired through this route can undergo a validation and certification process.
METHODOLOGICAL NOTE ON WAGE PREMIUMS

The coefficients for calculating wage premiums were estimated by a linear regression of the income logarithm applied separately to each of the AES samples (2007, 2011 and 2016), considering the respective weights. The dependent variable is defined as the main activity income in 2007 (in income brackets) and the equivalent adult income in 2011 and 2016. The model applied in 2007 considers the probability of the income to be in each step, taking into account the limits of this step. Regressions were estimated for full-time employees. The set of explanatory variables, besides those presented, also includes the age group (binary variables), the worker's antiquity (quadratic form) and control variables for the equivalent adult income. The regressions are the basic ones for human capital and do not include the size of the company, the sector of activity or the region. The comparison group for educational levels is made up of workers with no education level.

METHODOLOGICAL NOTE ON INTERGERATIONAL TRANSMISSION OF EDUCATION

The relationship between a person's education level and parental education level was estimated through an ordered Probit model. The model estimates the probability of the person completing a given education level by controlling for the following set of variables: parental education level, parental labour status (employed or not), and age group. The model was applied to each of the separate AES samples (2007, 2011 and 2016), considering the respective weights. The results were obtained for the age groups 25-34 and 35-44. The values presented represent the variation of the probability of completing each of the education levels, comparing with the probability of not completing any education level or of not completing primary education.