

INSTITUTO NACIONAL DE ESTADÍSTICA



Methodology of the Survey on the Participation of the Adult Population in Learning Activities 2022 (EADA-2022)

**Sub-Directorate General of Statistics
of the Labour Market
INE**

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1 Introduction

*Lifelong learning*¹ is at the centre of the European political debate, since the European Union named 1996 as the “European Year of Lifelong Learning”, and since then, it has become a horizontal objective of the European employment strategy.

The Lisbon European Council of March 2000 was a turning point. Lifelong learning was included in the conclusions of said Council, as one of the key elements to achieve the strategic objective of making the European Union the most competitive and dynamic economy based on knowledge.

In 2001, a “*Memorandum on lifelong learning*” was drawn up, which after collecting the observations of European institutions and citizens, was reflected in the European Commission communication entitled “*Making a European lifelong learning area a reality*”.

One of the main contributions of this communication was to propose a definition of lifelong learning. It is considered as such “*any learning activity undertaken throughout life, with the objective of improving knowledge, skills and competencies, from a personal, civic, social and/or employment-related perspective*”.

The Barcelona European Council of March 2002 established a detailed work program to monitor compliance with the Lisbon objectives in education and training.

The need to have indicators for the EU such as, among others, the percentage of the population between 25 and 64 years old that participates in education or training is already mentioned.

Eurostat launched a *Task Force on measuring lifelong learning* in 2000, the conclusions of which were discussed at a seminar sponsored by the *Committee on Statistical Information in the Economic and Social areas* (CEIES). As a consequence, Eurostat proposed in that year the creation of a European statistical information system on the education of the adult population, based on three main sources:

- An exploitation of administrative data on regular education and training systems, including the joint UOE (UNESCO-OECD- EUROSTAT) questionnaire, which is currently widely developed.
- A survey of companies specializing in the provision of vocational training in companies [*Continuing Vocational Training Survey (CVTS)*].
- A household survey on adult participation in learning, education and training activities: *Adult Education Survey* (AES), which is what this methodology is about.

¹ *Lifelong Learning* is usually translated as “*aprendizaje permanente*” or “*a lo largo de la vida*”. In this project, the second translation is chosen, although it will also be mentioned in the other way at some points. On the other hand, throughout the document, the terms “*education*” and “*learning*” are sometimes mentioned interchangeably. According to the Royal Academy of Language, *education* is defined as the action or effect of educating, and also as instruction through teaching action. Educate is a transitive verb (you educate someone). *Learning* is defined as the action and effect of learning, which is defined as acquiring knowledge of something through study or experience. Although there is a great closeness between both concepts, they are not synonymous and that is why the use of the term learning is preferred, which more precisely defines the set of activities under study in this research

The AES is the European component of the system for producing statistics on adult education and its Spanish version is the Survey on the Participation of the Adult Population in Learning Activities (EADA).

The other two components of the production system on adult education are the Active Population Survey (EPA) and the Continuing Vocational Training Survey (EFPC). Regarding the last two sources of information, the EPA provides information on the annual evolution of a limited set of indicators, while the EFPC provides data on business activities for the development of employee skills.

Three surveys have been carried out on adult education: The EADA (pilot) of 2007 and the EADA of 2011 and 2016, all of them under a European legal framework.

This survey project is aimed at the study of lifelong learning and is coordinated by Eurostat. Its execution is derived from Community Regulation No. 2021/861 of the Commission of May 21, 2021, and both the methodological framework and its implementation in the different member states have been agreed within the scope of the European Statistical System.

2 Objectives of the EADA

The EADA aims to obtain information on the learning activities carried out by the adult population during the 12 months prior to the interview, as an approach to the phenomenon of lifelong learning.

The main objective of the survey is to measure the participation of the adult population (between 18 and 69 years old) in activities carried out with the intention of learning or acquiring some knowledge or skill. We will try to answer the following questions:

- Who are the people who learn?
- How do these people participate in formal, non-formal education and informal learning activities?
- How much time do they dedicate to learning?
- What are the characteristics of the educational and learning activities in which they have participated?
- What are the difficulties that these people encounter in participating in educational and learning activities?
- Who pays for the learning activities?
- What part of education and learning activities is provided by employers?

In short, try to respond to the political and social needs for information in the field of lifelong learning.

Knowledge about the participation of adults in learning activities requires not only quantifying and classifying these activities but also relating them to other aspects that allow for a more effective analysis, such as obstacles or difficulties in learning or the accessibility of information about learning opportunities.

In addition, it is important to know the social characteristics (age, sex, home in which they reside, nationality...), economic characteristics (professional situation, occupation,

economic activity of the company in which they work...) and the educational trajectory of the people interviewed to have a basis on which to draw conclusions regarding participation in educational activities and learning.

The study that the survey proposes on linguistic knowledge deserves special mention, being a unique source for obtaining this information.

3 Scope of the survey

3.1 POPULATION SCOPE

The *population scope* of the survey is made up of people between 18 and 69 years old, both inclusive, who live in family homes. People of these ages residing in institutions or collective establishments are excluded.

3.2 GEOGRAPHICAL SCOPE

The *territorial scope* is the entire Spanish territory.

3.3 TIME SCOPE

The reference period or *temporal scope* to study participation in the training activities that has been considered most convenient is one year, considering the twelve months prior to the interview. The collection period took place over 4 months, from the end of April to the end of August.

3.4 FREQUENCY OF THE SURVEY

Currently, the survey is carried out every 6 years, according to Regulation (EU) 2019/1700. It has a six-year periodicity.

4 Concepts and definitions¹

Lifelong learning is defined as “any learning activity undertaken throughout life, with the objective of improving or expanding knowledge, skills and competencies, from a personal, civic, social and/or employment-related perspective”.

Learning activities are defined as “those activities of an individual organized with the intention of improving or expanding his or her knowledge, skills and competencies”. The two fundamental criteria to distinguish, for their adequate statistical treatment, learning activities from activities that are not, require verifying that: a) the action must be

¹ For more information on these concepts you can consult ‘*Classification of learning activities (CLA) manual - 2016 edition*’ and *National Classification of Education (CNED-2014)*

deliberate, that is, the action has the predetermined purpose of learning and b) the action must be *organized* to achieve that purpose in some way, including the possibility of being self-organized.

Deliberate learning is defined as “a deliberate pursuit of knowledge, skills, competencies, or attitudes of lifelong value”. The intention to learn, formulated before starting the activity by the student or by another individual, is therefore the crucial criterion.

Organized learning is “learning planned according to a pattern or sequence with explicit or implicit objectives”. This requires a providing agent (person or persons or organization) that establishes the learning environment and a teaching method through which communication is organized.

Learning activities can be classified into four broad categories: formal education, non-formal education, informal learning and incidental learning.

Taking into account the definition of learning activities that we have adopted, incidental learning should be excluded from statistical observation and from the scope of the classification of learning activities and the survey, since it is not deliberate. Therefore, the scope of research is reduced to the first three categories.

- Formal education
- Non-formal education
- Informal learning

The definitions currently used for these three broad categories are the following:

Formal education is defined as “institutionalized¹, intentional and planned education by public organizations and accredited private bodies that, together, constitute the formal educational system of the country. By definition, formal education programs and corresponding certifications are officially recognized.

The main component of formal education is initial education, defined as that intended for children, adolescents and young adults before their incorporation into the labour market, and which is made up of full-time educational programs, integrated into continuous itineraries and taught by entities specific for this type of education (schools, institutes, universities and other institutions). Formal education is therefore related to the educational stage prior to entry into the labour market, although programs taught partially in the workplace can also be considered part of formal education if they lead to a certification of the educational system and official training. It also includes education, intended for any age, in which the content of the programs or the resulting certifications are equivalent to those of initial education.

Non-formal education. It is defined as “education that is institutionalized, intentional and organized by an education provider but is not standardized. Non-formal education is characterized by being an alternative or complement to people’s formal education, within the process of lifelong education and training. It is aimed at all age groups, the programs

¹Education is said to be institutionalized when there is an organization that provides a structured set of elements designed expressly for education and learning, such as the student/teacher relationship or other similar interactions.

are of a shorter duration and/or intensity (usually in the form of courses, seminars or workshops) and are not necessarily integrated into defined itineraries”.

“In general, non-formal education leads to accreditations that are not officially recognized or may not even be reflected in any accreditation. However, it is possible to obtain educational certifications through official validation of knowledge acquired exclusively through participation in non-formal programs”.

Non-formal learning can therefore take place both inside and outside educational institutions and cater for people of all ages. It can cover educational programs for adult literacy, basic extracurricular education, tools to get along in life, tools for work and general culture. Non-formal learning programs do not necessarily have to follow the ladder of the education system, and may have a different duration.

These types of activities include education and training activities regardless of their duration or purpose (related to work or for personal reasons): private classes, courses, conferences, talks, workshops, seminars and also activities aimed at preparing for a job.

We can classify non-formal education activities as follows:

- Private classes or courses (classroom instruction, lectures or theoretical and practical courses): A course is defined as “a planned series of individual learning activities related to a specific topic and provided by a single entity”. Courses are taught by one or more people specialized in the field(s) of education and training.

They can take place in one or more environments:

- through classroom teaching (including lectures): It includes organized learning in a classroom for a group of people and is based on the transmission of knowledge from a teacher/tutor with the intention of educating.
- Combined theoretical/practical courses (workshops), that is, it covers all courses that combine classroom teaching (theoretical) with practice in real or simulated situations. It also includes sessions that combine theoretical teaching with practical training provided during a conference or congress that may be called “workshop”, “seminar”, “tutorial” or other.
- Courses that are carried out through open and distance education, that is, courses that are similar to face-to-face courses, that is, they may have elements such as registration, tutorials and exams, but they take place through postal correspondence or by electronic media, and that relate instructors and students, who are not together in a classroom. This type, of course, involves interaction between the instructor and the student, although not simultaneously, but with a certain delay.
- Tutoring: A planned series of learning experiences offered by experts or others acting in an expert capacity, selected to deepen knowledge or skills, to learn more intensely, and usually conducted by only one or a very few students. Typically, the tutor (natural person) is also the ‘provider’ and has education as their primary activity.

In the case of private classes, if the intention of the teacher or tutor is to help the student within the framework of a social or family relationship, it should be considered informal learning.

- Oriented towards training for a job: This type of learning is characterized by planned periods of training, instruction or practical experience, using normal work tools, either in the immediate workplace or in a simulated work situation with the presence of a tutor (who is not intended to be physically present, but you can give instructions by telephone or other means). It is generally organized by the employer to facilitate the adaptation of personnel, including in situations of transfer, rehiring and seasonal work in their current or new jobs. It may include general training about the company (organization, operating procedures, etc.) as well as specific work instructions (safety and hygiene, work practices).

Notwithstanding the above, for the purposes of this survey, non-formal education activities will be classified as:

- Planned training for a job (organized by the employer and led by a teacher or instructor, such as, for example, training for new tasks, new computer applications, handling of work tools or machinery, etc.).
- Workshops (courses, workshops or seminars held in the workplace or in free time that combine theory and practice, such as, for example, computer or cooking courses, courses to obtain a driving licence, etc.)
- Courses (theoretical courses, both in classrooms and remotely, carried out in the workplace or in free time, talks or conferences such as, for example, a law course, history or art conference...).
- Private classes taught by a specialized teacher who is remunerated for these activities, such as, for example, mathematics, piano, language classes, etc.

Informal learning, which is defined as “deliberate learning, but is less organized and less structured and may include, for example, learning events (activities) that take place in the family, in the workplace, and in each person’s daily life”. It is not institutionalized.

Informal learning activities can be classified by the medium of learning:

- Learning from a family member, friend, or co-worker, that is, lessons provided by household members or other people, such as relatives, acquaintances, or neighbours.
- The use of printed materials (books, professional magazines, etc.), that is, studying a topic with books, professional magazines, etc.
- Use of electronic devices (with or without an Internet connection) such as computers, tablets, mobile phones, television, radio, DVD, etc.
- Through guided visits to museums or historical, natural or industrial sites
- Through visits to libraries or other similar centres

4.1 CRITERIA USED TO DISTINGUISH BETWEEN FORMAL, NON-FORMAL AND INFORMAL EDUCATION

There are a number of operational criteria used to distinguish between broad categories of learning activities according to their conceptual definitions. These are described below:

4.1.1 Formal education versus non-formal education

Formal and non-formal learning are both included in the framework of education. The fundamental criterion that distinguishes formal education from non-formal education is the following: if the learning activity is officially recognized by the educational authorities, we will say that it is a formal activity; otherwise, we will say that it is non-formal.

In addition, several criteria must be taken into account to distinguish between formal education activities and non-formal education activities:

- Duration: Educational programs lasting less than one semester (less than 30 ECTS credits) are excluded from formal education. Even if they meet the rest of the criteria, they should be considered non-formal education.
- “Level hierarchy” criterion: This is based on the definition of the National Classification of Education (CNED-2014), according to which a formal learning activity can be viewed as a “continuous pathway” of education that requires the successful completion of a degree level. before moving on to the next.
- Admission requirements: These generally refer to the age and level of previous education for admission to a formal educational activity,
- while such requirements may not exist for admission to a non-formal educational activity.
- Registration requirements: a formal education activity is usually subject to registration, that is, it requires a set of requirements that must be formally recorded for registration in the activity. On the other hand, there is no need for such a requirement in non-formal education.

4.1.2 Informal learning versus formal and non-formal education

A learning activity is considered informal when it is not institutionalized, that is, it is less structured and can take place almost anywhere: with family, with friends, at work or even using means made available by education providers. And training.

A learning activity is *institutionalized* when there is “an organization that provides structured measures, such as student/teacher relationships and/or interactions, that are specially designed for education and learning”.

Learning activities are institutionalized when the body/organization that provides the activity is in charge of determining, at least, the following points:

- the learning method (default)
- the learning calendar
- the admission conditions
- the location of learning facilities

4.1.3 Case examples of formal education, non-formal education and informal learning activities

Some examples of educational activities and their classification according to the Classification of Learning Activities (CLA) are described below:

1. When are sports activities considered free time activities and when are they learning activities?

Sports activities, if they are not formally organized and without a teacher or coach involved, are not considered learning and are merely physical maintenance programs. Furthermore, there must be an intention to learn. Playing a game of football with other people is not a learning activity. Playing golf with a teacher to improve your handicap is not an educational activity, but playing golf with a teacher to learn the rules and strokes would be a non-formal educational activity.

Courses for coaches, judges, referees... etc. that lead to obtaining a certificate or qualification that allows them to perform a special function should be considered non-formal education. Studying at a university to obtain a Degree in Physical Activity and Sports Sciences would, however, be a formal educational activity.

What happens if an employer has a study centre where his employees can use the centre's material (electronic or paper) for their "self-learning" at that location or at home?

The study centre is a learning infrastructure but the activity is not institutionalized. That is, the activity is "self-learning" and is classified as informal learning.

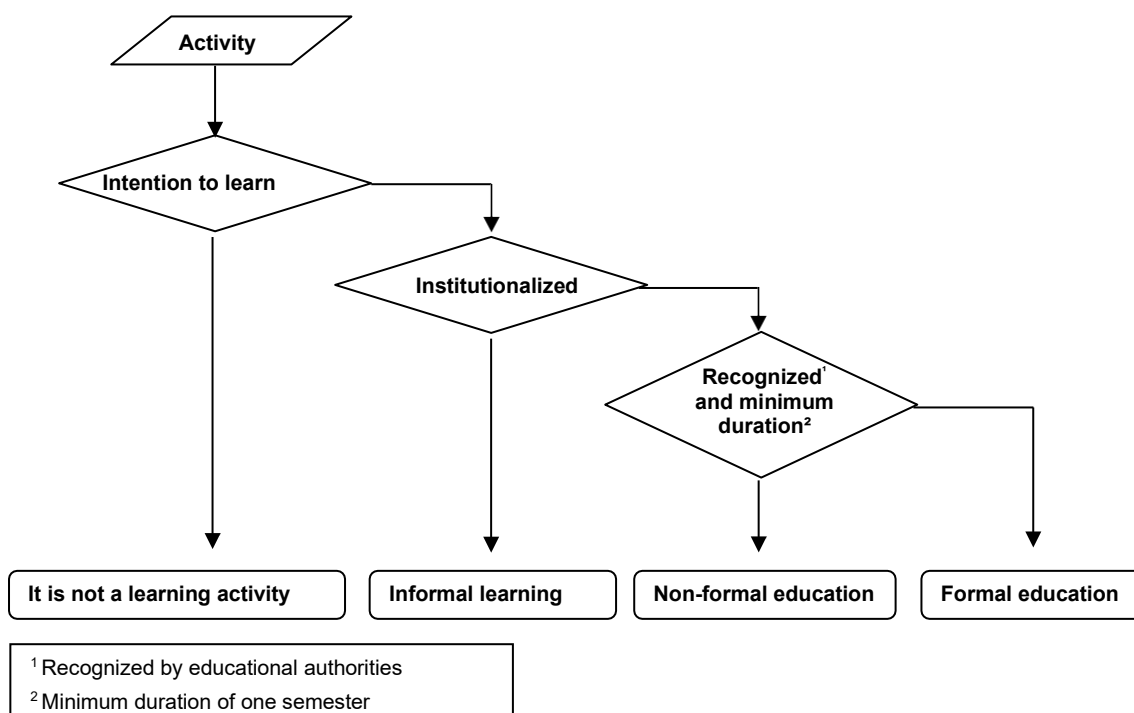
And with learning when the provider is the entrepreneur? Is it formal education?

If the employer offers this learning as part of a program recognized by educational authorities, then the activity is formal education.

If the person participates in practical training after receiving their qualification with the aim of being recognized professionally then it is work and not learning.

A simple, clear and intelligible way of expressing the criteria that should be used when making a decision on the assignment of learning activities into the three broad categories is presented in the following diagram.

Figure 1: Allocation of education and learning activities according to the 3 main categories



5 The questionnaire

The European AES questionnaire was initially prepared for the pilot AES that was carried out during the period 2005-2008. Its objective was to collect harmonized information on people’s participation in any type of learning activities (formal, non-formal and informal), as well as in work-related activities, time spent in education and training, social participation and cultural, ICT and linguistic skills, as well as the classification variables related to the main characteristics of the respondents.

Based on the experience of the pilot AES, the questionnaire model was further developed to include all basic social variables, some questions on the measurement of competencies and outcomes of education and training, while other questions were improved or were well considered for exclusion.

The countries adapted their questionnaires to the European questionnaire model with as few deviations as possible in order to produce comparable statistics at EU level.

However, countries are permitted to include additional variables and questions for national purposes only, ensuring that this will not substantially increase the burden on respondents. The EADA 2016 questionnaire is quite similar to that of 2011, although somewhat smaller, as it does not include either the module on cultural participation or the use of ICT.

5.1 MAIN CHARACTERISTICS TO INVESTIGATE IN THE SURVEY

The main characteristics to investigate in the survey are:

- Educational data of the person to be interviewed:
 - Teaching level achieved
 - Linguistic knowledge
- Participation in formal education and training
 - Level of most recent formal education activity
 - Characteristics of the most recent formal education activity
- Participation in non-formal education and training
 - Identification and general characteristics of up to 5 non-formal educational and training activities
 - Main characteristics of up to 2 non-formal educational and training activities chosen at random from the 5 above
- Difficulties participating in education
- Access to information about learning possibilities
- Participation in informal learning

5.2 CLASSIFICATION VARIABLES

The classification variables will be the basic social variables, which are made up of several groups:

- a) SOCIODEMOGRAPHIC CHARACTERISTICS OF THE SELECTED PERSON:
 - Sex
 - Age
 - Nationality
 - Country of birth
 - Limited by health problems
- b) CHARACTERISTICS OF THE HOME IN WHICH THAT PERSON RESIDES:
 - Type of household
 - Children under 14 in the household
 - Net household income
- c) SOCIOECONOMIC CHARACTERISTICS OF THE PERSON:
 - Relationship with the activity
 - Professional situation of the employed
 - Occupation in main job

d) CHARACTERISTICS OF THE PLACE OF RESIDENCE OF THE SELECTED PERSON:

- Housing
- Autonomous Community

e) CHARACTERISTICS OF THE PARENTS OF THE SELECTED PERSON:

- Place of birth of the father and mother
- Highest level of education achieved by the father and mother

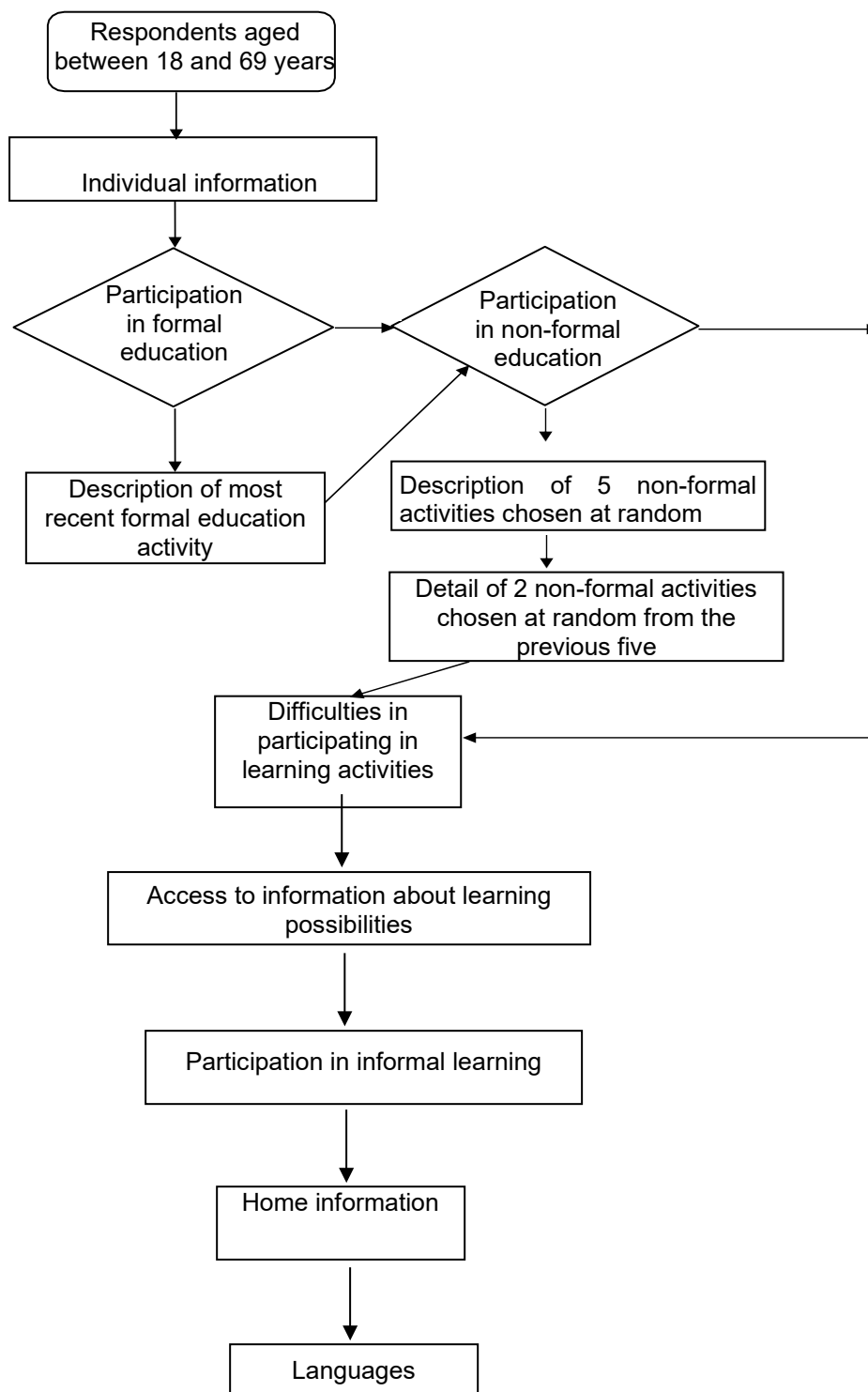
f) HIGHEST LEVEL OF STUDIES ACHIEVED BY THE SELECTED PERSON

It is important to note that the variable maximum level of education achieved, which makes up the last group for classification purposes, is not only used as a classification variable but, given its importance in this survey, it is also one of the main characteristics to be investigated.

5.3 QUESTIONNAIRE DESIGN

The diagram in Figure 2 illustrates the design structure of the EADA 2022 questionnaire

Figure 2. Basic diagram of the EADA-2022 questionnaire design



6 Sample Design

$$\begin{aligned} \text{FACTOR_DIS_E} &= \text{FACTOR_DIS_T} \frac{\sum_{i \in \text{MT}} \text{FACTOR_DIS_T}}{\sum_{i \in \text{ME}} \text{FACTOR_DIS_T}} \text{FACTOR_DIS_E_}(\text{EXP}) \\ &= \text{FACTOR_DIS_E} \frac{P_h}{\sum_{i \in h} \text{FACTOR_DIS_E}} \text{FACTOR_DIS_E_}(\text{EXP}) \end{aligned}$$

6.1 SAMPLE TYPE

The type of sampling that will be used is stratified two-stage sampling. The first stage units are the census sections. The second stage units are people between the ages of 18 and 69, both inclusive, who have their habitual residence in the main homes of the section.

The framework for sample selection will be the most up-to-date geo-referenced address (MDG) framework as of the date of sample selection. The area framework will be formed by the list of existing census sections. For the second stage units, the list of people in each of the sections selected for the sample is used.

The stratification criterion that will be used is the size of the municipality to which the section belongs, as well as its main socio-demographic characteristics.

The strata are:

Stratum 0: Municipalities with more than 500,000 inhabitants

Stratum 1: Rest of capitals

Stratum 2: Non-capital municipalities with more than 100,000 inhabitants

Stratum 3: Municipalities between 50,000 and 100,000 inhabitants

Stratum 4: Municipalities between 20,000 and 50,000 inhabitants

Stratum 5: Municipalities between 10,000 and 20,000 inhabitants

Stratum 6: Municipalities with less than 10,000 inhabitants

For each Autonomous Community, an independent sample is designed to represent it, as one of the objectives of the survey is to provide data with this level of disaggregation.

6.2 SAMPLE SIZE. ALLOCATION

To meet the objectives of the survey of being able to provide estimates with a certain degree of reliability at the national and Autonomous Community level, a sample of 34,000 people distributed in 2,125 census sections will be selected. The number of people selected in each census section will be 16. In this survey, reserve persons will not be considered, that is, the 16 people selected in each section are regular

The sample is distributed among Autonomous Communities, assigning a uniform part and another proportional to the size of the Community.

Table 1. EADA2022 Sample

Distribution of the sample of sections by Autonomous Community

Autonomous Community	Total
TOTAL	2,125
Andalucía	223
Aragón	95
Asturias (Princ. de)	91
Baleares (Islas)	95
Canarias	115
Cantabria	82
Castilla y León	114
Castilla-La Mancha	109
Cataluña	210
Comunidad Valenciana	162
Extremadura	93
Galicia	120
Madrid (Comunidad de)	195
Murcia (Region de)	100
Navarra (Com. Foral)	84
País Vasco	112
La Rioja	77
Ceuta	24
Melilla	24

6.3 SAMPLE SELECTION

The sections will be selected within each stratum with probability proportional to their size, understood as the number of people between 18 and 69 years of age. The people, in each section, will be selected through systematic sampling with random start. People between the ages of 18 and 24 will have a higher probability of being selected.

6.4 ESTIMATORS

To obtain the EADA22 people lifting factors, the following steps have been followed:

1. DESIGN FACTOR. It is based on the design factor of the person of the theoretical sample (inverse of the selection probability).

$$f_i^{(1)} = f_i^t$$

2. CORRECTION OF NON-RESPONSE. The previous factor is corrected in the effective sample with the Autonomous Community, Stratum and Type of age of the person (18 to 24 or 25 to 69) as the correction group.

$$f_i^{(2)} = f_i^{(1)} \frac{\sum_{H_t} f_i^{(1)}}{\sum_{H_e} f_i^{(1)}}$$

Person i belongs to group H.

H_t Theoretical sample

H_e Effective sample

3. RATIO ESTIMATOR. The ratio estimator is obtained with the total auxiliary variable of people aged 18 to 69 from stratum h to which person i (P_h) belongs.

$$f_i^{(3)} = f_i^{(2)} \frac{P_h}{\sum_h f_i^{(2)}}$$

4. CALIBRATED. The previous factor is calibrated so that the totals match the population values.

The totals to which it is calibrated are, by Autonomous Community, population by sex and five-year age group, foreign population and provincial totals. Always populations from 18 to 69 years of age.

The populations for the ratio estimator and for the calibration are with reference to May 15, 2023.

This is the final factor of the person.

6.5 SAMPLING ERRORS

To estimate the sampling errors, the Jackknife method has been used, which allows obtaining the estimate of the variance of the estimator of a characteristic X through the expression:

$$\hat{V}(\hat{X}) = \sum_h \frac{N_h - 1}{N_h} \sum_{i \in h} (\hat{X}_{(ih)} - \hat{X})^2$$

Being $\hat{X}_{(ih)}$ the estimate of the characteristic X obtained by removing section i from stratum h, y N_h is the number of sections in stratum h.

The tables publish the relative sampling error in percentage, coefficient of variation, whose expression is:

$$CV(\hat{X}) = \frac{\sqrt{\hat{V}(\hat{X})}}{\hat{X}}$$

The sampling error allows us to obtain the confidence interval, within which, with a certain probability, the true value of the estimated characteristic is found.

Sampling theory determines that in the interval between

$$\left(\hat{X} - 1,96\sqrt{\hat{V}(\hat{X})} \ , \ \hat{X} + 1,96\sqrt{\hat{V}(\hat{X})} \right)$$

7 Information Collection

7.1 COLLECTION METHOD

The collection was carried out by a company external to the INE through a multi-channel procedure. It began by requesting collaboration through a web questionnaire (CAWI), for which the selected person had one week to completely complete the questionnaire, followed by a telephone claim phase with the possibility of an interview (CATI) and finally a personal interview with an electronic questionnaire on a laptop computer (CAPI) for those people who had not collaborated at the time of launching this collection method. During the home visit, the interviewer requested the necessary information to complete the electronic questionnaire. He could complement the interview, if necessary, with telephone calls to complete omitted data or correct erroneous data.

The 'proxy' interview (that another person provides the data of the selected person) was not accepted but it was allowed, in case of inability of the selected person to answer, that another person help him provide the information.

7.2 COLLECTION ITEMS

The collection computer application was developed by the external company, both for CAWI, CATI and CAPI, and included all the rules for monitoring the flow of completion of the questionnaire as well as all the controls and rules for detecting inconsistencies that the promoting service considered timely, in such a way that, at the time of completing the questionnaire, it was considered refined and only lacking some coding so that the INE could consider it valid.

The necessary coding, both of the CAWI part and the CATI or CAPI part, was carried out by the same company in charge of collection.

7.3 COLLECTION INDICATORS

Initial sample:	32,000
Surveyable:	28,365
Surveyed:	23,019
Response rate (% surveyable):	81.2
Non-response rate (% surveyable):	18.8
Total non-response:	5,346
– Absent:	3,137
– Negative:	1,960
– Incapacity:	145
– Lack of information:	75
– Others:	29

By interview method, the final sample is distributed as follows:

– Personal interview (CAPI):	15.7%
– Telephone interview (CATI):	30.8%
– Internet Interview (CAWI):	45.5%
– Mixed interview:	8.0%

8 Processing of information

As mentioned above, the questionnaires were refined and coded at the same time they were introduced into the computer application. In the promoting unit, the purification was reviewed using the ATINE program, developed by the General ICT Subdirectorate (SGTIC) of the INE, which allows controlling the flow of the survey as well as range and inconsistency errors. The correct assignment of the level of education achieved and the coding that was accurate was also reviewed.

No automatic imputation was applied to partial non-response. All variables had to be completed and comply with all established controls for the questionnaire to be considered valid. However, following the guidelines of the European questionnaire, almost all questions allowed the option of don't know/no answer.

On the other hand, since the Spanish survey uses national classifications, it was necessary to recode some variables to adapt them to the international classifications used by Eurostat. Furthermore, for the purposes of exploiting results and especially transmitting the microdata file to Eurostat, the derived variables that were considered appropriate were created. These tasks were carried out by the promoting service in collaboration with the corresponding unit of the SGTIC of the INE.

8.1 RESULTS TABLES

The basic scheme of the tables follows the classic model of crossing the main characteristics to be investigated in the survey with the classification variables that try to explain the phenomenon of adult learning. Both absolute values of the data and relative values (horizontal percentages) are shown.

For reasons of confidentiality, on the one hand, and representativeness, on the other, in cells with less than 20 sample units the result is not published, but rather the symbol (..) appears.

For the purposes of representativeness of the published results and in order to obtain tables with the greatest number of cells with observations equal to or greater than 20, aggregations of categories of the following variables have been made in the results tables, as set out below:

HATLEVEL (Highest level of education achieved)

- Primary or lower education HATLEVEL= 01, 02, 10
- First stage of secondary education HATLEVEL= 21, 22, 29
- Second stage of Secondary Education: Baccalaureate and similar HATLEVEL= 32
- Second stage of Secondary Education: Professionally oriented teachings
HATLEVEL= 33, 39, 41
- Higher level vocational training HATLEVEL= 50
- University degree (240 ECTS credits), diploma HATLEVEL = 60
- University degree (more than 240 credits), degree HATLEVEL = 70
- Masters, speciality in Health Sciences and Doctorate HATLEVEL= 79, 81

FEDLEVEL (Level of studies of the last formal education activity carried out)

- First stage of secondary education or lower FEDLEVEL= 12, 13, 21, 22, 23
- Second stage of secondary education FEDLEVEL= 31 to 38, 41
- Higher level vocational training FEDLEVEL= 51, 52
- University degree (240 ECTS credits FEDLEVEL= 61, 62, 63
- University degree (more than 240 credits), master's degree, speciality in Health Sciences and doctorate FEDLEVEL= 71, 72, 73, 74, 75, 81

LOCNACE (Main activity of the establishment where you work)

- Agriculture, livestock, forestry and fishing LOCNACE=01-03
- Extractive, manufacturing and other industries LOCNACE=05-09, 10-33, 35, 36-39
- Construction LOCNACE= 41-43
- Commerce, transport and hospitality LOCNACE= 45-47, 49-53, 55-56
- Information and communications LOCNACE= 58-63

- Financial and insurance activities LOCNACE= 64-66
- Real estate activities LOCNACE= 68
- Business services LOCNACE= 69-75, 77-82
- Public administration, defence, education and health LOCNACE= 84, 85, 86-88
- Other services LOCNACE= 90-93, 94-96, 97-98, 99

On the other hand, there are two factors for increasing non-formal activities (NFEACTWEIGHT_5, NFEACTWEIGHT_2) depending on whether the five described are analysed or the two detailed ones that are randomly selected from those five, which correspond to NFERAND1 and NFERAND2. The person factor is already included in its calculation:

$NFEACTWEIGHT_5 = RESPWEIGHT * (NFENUM / \text{number of non-formal activities of the five with information}).$

$NFEACTWEIGHT_2 = RESPWEIGHT * (NFENUM / \text{number of non-formal activities of the two chosen at random with information}).$

The variables related to NFERAND1 and NFERAND2 in the record layout range from NFERAND1 to NFEOUTCOMEMAIN2.

The other variables are only affected by the person factor (RESPWEIGHT).

9 Dissemination of results

The results tables were disseminated on the INE website, accompanied by a press release that presented the main characteristics of adult learning in 2022 and its evolution with respect to the results of the previous survey.

The dissemination schedule of the survey results has been as follows:

NOVEMBER 2023

- Results tables
- Press release
- Methodology
- Standardized methodological report
- Questionnaire
- Anonymized microdata file