

2016 AES implementation – FAQ

28 June 2017

I - Technical issues (coding)

Question:

The coding for the four new items GUIDEINST, GUIDESOURCE, GUIDETYPE and GUIDEMODE is not clear.

I understand the coding of each sub-variable (corresponding to categories), considered as dummy variables (1 if selected, 2 if not, -1 if no answer and -2 if not applicable). However, how should the four 'global' variables GUIDEINST, GUIDESOURCE, GUIDETYPE and GUIDEMODE be coded?

Answer:

The four 'global' **variables** GUIDEINST, GUIDESOURCE, GUIDETYPE and GUIDEMODE have no 'informative' role per se within the data collection, meaning that they do not refer to any modality chosen in a list but they only show whether the whole **items** GUIDEINST, GUIDESOURCE, GUIDETYPE and GUIDEMODE were answered by the respondent or not and/or was applicable to the respondent or not.

Therefore, the four variables should be coded as follows (the coding has to be derived after having asked for the sub-categories):

Variable	Case	Comment
GUIDEINST		
1	At least one of the three sub-categories (GUIDEINST_1 to GUIDEINST_3) was answered.	The number 1 does not have any value per se, but it indicates that the respondent did choose one sub-category among the three suggested.
-1	No answer among the sub-categories.	This category enables to show right away that this item was not answered at all – refusal to answer – without looking at each of the sub-categories.
GUIDESOURCE, GUIDETYPE		
1	At least one of the sub-categories (GUIDESOURCE_1 to GUIDESOURCE_5 or GUIDETYPE_1 to GUIDETYPE_4) was answered (the respondent chose at least the 'other source/type' category - GUIDESOURCE_5=1 or GUIDETYPE_4=1).	The number 1 does not have any value per se, but it indicates that the respondent did choose one sub-category among those suggested.
-1	No answer among the sub-categories.	This category enables to show right away that this item was not answered at all – refusal to answer – without looking at each of the sub-categories.
-2	Not applicable (GUIDEINST_1≠1)	This category enables to show right away that this item was not

Variable	Case	Comment
		applicable at all.
GUIDEMODE		
0	None of the sub-categories (GUIDEMODE_1 to GUIDEMODE_4) were selected. <i>For this variable, unlike the two previous ones, there is no possibility to answer 'other mode'.</i>	The respondent was asked the question, did not refuse to give a reply but unfortunately none of the suggested categories was relevant. That is - either the actual questionnaire provided one tick box for each sub-category (GUIDEMODE_1 to GUIDEMODE_4) <u>and</u> an additional sub-category 'none of the items above/other' and only this one was ticked while the sub-categories GUIDEMODE_1 to GUIDEMODE_4 remained un-ticked; - or the 4 sub-categories were asked as yes/no answers and the respondent ticked 'no' for all of them ¹ .
1	At least one of the sub-categories was answered.	The number 1 does not have any value per se, but it indicates that the respondent did choose one sub-category among those suggested (GUIDEMODE_1 to GUIDEMODE_4).
-1	No answer among the sub-categories.	This category enables to show right away that this item was not answered at all – refusal to answer – without looking at each of the sub-categories.
-2	Not applicable (GUIDEINST_1≠1)	This category enables to show right away that this item was not applicable at all.

Question:

Public schools are financed from the state budget, however almost always students pay for registration, books etc. In such case which answers should be chosen to questions **FEDPAID**, **FEDPAIDBY**?

Answer:

The following should apply:

FEDPAID = 2 (partly paid by the respondent, and partly by someone else)

FEDPAIDBY_3 = 1 (other public institutions)

and other variables FEDPAIDBY_x = 2.

¹ The same logic applies to the following variables: FEDREASON, FEDPAIDBY, FEDOUTCOME, NFEREASON1, NFEPAIDBY1, NFEOUTCOME1 and DIFFTYPE.

Question:

How to code and check the 'global' variables with multiple answer sub-categories?

Answer:

The following 'global' variables and their sub-categories are concerned:

'Global' variable	Sub-categories
GUIDEINST	GUIDEINST_1 to GUIDEINST_3
GUIDESOURCE	GUIDESOURCE_1 to GUIDESOURCE_5
GUIDETYPE	GUIDETYPE_1 to GUIDETYPE_4
GUIDEMODE	GUIDEMODE_1 to GUIDEMODE_4
FEDREASON	FEDREASON_01a to FEDREASON_09
FEDPAIDBY	FEDPAIDBY_1 to FEDPAIDBY_4
FEDOUTCOME	FEDOUTCOME_1 to FEDOUTCOME_7
NFEREASONx	NFEREASONx_01a to NFEREASONx_13
NFEPAYBYx	NFEPAYBYx_1 to NFEPAYBYx_4
NFEOUTCOMEx	NFEOUTCOMEx_1 to NFEOUTCOMEx_7
DIFFTYPE	DIFFTYPE_01 to DIFFTYPE_12
Coding of 'global' variables	Coding of sub-categories
0 – none of the items 1 – at least one of the items selected -1 – no answer -2 – not applicable	1 – selected 2 – not selected -1 – no answer -2 – no applicable

Checking rules in EDIT

The validation software EDIT checks the consistent coding for the above listed variables according to four main rules, and the checking is done two ways: (1) from the sub-categories to the 'global' variable and (2) from the 'global' variable to the sub-categories.

The rules are illustrated by FEDPAIDBY "Which one of the following entities paid in-part or in-full for tuition, registration, exam fees, and expenses for books or technical study means, regarding your studies for FEDNAME? (mark all that apply)"

From sub-categories to 'global' variable:

- 1) If (FEDPAIDBY_1 and FEDPAIDBY_2 and FEDPAIDBY_3 and FEDPAIDBY_4) = 2 then FEDPAIDBY = 0
- 2) If (FEDPAIDBY_1 or FEDPAIDBY_2 or FEDPAIDBY_3 or FEDPAIDBY_4) = 1 then FEDPAIDBY = 1
- 3) If (FEDPAIDBY_1 and FEDPAIDBY_2 and FEDPAIDBY_3 and FEDPAIDBY_4) = -1 then FEDPAIDBY = -1
- 4) If (FEDPAIDBY_1 and FEDPAIDBY_2 and FEDPAIDBY_3 and FEDPAIDBY_4) = -2 then FEDPAIDBY = -2
⇒ this is the usual check for correct application of the filter; accordingly this rule does not apply for GUIDEINST as there is no filter.

From 'global' variable to sub-categories:

- 1) If FEDPAIDBY = 0 then (FEDPAIDBY_1 and FEDPAIDBY_2 and FEDPAIDBY_3 and FEDPAIDBY_4) = 2

2) If FEDPAIDBY = 1 then (FEDPAIDBY_1 or FEDPAIDBY_2 or FEDPAIDBY_3 or FEDPAIDBY_4) = 1

3) If FEDPAIDBY = -1 then (FEDPAIDBY_1 and FEDPAIDBY_2 and FEDPAIDBY_3 and FEDPAIDBY_4) = -1
⇒ the issue of 'partial non-response', i.e. the combination of codes 1 or 2 with code -1 for the sub-categories FEDPAIDBY_1 to FEDPAIDBY_4 should only emerge in case of questionnaire option B (see below), and then these 'partial non-response' have to be recoded from -1 into 2. For further clarifications see the below explanations on the options for national questionnaire implementation and the implications for coding.

4) If FEDPAIDBY = -2 then (FEDPAIDBY_1 and FEDPAIDBY_2 and FEDPAIDBY_3 and FEDPAIDBY_4) = -2

Implementation in national questionnaires

In national questionnaires, countries have two options to implement these variables.

Option A – single checklist

Example FEDPAIDBY

- Employer or prospective employer (FEDPAIDBY_1)
- Public employment services (FEDPAIDBY_2)
- Other public institutions (FEDPAIDBY_3)
- A household member or a relative (FEDPAIDBY_4)
- None of the items above / other (please specify)

If a single checklist is used an additional sub-category 'none of the above' or 'other (please specify)' needs to be in this checklist (even if this is not a sub-category for data transmission) in order to allow a distinction between 'none of the items above' and 'no answer' in the 'global' variable FEDPAIDBY.

Implications for coding:

Any ticked sub-category is coded 1. Sub-categories not ticked are coded 2. The code -1 is only applied if none of the five sub-categories is ticked, and only then all sub-categories FEDPAIDBY_1 to FEDPAIDBY_4 are coded -1; the 'global' variable FEDPAIDBY is also coded -1.

'Partial non-response' is not possible, i.e. there are no combinations of codes 1 and -1 – as soon as one of the five sub-categories is selected, all other not selected sub-categories are by default coded 2.

Option B – yes/no checklist

Example FEDPAIDBY

	Yes	No	[No answer]	
Employer or prospective employer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(FEDPAIDBY_1)
Public employment services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(FEDPAIDBY_2)
Other public institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(FEDPAIDBY_3)
A household member or a relative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(FEDPAIDBY_4)

For each of the sub-categories, tick boxes for 'yes' and 'no' are provided, a tick box for 'no answer' might or might not be offered.

An additional sub-category 'other (please specify)' could be provided but is not necessary to allow a distinction between 'none of the items' and 'no answer' in FEDPAIDBY, as this can be derived from the 'no' or 'no answers' ticked for the four sub-categories.

Implications for coding:

With a yes/no checklist each sub-category can be coded as either 1, 2 or -1, i.e. 'partial non-response' is possible if the respondent answered 'yes' to the first sub-category, 'no' to the second and left the other two sub-categories empty (or ticked 'no answer').

In order to harmonise the treatment of 'no answer' for option B with coding for option A, coding for option B should be as follows:

If any sub-category FEDPAIDBY_1 to FEDPAIDBY_4 is ticked 'yes', all other sub-categories for which 'yes' is NOT ticked should be coded 2 (i.e. also sub-categories where neither 'yes' nor 'no' is ticked should be coded 2).

All sub-categories FEDPAIDBY_1 to FEDPAIDBY_4 should only be coded -1 if all are either empty or 'no answer' is ticked for all of them.

II – Conceptual issues

a) Guidance

Question:

Could you be a little more specific what should and shouldn't be included in **GUIDEINST**?

GUIDEINST: *During the last 12 months, have you received any information or advice/help on learning possibilities from institutions/organisations (include all types of services and all modes of service received: face to face, internet, mail, phone, fax, posters, leaflet, etc. ...)?*

According to the manual, the "*provision of services often relies on some information/knowledge or the user's specific situation (for instance in terms of needs, preferences, inclinations, etc.)*". I am not sure whether this goes well with the modes of service received such as posters, leaflets, commercials. When the respondent notices a university ad at a bus station or in a newspaper, does this count as receiving information on learning possibilities? If a leaflet for language school is handed to him in the street, does this count? What if the leaflets distributing person is aiming only at young people in a given location (and thus relies on some sort of knowledge of the user's specific situation)? The respondent has no mean to know if he was "targeted" or they are giving the same leaflet to anyone. The same goes for the internet and the omnipresent ads (internet advertisement can be targeted to users in specific situations even better) and TV programmes (mentioned in **GUIDEMODE_4**).

Answer:

Posters or leaflets should be given by the institutions/organisations following a discussion with the respondents to provide guidance or help. Therefore, advertisements at a bus stations or newspaper, distribution of flyers in the street as well as general internet advertisement should be excluded.

Question:

Should information about recognition of prior education be included in **GUIDETYPE_3** (for example someone studying abroad returns home and wants to know how his (formal) education from abroad can be recognised in his country of origin)?

GUIDETYPE: *Which type of free information or advice/help concerning learning possibilities have you received?*

GUIDETYPE_3: *Information or advice/help on procedure for validation/recognition of skills, competences or prior learning.* I assume this refers mainly to NQF.

Answer:

Eurostat recommends to also include recognition of prior education from abroad ("prior learning" has a broad meaning here).

Question:

In **GUIDETYPE_3** does this variable include entrance exams and entry requirements? Or is it only validation/recognition of skills (for foreigners for example who have foreign education)?

Answer:

In this variable, the focus is rather on validation/recognition of skills: for granting an official status to competences (validation) or for foreigners for example who have foreign education (recognition).

Guidance on the existence of entrance exams / entry requirements for a specific training should be covered in **GUIDETYPE_1** because they are directly linked to the learning possibilities (supply), in the sense that there is a possibility to learn provided that the person has the required characteristics.

This shall not be mixed with what is covered by **GUIDETYPE_2** which rather refers to guidance on how and where people can have their skills/competences tested if they would like to, independently of whether such skills/competences might be required for a specific training.

Question:

For GUIDETYPE_4 could you give some examples of what information/help/advise that would fall into this category?

Answer:

In this case, we can think of advice given as regards payments (how to find help from the State to take part in a training for instance) and any other kind of ancillary services related to the learning, but not directly about the learning itself: help for finding accommodation if needed, help for transports to reach the training centre, etc... This category stands for 'other type' and was meant to cover a maximum of forms of help (which could vary from one country to another) and avoid 'no answer'.

In any case, you should report your national examples in the metadata (questionnaire / quality report) if there is one form of help you covered in particular.

b) Formal education

Question:

Should students who interrupted their studies be counted in formal education (**FED**)? Formally, they are still students of a given school and can return to education at any time but they did not take any educational modules during the last 12 months. It would probably not make sense to ask them all the FED questions then. If they interrupted the studies during the last 12 months, should they choose answer nr. 2 in **FEDCOMP**?

Answer:

Those students who did not attend any module during the last 12 months should not be asked for any question on FED (FEDCOMP included). But if they interrupted the studies at some point during the last 12 months that means that they were in education in the last 12 months before interrupting their studies and thus all questions on FED should then be asked.

Question:

Could you clarify the concept of Open Educational Resources (OER) (as described in the manual)?

FEDOERA: *Have you used online educational resources in the most recent formal education or training activity (for instance audio-visual materials, online learning software, electronic textbooks, etc.)?*

Do you think respondents will be able to distinguish between OER and other sources? Could you provide examples of what shall and what shall not be included here? (for example is wikipedia included? What about jstor, random internet sources, khan's academy videos, other youtube videos which are not clearly marked as educational.....?)

Same for **NFOERA**.

Answer:

The focus should be on the fruition of contents on line (that is, through a device connected to the internet), and there is no need to define further what is an educational resource, as long as the respondent perceives that the educational content is predominant. In this context, the reference to OER is a bit misleading, as it excludes contents available online for a fee.

Question:

Could you provide a clearer definition of educational websites/portals?

FEDOERB: *Did you interact with other people (e.g. teachers, learners) through educational websites/portals for the most recent formal education or training activity?*

What about class facebook groups, dedicated G+ groups, OneDrive and other clouds, whatsapp student groups should all these be included if the main reason why they were created/why people use them is the educational activity?

Same for **NFEOERB**. (Does teacher posting learning material for students on his web pages count as interaction through educational website?).

Answer:

The interpretation of the question should be quite broad, and the answer should be based on the perception of the respondent regarding the use of websites/portals. If the interaction took place in a context which is specific to an educational purpose (or that is perceived as such by the respondent), the respondent should reply YES, even if the medium through which the interaction took place is not specifically designed for education – e.g., Facebook, WhatsApp, google+, etc.

Question:

FEDUSEA, FEDUSEB, FEDOUTCOME: Are we asking here about the use/outcomes of skills/knowledge acquired during the whole formal education activity (lasting several years) or are we asking just about skills/knowledge acquired during the last 12 months only?

Answer:

These questions are based on the most recent formal education or training activity and not on the knowledge acquired in the last 12 months. The use/outcomes/skills are related to the most recent formal education and training activity.

Same comment for the corresponding variables on non-formal education and training.

c) Non-formal education

Question:

Are self-managed free on-line courses with professional lecturers (such as Coursera) included in non-formal education and training (courses) or in informal education?

Answer:

The use of Coursera website is considered as informal learning if self-managed. In case a school includes the use of Coursera in the curriculum/formal programme, making it mandatory for students to use it, then it would be part of formal education and training (and apply for an open educational resource).

In any case it cannot be considered as non-formal education and training because it is not institutionalised (schools do not have a firm control and strategy on the content, on top there is no planning or organised path for the learning: anyone can pick any sub-topic they're interested in...).

d) Languages

Question:

Which version of the ISO classification for coding languages is correct: the one in the 2016 AES manual or the one in the Regulation (EC n°1145/2014)?

Answer:

The link is correct in the 2016 AES manual but wrong in the Regulation. Click [here](#) for list of codes (namely 'ISO 639 alpha 3' with 3 digits) that should be used.

e) Informal learning

Question:

In the variable INFCOMPUTER (learning by using computers online or offline), should tablets and smartphones be considered as well? That is, if a respondent used a tablet or a smartphone to learn something during the reference period, should that be counted as a Yes in this variable?

Answer:

Yes, we also have to consider other devices that might be used, in particular for online learning. More and more people use in particular tablets instead of a PC/laptop, and also mobile devices might be used for online learning.

III. Quality report – additional explanations

Net sample

The net sample means the actual number of respondents (i.e. un-weighted). The actual number of respondents is the number of records in the microdata file.

Table 6.2.1 Sampling error indicators for 2016 AES key statistics

The age group 25-64 applies to the four indicators where age is not specified:

- Share of job-related activities among non-formal education and training - %
- Average amount paid by a respondent for all the expenses related to the randomly selected non-formal education activities
- Average number of hours spent by a respondent in the most recent formal education activity
- Average number of hours spent by a respondent in the randomly selected non-formal education activities

Calculation of indicators for this table

'Participation rate in formal education and training' is to be calculated based on FED.

Formulae: $(FED = 1 / \text{all people aged 25-64}) * RESPWEIGHT$

'Participation rate in non-formal education and training' is to be calculated based on NFE.

Formulae: $(NFE^2 = 1 / \text{all people aged 25-64}) * RESPWEIGHT$

(Analogously for the different breakdowns – age, sex, educational attainment)

'Participation rate in informal learning' is to be calculated based on INF.

Formulae: $(INF = 1 / \text{all people aged 25-64}) * RESPWEIGHT$

'Share of job-related activities among non-formal education and training' is to be calculated based on NFEACT0x_PURP (up to 7 activities). NFEACT0x_TYPE = 3 is included in the formula as guided-on-the-job by its very nature is a job-related activity.

Formulae: $((NFEACT01_TYPE = 3 \text{ or } NFEACT01_PURP1 = 1) + (NFEACT02_TYPE = 3 \text{ or } NFEACT02_PURP1 = 1) + (NFEACT03_TYPE = 3 \text{ or } NFEACT03_PURP1 = 1) + (NFEACT04_TYPE = 3 \text{ or } NFEACT04_PURP1 = 1) + (NFEACT05_TYPE = 3 \text{ or } NFEACT05_PURP1 = 1) + (NFEACT06_TYPE = 3 \text{ or } NFEACT06_PURP1 = 1) + (NFEACT07_TYPE = 3 \text{ or } NFEACT07_PURP1 = 1)) / NFENUM > 0) * NFEACTWEIGHT2^3$

'Average amount paid by a respondent for all the expenses related to the randomly selected non-formal education activities' is to be calculated based on the full amounts indicated for NFEPaidVAL1 and NFEPaidVAL2 (costs paid for 1st and 2nd non-formal learning activity), i.e. regardless who paid for the purpose of this indicator.

Formulae: $((NFEPaidVAL1 \text{ (when } NFEPaidVAL1 \geq 0) + NFEPaidVAL2 \text{ (when } NFEPaidVAL2 \geq 0)) / \text{number of selected NFE activities (NFERANDx > 0)}) * NFEACTWEIGHT$

'Average number of hours spent by a respondent in the most recent formal education activity' is to be calculated based on FEDNBHOURS.

Formulae: $(FEDNBHOURS \text{ (when } FEDNBHOURS \geq 0) / FED > 0) * RESPWEIGHT$

² NFE = 1 if NFEcourse = 1 or NFEworkshop = 1 or NFEguidedjt = 1 or NFElesson = 1.

³ NFEACTWEIGHT2 = RESPWEIGHT / number of identified NFE activities (NFEACTxx_TYPE <> -2) * NFENUM

'Average number of hours spent by a respondent in the randomly selected non-formal education activities' is to be calculated based on NFENBHOURS1 and NFENBHOURS2.

Formulae: $((\text{NFENBHOURS1 (when NFENBHOURS1} \geq 0) + \text{NFENBHOURS2 (when NFENBHOURS2} \geq 0)) / \text{number of selected NFE activities (NFERANDx} > 0)) * \text{NFEACTWEIGHT}$