Guidelines for description
of occupations and assignment of
individual attributes to occupations

C-Game project, O2-2.2

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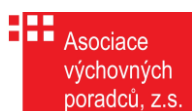
Content

1 Guidelines for description of occupations and assignment of their individual attributes

These guidelines serve to unify the way how to make:

- short text description of occupations,
- assignment of educational level required for the occupation,
- assignment of descriptors (individual attributes) to occupations,
- assignment of subjects to occupations

1.1 Division of the occupations among partners for all tasks:

- 1-100   ZiM
- 101-200   ISON
- 201-300   KABA
- 301-400   TCM
- 401-500   NVF
- 501-600   Avp

2 Short text description of occupations

2.1 Aim

The aim is to briefly and concisely characterize the content of the occupation in order to give the child aged 12-14 a basic idea of what are the main features of the work in that occupation. Occupational description will appear after clicking on the occupational title as the first part of the overall profile of the occupation.

2.2 Procedure and principles

- Fistly do it in your language and then translate to English in a new column.
- The description should give the child an answer to the question "What is this person doing?"
- It is necessary to identify the basic activities which form the centre activity of the occupation. It is certainly not to be a complete or detailed list of activities. It is not about the child knowing the whole content of the occupation (which would have forgotten immediately anyway), but about forming a certain idea about the occupation.
- The primary source for this is the relevant text in the O*Net database. However, this can usually not be fully used for its specificity and sometimes too briefness. Other sources may be national occupational systems, descriptions in the ESCO classification, etc.

- These activities need to be written in a simple way and try not to use very special expressions. Sometimes you can't do it without them, but it should be rare.
- Due to the uniformity of descriptions, a verb form is used in the 3rd person of the singular (that is, what a person in the occupation does).
- Descriptions should be in the range of about 200-350 characters including spaces.
- Do not translate the occupational description automatically - adjust the content to language of "your" kids.

2.3   Examples

Pastry chef:

He/she prepares confectionery doughs, materials and creams, including calculations of the amount of raw materials, performs their shaping and kneading (manual and mechanical). He/she serves ovens, ovens and other equipment, including their maintenance, decorates cakes and deserts, makes ice creams and fruit pies, creates its own designs of desserts, cakes. Sometimes he/she sells pastry products.

Animal keeper at the zoo:

He/she prepares, dispenses and administers feed, water or medicines and other veterinary prevention products to the animals, monitors their state of health, assists in veterinary procedures and births, monitors the condition and development of births, cleanses and disinfects animals premises.

Chemical technologist:

He/she sets chemical production procedures, calculates the quantities of raw materials needed, sets their types and parameters, plans the production of individual chemical products, including the workload of individual equipment, cooperates in the conduct of tests of chemical raw materials and product quality tests, determines requirements for the purchase and repair of production equipment.

3   Assigning education to occupations

3.1   Aim

The aim is to provide the child with information on what level of education needs to be achieved in order to pursue the occupation. The child doesn't have to know what a particular field of education it is (it can change over the years), but how difficult an educational journey he/she would probably expect.

3.2 Procedure and principles

- For each of the occupations is needed to determine level of education that is normally required or is mostly common for the occupation.
- The level of education is given as one of 6 following levels:

	ISCED 2011	CZ	SK	EN	GR	BG
1	1+2	Základní vzdělání	Primárne vzdelanie	Basic education	Βασική εκπαίδευση	Основното образование
2	3	Střední vzdělání s výučním listem	Stredné odborné vzdelanie s výučným listom	Secondary education with an apprenticeship certificate	Δευτεροβάθμια εκπαίδευση με Πιστοποιητικό Επαγγελματικής Κατάρτισης Επιπέδου 3 (ΣΕΚ)	Средно образование със сертификат за чиракуване
3	4	Střední vzdělání ukončené maturitou	Stredné vzdelanie ukončené maturitou	Secondary education completed by certificate of secondary education	Ανωτέρη Εκπαίδευση - Πτυχίο Επαγγελματικής	1ва степен средно образование завършено със свидетелство за средно образование
4	5	Vyšší odborná škola	Vyššia odborná škola	Higher vocational school	Ανώτατη επαγγελματική σχολή	2ра степен на средно професионално училище
5	6+7+8	Vysoká škola	Vysoká škola	Higher education / University	Ανώτατη εκπαίδευση / Πανεπιστήμιο	Висше образование/Университет
0	-	Na školním vzdělání nezáleží	Na školskom vzdelaní nezáleží	Education does not matter	Καμία εκπαίδευση	Училищното образование няма значение

- In the case of occupations where is most common for example university level, but can be performed also by people with lower level of education (not only exceptionally) you can indicate more of these educational options. This can be similar for some simpler occupations, which, for example, are often carried out by people with different level of education, but in reality it is enough the secondary school, because one learns the work by training directly at the workplace or by some course.
- The option with the higher vocational school should be introduced only in cases where such education is directly required, e.g. for certain health occupations.
- An option in which school education does not matter is indicated by occupations where general (e.g. communication) skills matter more than school education, or there must be a special exam (these are not given because they are subject to regulations that may change in our countries as well as over time).
- Required level of education will be determined by the partners, as it can vary from country to country.

3.3 Examples

Occupation	Basic education ISCED 1+2	Secondary education with an apprenticeship certificate ISCED 3	Secondary education completed by certificate of secondary education ISCED 4	Higher vocational school ISCED 5	Higher education / University ISCED 6+7+8	Level of education doesn't matter
Hairdresser		X				
PC Network Manager			X	X	X	
Kindergarten teacher			X			
Chemical technologist					X	
Farmer		X				
Nurse				X		
Maid	X					
Sales representative						X

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4 Assignment of descriptors to occupations

4.1 Aim

The aim is to bring the child closer to the occupation by means of general types of activity that he/she can imagine, which may be comparable to his/her interests and activities and which are characteristic for each occupation. These types of activity (descriptors) will serve three purposes:

- as part of the overall characteristics of the occupation that appears after click on a given occupation,
- when selecting job advertisement items for recruitment of employees for the given occupation,
- as an auxiliary part of any further questions, additions, testing, etc.

4.2 Procedure and principles

The list of descriptors is in Annex 1. Each occupation shall be assessed according its relationship to individual descriptors (i.e. types of activity):

2	Descriptor is crucial for the occupation. Alone, or with other types of activity, forms the focus of work and success in the occupation.	
1	Descriptor occurs in the occupation, but it is not a key factor on which the occupation and success were based in it.	
0	Descriptor does not occur in the occupation or only marginally (zero is not filled in, the cell remains unfilled).	

The source of assessment is primarily description of the occupation.

4.3 Examples

Occupation	Operate and operate devices, machines, devices	Assemble, adjust and repair equipment, machines, appliances	Make, process, assemble and assemble manually and with manual tools	Measuring instruments and systems to measure, test, test	Invent and construct new things, conduct research	Rate and control	Teach, educate, educate	Care for people who need care	Treat, treat	Provide services to people, serve customers	Offer goods to customers or sell them	Listen to people, advise them, help solve problems	Negotiate, convince	Perform in front of more people	Invent workflows, plan	Organize people's work	Ensure security and order, protect people or property	Grow vegetables	Keep animals and other animals, take care of them	Protect nature and the environment	Program, design information systems	Take care of computers, programs, data, help you work with them
Hairdresser	1		2						2	2	1											2
PC Network Manager	1	1		1		1						2	1									1
Kindergarten teacher			1	2			1	1	1	1				1	1					1		
Chemical technologist			1	1						2	2				1							
Farmer	2				1				1	2		2	2					2	2	2		
Nurse	1		1	1				2	2			1										
Maid	2	1							1	1												
Sales representative										2	1	2										

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5 Occupational working activities

5.1 Goal

The aim is to describe the main work activities performed by the profession. Work activities will be part of the compilation of an advertisement for a vacancy, so they should be concise, concise.

5.2 Procedure and principles

For every occupation has to be to prepared 4-6 working activities.

Working activities have to:

- be written in 3 person singular form,

- start with capital letter,

- be detailed specified and be clearly identifiable to which of the occupations they belong,

- be formulated so that students would not leave the game because they are unable to choose the right ones,

- concentrate on specific occupation activities (if the list is long),

- be addressable, concise but written briefly,

- focus only on important activities directly connected to the occupation, including keywords related to the occupation so that children connect the dots (e.g. FARM equipment on the farmer occupation), long sentences can be sometimes split in two working activities

- can be listed in order of importance. The first three will be listed in the job advertisement to fill vacancy of the given occupation, the others will be randomly assigned to other occupations.

- be formulated on level 2-3 (red + yellow), i.e. more than three-word descriptions,

- take in mind that if students would be not able to choose the right work activities, they will be frustrated, end the game and NEVER open it again.

When preparing the working activities the occupational description has to be reviewed and adjusted.

5.3 Examples

Photolaborant
- Loads finished photos in envelopes and marks them with the order number.
- Operates a photo processing machine.
- Checks the print quality of photos.
- Adds chemicals to the photo processing machine.

- Performs regular maintenance of photo processing equipment.
- Reads data with photos from various electronic media and transfers them to a photo processing machine.

6   Annex 1 - List of descriptors

A	Assemble, adjust and repair equipment, machines, appliances
A	Make, process, assemble and assemble manually and with manual tools
A	Measuring instruments and systems to measure, test, test
A	Invent and construct new things, conduct research
B	Rate and control
B	Teach, educate, educate
B	Care for people who need care
B	Treat, treat
B	Provide services to people, serve customers
B	Offer goods to customers
B	Listen to people, advise them, help solve problems
B	Negotiate, convince
B	Perform in front of more people
B	Invent workflows, plan
B	Organize people's work
B	Ensure security and order, protect people and property
C	Grow
C	Keep animals and other animals, take care of them
C	Protect nature and the environment
D	Program, design information systems
D	Take care of computers, programs, data, help people work with them
D	Insert numbers, data, texts, keep records, documentation
D	Evaluate data sets, summarize them, charts, reports
D	Write articles and books or judge, edit them
E	Sing or play musical instruments
E	Create artisticly

The letters in the left column are for easier orientation only and have the following meaning:

A. Types of activities focused in particular on 'things'
B. Types of activities aimed in particular at 'people'
C. Types of activities focusing in particular on 'fauna, flora and the environment'
D. Types of activities focusing in particular on 'data, information and texts'
E. Types of activities focused on "art"

7 Annex 2 - List of subjects

CZ	SK	EN	GR	BG
Český jazyk a literatura	Slovenský jazyk a literatúra	National language and literature	Νεοελληνική γλώσσα και λογοτεχνία	Български език и литература
1. cizí jazyk	1. cudzí jazyk	1st foreign language	1. ξένη γλώσσα	1. чужд език
Matematika	Matematika	Mathematics	Μαθηματικά	Математика
Fyzika	Fyzika	Physics	Φυσικη	Физика
Chemie	Chémia	Chemistry	Χημεία	Химия
Dějepis	Dejepis	History	Ιστορία	История
Zeměpis	Geografia	Geography	Γεωγραφία	География
Přírodopis	Biológia	Biology	Φυσική ιστορία	Природознание
Občanská výchova	Občianska náuka	Civic education	Πολιτική εκπαίδευση	Гражданско образование
Etická výchova/ Náboženská výchova	Etická výchova/ Náboženská výchova	Ethical / Religious education	Ηθική / Θρησκευτική εκπαίδευση	Етично / религиозно образование
Informatika	Informatika	Informatics	Πληροφορική	Информатика
Výchova ke zdraví	------	Health education	Εκπαίδευση υγείας	Здравно образование
Člověk a svět práce	Svet práce	World of work	Ο άνθρωπος και ο κόσμος της εργασίας	Човекът и светът на труда
Technika	Technika	Technic	Техника	Τεχνικά
Tělesná výchova	Telesná a športová výchova	Physical and sports education	Φυσική αγωγή	Физическо възпитание
Výtvarná výchova	Výtvarná výchova	Creative education	Δημιουργική εκπαίδευση	Творческо образование
Hudební výchova	Hudobná výchova	Music education	Μουσική εκπαίδευση	Музикално образование
Výchova uměním	Výchova umením	Art education	Εκπαίδευση τέχνης	Художествено образование
2. cizí jazyk	2. cudzí jazyk	2nd foreign language	2. Ξένη γλώσσα	2. чужд език