

## Where should “Print Production Technology” take place under the International Standard Classification of Education?

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The world's education systems vary widely in terms of structure and curricular content. Consequently, it can be difficult for national policymakers to compare their own education systems with those of other countries or to benchmark progress towards national and international goals.

UNESCO developed the International Standard Classification of Education (ISCED) to facilitate comparisons of education statistics and indicators across countries on the basis of uniform and internationally agreed definitions. In 2011, a revision to ISCED was formally adopted by UNESCO Member States. The product of extensive international and regional consultations among education and statistical experts, ISCED 2011 takes into account significant changes in education systems worldwide since the last ISCED revision in 1997. (Data for ISCED 1997 are available under [www.uis.unesco.org/isced/](http://www.uis.unesco.org/isced/).)

The first data collection based on the new classification will begin in 2014. The UNESCO Institute for Statistics (UIS) is working closely with Member States and partner organizations (such as OECD and Eurostat) to map education systems to the new classification and to revise collection instruments.

During the ISCED 2011 review, UNESCO Member States agreed that the fields of education should be examined in a separate process. This review is now underway with the view to establishing an independent but related classification called the ISCED Fields of Education and Training. A panel of experts led by the UIS has developed a draft classification. A global consultation on the draft was took place in early 2013<sup>[1]</sup>.

In ISCED 1997 and 2011 there are totally 25 education fields under 9 broad groups. These documents can be downloaded from [www.uis.unesco.org/isced/](http://www.uis.unesco.org/isced/).

### 2. Humanities and arts

#### 2.1. Arts

Fine arts:	drawing, painting, sculpture;
Performing arts:	music, drama, dance, circus;
Graphic and audio-visual arts:	photography, cinematography, music production, radio and television production, <b>printing and publishing</b> ;
Design:	craft skills.

Figure 1: In ISCED 1997 and ISCED 2011, classification of “Printing and Publishing” field under “Humanities and Arts” board group<sup>[2,3]</sup>

According to ISCED 1997 and ISCED 2011, field of “Printing and Publishing” is classified under the board group of “Humanities and Arts” (Figure 1). (It can be seen in ISCED97<sup>[2]</sup> on page 42 and in ISCED2011<sup>[3]</sup> on page 73.)

According to my opinion, field of “Printing and Publishing” shouldn't be classified under the board group of “Humanities and Arts”. Because printing books, magazines, brochures, packaging and wallpapers are none of an artist's business. Printing these types of products can be defined as production or manufacturing.

In ISCED 1997 and ISCED 2011 there is a field called “manufacturing and processing” under the board group

of “Engineering, manufacturing and construction” (Figure 2).

Under the field of “manufacturing and processing” there are sub-fields like textiles, clothes, footwear and leather. All those products are designed before the production step just like printed products such as books, magazines, packaging, etc., but they are not classified under “Humanities and Arts”. My opinion is that the classification of these types of productions under “manufacturing and processing” is the proper way of classification.

According to ISCED 2013<sup>[4]</sup>, which is the Final Draft, Detailed Field of “Printing and Publishing” is not

mentioned under any Board Field even under “Arts and humanities” (Figure 3).

This currently causes problems for the departments, faculties or schools which offer “Printing Technology Education”. For example in Turkey, The Council of Higher Education takes the classifications of ISCED (International Standard Classification of Education) as reference points and it is almost impossible to convince the council that the field of “Printing” is Production rather than Art or Communication.

The difference between Printing as a Production and Printing as an Art can be explained as below by giving an example from gravure printing technique:

- Printing as an art: A gravure artist uses engraving tools for performing his art. The artist engraves the plate by engraving tools, applies the ink on the plate manually and prints it by a very primitive printing machine in limited number of copies because the art should be unique.

### 5. Engineering, manufacturing and construction

#### 5.2. Engineering and engineering trades

Engineering drawing, mechanics, metal work, electricity, electronics, telecommunications, energy and chemical engineering, vehicle maintenance, surveying.

#### 5.4. Manufacturing and processing

Food and drink processing, textiles, clothes, footwear, leather, materials (wood, paper, plastic, glass, etc.), mining and extraction.

#### 5.8. Architecture and building

Architecture and town planning: structural architecture, landscape architecture, community planning, cartography; Building, construction; Civil engineering.

Figure 2: In ISCED 1997 and ISCED 2011, classification of “Manufacturing and processing” field under “Engineering, manufacturing and construction” board group<sup>[2,3]</sup>

Broad Field	Narrow Field	Detailed Field
02 Arts and humanities	021 Arts	0211 Audio-visual techniques and media production 0212 Fashion, interior and industrial design 0213 Fine arts 0214 Handicrafts 0215 Music and performing arts
	022 Humanities (except languages)	0221 Religion and theology 0222 History and archaeology 0223 Philosophy and ethics
	023 Languages	0231 Language acquisition 0232 Literature and linguistics

Figure 3: In ISCED 2013, classification of “Arts and humanities”<sup>[4]</sup>

- Printing as a production: Printing a flexible packaging by a gravure-printing machine is a very different concept from performing a gravure art. The gravure cylinder is engraved by a very high technology engraving machine which is computer controlled. An operator who operates this engraving machine is not an artist. After the cylinders were prepared, they are mounted to the gravure-printing machine. This printing machine is different from the gravure artists printing machine. The industrial gravure-printing machine is designed for production. It can print up to 400 meters per hour and it costs billion Euros.

#### My Conclusion:

Finally, I believe that there should be a "Printing" or "Print Production" field in ISCED 2013. Because of the reasons mentioned above, the best place for the classification of "Printing" or "Print Production" field is under the Narrow Field of "Manufacturing and processing" (Figure 4).

Broad Field	Narrow Field	Detailed Field
07 Engineering, manufacturing and construction	071 Engineering and engineering trades	0711 Chemical engineering and processes 0712 Environmental protection technology 0713 Electricity and energy 0714 Electronics and automation 0715 Mechanics and metal trades 0716 Motor vehicles, ships and aircraft
	072 Manufacturing and processing	0721 Food processing 0722 Materials (glass, paper, plastic and wood) 0723 Textiles (clothes, footwear and leather) 0724 Mining and extraction
	073 Architecture and construction	0731 Architecture and town planning 0732 Building and civil engineering

Figure 4: Classification of "Manufacturing and processing" in ISCED 2013 <sup>[4]</sup>

#### References:

- [1] [www.uis.unesco.org/isced](http://www.uis.unesco.org/isced)
- [2] ISCED 1997, ISBN 92-9189-035-9, 2006
- [3] ISCED 2011, ISBN 978-92-9189-123-8, 2012
- [4] ISCED 2013, Final draft, June 2013 (accessible under [www.uis.unesco.org/isced](http://www.uis.unesco.org/isced))

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