

**Sexual Transmitted Diseases and control of reproduction in biology textbooks.  
A comparative analysis in 15 countries**

---

BERNARD Sandie, CLEMENT Pierre (LIRDHIST, University of Lyon 1, France),  
CARVALHO Graça, ALVES Gilda (LIBEC/CIFPEC, IEC, University of Minho, Portugal)  
THIAW Mame Seyni (ENS, UCAD, Dakar, Senegal)  
SELMAOUI Sabah, KHZAMI Salaheddine (ENS Marrakech, Morocco)  
SKUJIENE Grita (University of Vilnius, Lithuania)  
BERGER Dominique (IUFM Lyon, France)

**Abstract**

We present a comparative analysis in textbooks of different 15 countries on the topic “Human Reproduction and Sex Education” by using a specific grid of analysis. The focus is on two sub-topics associated to pupils’ development of responsible behaviour: the control of reproduction (e.g. choice of contraception) and the Sexually Transmitted Diseases (STDs). AIDS is presented in all textbooks analysed. Some countries, but not all, give also information about other STDs. We analysed condom images and how textbooks refer to the way of using it. Results show differences not only between countries but also between publishers of the same country.

**Acknowledgements**

This work has been done with the help of an European research project (‘Biology, Health and Environmental Education for better Citizenship’: "Biohead-Citizen" CIT2-CT2004-506015), STREP of the priority 7 of FP6. Thanks for the collective work done inside this project. The authors particularly thank the other participants who gathered data or coordinated this process concerning the topic "Health Education" in the textbooks of their respective countries: Franz Bogner, Christina Geier & Britta Oerke (Germany), Daniel Favre & Valérie de la Forest (France), Adriana Valente, Daniela Luzi & Silvia Caravita (Italy), Nicos Valanides, Olympia Nisiforou & Petroulla Tzortzi (Cyprus), Tago Sarapuu & Kersti Kaplinski (Estonia), Iman Khalil & Jaber Yolla (Lebanon), Sami Abdelli & Mondher Abrougui (Tunisia), Attila Varga & Dániel Horváth (Hungary), Jurga Turcinaviciene & Grita Skujiene (Lithuania), Desiree Scicluna Bugeja & Paul Pace (Malta), Adrienne Kozan (Romania), Farida Khammar (Algeria), Taoufic Abboudi & Boujemaa Agorram (Morocco), Valdiodio Ndiaye (Senegal), Anna-Liisa Rauma & Salla Mielonen (Finland).

Special thanks to Franz Bogner for English.

## Introduction

In the scope of the European project Biohead-Citizen “Biology, Health and Environmental Education for better Citizenship” (FP6), coordinated by Carvalho G., Clément P. & Bogner F. (2004-2007) we are working on a comparative analysis of textbooks contents from 19 countries. A specific goal of this project was to clarify and to improve understanding of how different aspects of citizenship, including emotional and social dimensions, are promoted or could be promoted through Biology, Health and Environmental Education (Carvalho & al., 2005). One of the six topics of this project is dealing with “Human Reproduction and Sex Education” (HRSE). This topic concerns the daily life particularly of young people. Its biological aspects overlap with emotional and moral issues, which interact with the specific pattern of values and social practices of the involved countries.

Are Biology textbooks contributing to pupils’ responsibility as regards of sexuality? Do they help children or young people to gradually appropriate the means to operate choices, to adopt responsible behaviour for themselves as well as for the respect of others?

Textbooks, as well as syllabuses, represent a precise level within the didactic transposition model. It is the result of several strategies: (a) strategies leading to the drafting of official syllabuses and programmes involving influences of different actors: the Ministry of Education, the main educational system policy makers, families, associations, unions or political groups, as well as the personal views of each syllabus committee member; (b) textbooks publishers strategies (marketing); (c) authors’ strategies for textbooks (supposed to represent teachers’ and students’ needs); (d) as well as strategies of images diffusers (images data bases), etc.

In the present work we analysed current school textbooks of 15 countries with regard to interactions between contents and some contrasted socio-cultural contexts. This work focused on two important sub-topics that are associated to pupils’ development of responsible behaviour: the control of reproduction (e.g. choice of contraception) and the Sexually Transmitted Diseases (STDs).

## Methodology

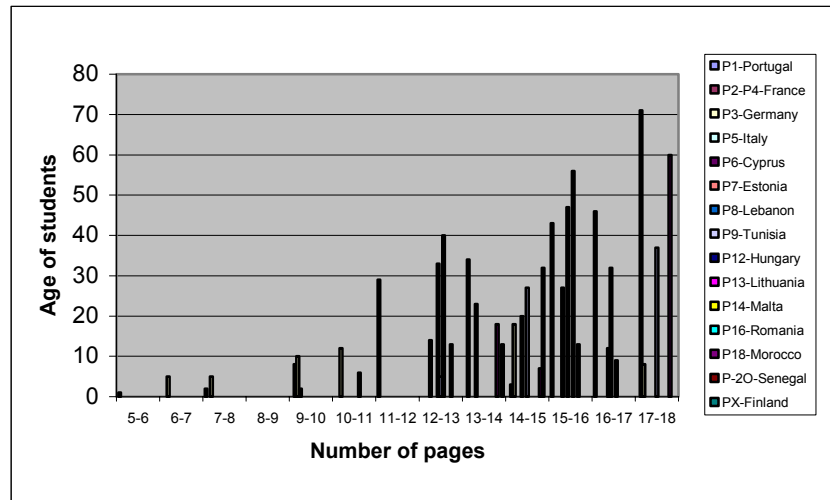
An essential point of our methodology was to construct a grid to analyse these precise contents in all the concerned countries. This grid has been developed within the Biohead-Citizen project during the year 2004-2005 and then tested preliminarily in few textbooks of most countries. The grid was then improved and the final grid was applied in all countries participating in the project: for each textbook an entire grid was filled in. For the present work we used only some parts of the grid, where the control of reproduction and the STDs (Figure 1) were assumed as the most relevant issues.

CONCEPTIONS	INDICATORS	IMAGES N°occurrences	TEXT Yes / No	ANNEX
14. SEXUALLY TRANSMITTED DISEASES (STDs)	Sexually Transmitted Diseases (STDs)	.....	.....	.....
	Sexually Transmitted Infections (STIs)	.....	.....	.....
	- AIDS	.....	.....	.....
	- HIV	.....	.....	.....
	Other STDs:	.....	.....	.....
	- Chlamydia			
	- Genital Herpes (HSV)			
	- Genital Warts (HPV)			
	- Syphilis			
	- Gonorrhoea			
	- Chancroid			
	- Viral Hepatitis			
	- Vaginitis			
- Others (specify which STD in annex)				
Risk	.....	.....	.....	
Risk behaviours	.....	.....	.....	
Sexual behaviours	.....	.....	.....	
Sexual attitudes	.....	.....	.....	
Prevention of STDs	.....	.....	.....	
Others (specify in annex)	.....	.....	.....	
Total Occurrences	.....	.....	.....	

**Figure 1** - Grid for the identification of the STDs and their occurrences in the chapters related to HRSE.

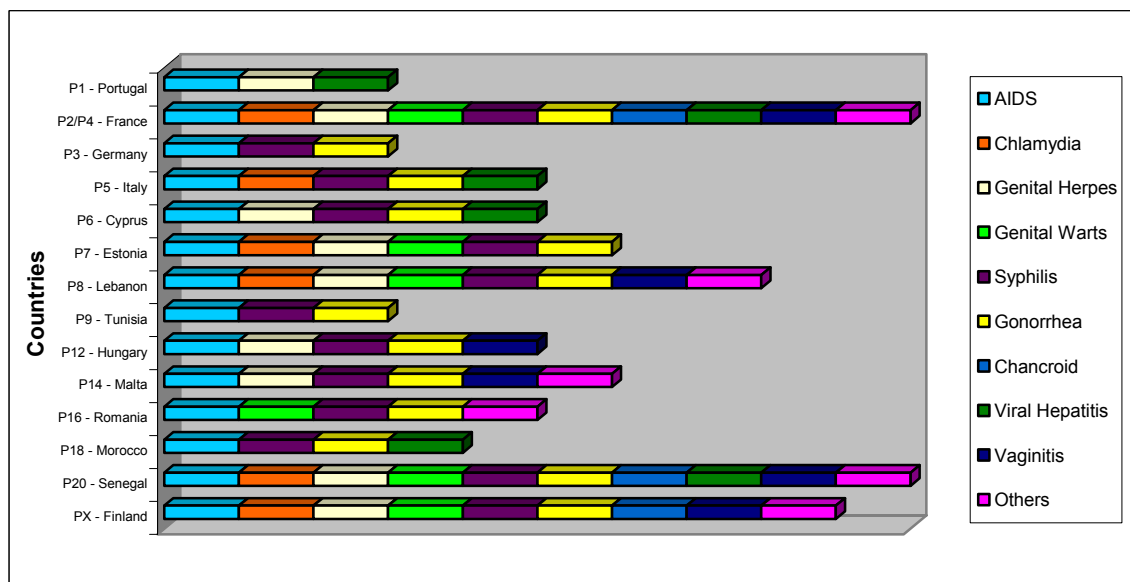
## Results and Discussion

For the present work, 32 textbooks of 15 different countries (listed in Figure 2) were analysed. At first, the number of pages concerning HRSE in each analysed book were counted. In general HRSE was present preferentially in textbooks for the 12/13 to 17/18 years old students rather than in textbooks for the younger ones (Figure 2). In consequence, we have limited the present study to the former textbooks.



**Figure 2** - Number of pages devoted to chapters concerning HRSE by textbook.

We analysed both sub-topics – the control of reproduction and the STDs – that we selected for their relevance in the development of pupils' responsible behaviour. It has been assumed that injunctive discourse with moralizing content tends to block children in the inhibition and/or the rejection of messages (Picod & Guigné, 2005). This is why we wanted to know how authors of textbooks present these two sub-topics: What are the STDs presented in textbooks? Can we find injunctive talks concerning prevention of STDs? What types of contraception methods are presented? Are they presented with their advantages as well as with their disadvantages (in term of safety)?

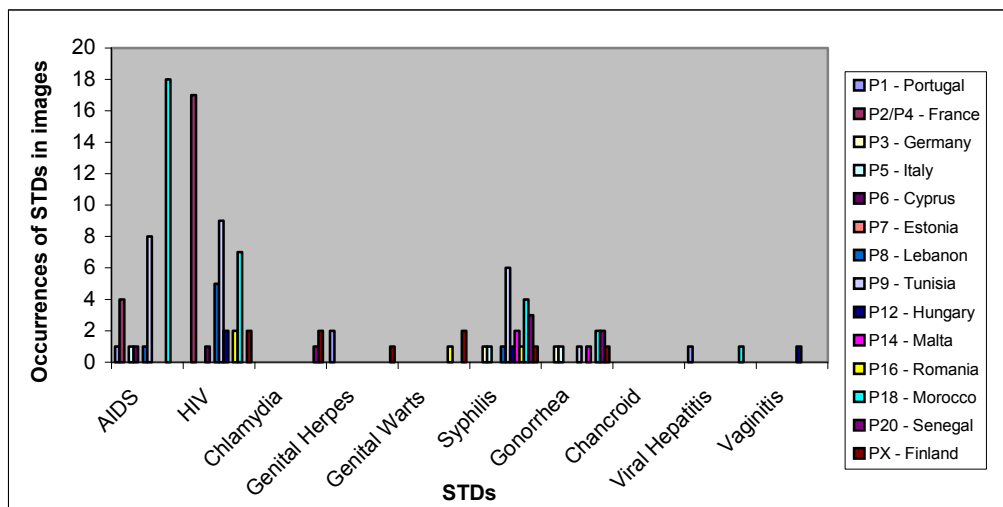


**Figure 3** - Different STDs found in the 32 analysed textbooks.

AIDS (Figure 3) is presented in each textbook analysed. Some countries gave more information concerning the different kind of STDs (France, Senegal, Finland) than others (Portugal, Germany, Tunisia). Nevertheless the number of images of STDs in textbooks (Figure 4) is focused in majority on AIDS (with a lot of images presenting HIV) and on Syphilis and Gonorrhoea.

Depending of countries, STDs are treated in the part of textbook devoted to Human Procreation (in the chapters about the control of the reproduction, the hygiene of reproduction) or directly in chapters devoted to

STDs and AIDS. Sometimes STDs are included in chapters devoted to Immunology (with AIDS in particular) or Protection of the Body. In this case textbooks often give scientific knowledge anchored in a biomedical model with no or little connection with prevention of diseases.



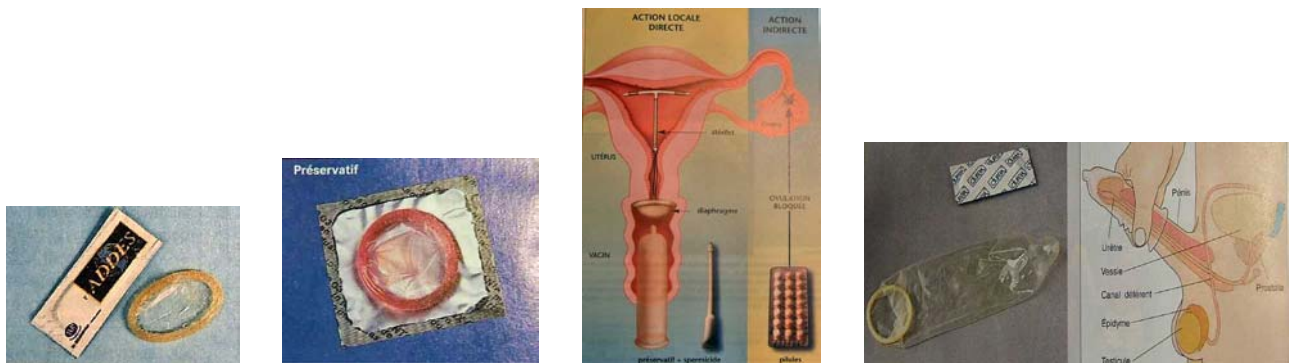
**Figure 4** - Number of occurrences of images devoted to STDs in the 32 analysed textbooks.

Concerning the control of the reproduction (choice of contraception) some textbooks (e.g. in Senegal and Morocco) are using injunctive or persuasive educational style: for instance in a Senegal textbook:

*“The female condom or diaphragm... must be put several hours before the sexual intercourse.”* (p 168).  
*“The female condom or diaphragm...is a good contraceptive method.”* (p 169).

The participative educational style is absent whereas it would be more relevant to emphasize on the actions or behaviour of students.

When condoms are mentioned in textbooks as means of contraception, we analysed both their images and how textbooks refer to the way of using them: rolled or unrolled condoms? Man’s condom unrolled in erected penis? Woman’s condom inside the vagina? (Figure 5)



**Figure 5** – Man’s condom in 4 French textbooks (Bordas, Nathan, Magnard, Belin), (14-15 years old).

Results show great differences not only between countries but also between publishers of the same country. We will present and discuss these results with more details in the communication.

## References

- Bernard, S & Clément, P. (2005). L’enseignement de la reproduction humaine et de la sexualité humaine dans les programmes du secondaire, en France, de 1950 à nos jours. In *Actes des 4èmes rencontres de l’Association pour la Recherche en Didactique des Sciences et des Techniques*. Lyon : INRP, pp.419-420.
- Carvalho, G. & Clément, P. & Bogner, F. (2004). *First year report of "Biology, Health and Environmental Education for better Citizenship (Biohead-Citizen)"*. Bruxelles FP6, Priority 7.
- Clément, P. (2006). Didactic transposition and the KVP model: conceptions as interactions between scientific knowledge, values and social practices. *Actes de la Summer School d’ESERA*, IEC, Braga Univ do Minho (Portugal), pp. 9-18.
- Jacobi, D. (1987). *Textes et images de la vulgarisation scientifique*. Berne : Peter Lang.
- Picod, C. & Guigné, C. (2005). *Education à la sexualité au collège*. Grenoble : CRDP.