HBSC recorded lesson: Teacher notes

Background

The Health Behaviour in School-aged Children (HBSC) study is a unique cross-national research study into the health and well-being of adolescents across Europe and North America, conducted in collaboration with the World Health Organisation (WHO) Regional Office for Europe.

HBSC has been conducting surveys of young people every four years since 1983/84, with an increasing number of countries participating in each survey cycle. It provides a vital resource to compare the health and well-being of adolescents between countries and over time.

HBSC data are used at national/regional and international levels to gain new insights into adolescent health and well-being, understand the social determinants of health and inform policy and practice to improve young people's lives.

In England, it is carried out by the Centre for Health Services Studies at the University of Kent and is funded by the Department of Health and Social Care and the Department for Education. For more information about our work, please see https://hbscengland.org/ and our parent website https://hbsc.org/ – or contact us via hbsc@kent.ac.uk

The recorded lesson

You are welcome to use this resource whether your school has been involved in the study or not.

The lesson draws on the cross-national findings from our last completed HBSC survey round (2017-2018) as well as exploring HBSC's survey rationale, methods, analysis and what we do with our findings. We aim to show how live research into young people's lives works in practice, as well as how it connects to their learning. The lesson covers the following:

An introduction to the HBSC cross-national study

- ❑ Why and where we collect this data
- ❑ Examples of findings from 2017-2018 for discussion

The thinking and planning that goes into delivering the study

- ❑ How we make the study as relevant and accurate as possible
- ❑ How we collect, analyse and present the data

HBSC has application in the teaching of Relationships Education, Relationships and Sex Education (RSE) and Health Education and we provide links to survey data on these topics for discussion, such as peer support, oral hygiene and social media use. The lesson has been planned with national curriculum in mind, in particular Science (Working scientifically)[1,2] and Maths (Working Mathematically; Statistics)[3,4] at Key Stage 3 and Key Stage 4 (GCSE). Pages 4-5 in this document detail the lesson objectives and their curriculum links.

There are opportunities to stop the recording for discussion of the questions raised on the slides/audio, or access interactive links which present findings on an array of topics which can be explored and compared by gender, age or country. The table on the following page provides a breakdown of the slide contents, time stamps and Q&A/discussion content.

Please do feel free to use the resource as works best for your class. We would very much appreciate it if you could provide us with your feedback through our short online survey – this will help us to improve our resources.

HBSC recorded lesson: Teacher notes

Slide	Focus	Timestamp	Comment
1	Cover slide	00.00	
2	Contents of the lesson and its objectives	00.11	
3	Introduction to HBSC	00.57	
4	When we deliver HBSC surveys	01.26	
5	Why we run HBSC - our objectives	01.45	
6	HBSC membership	02.21	
7	Introducing HBSC 2017-2018 findings	03.19	This set of slides have questions posed to the class, so teachers may wish to pause the video for class/group discussion
8	Findings on online communication among adolescents	03.48	
9	Findings on cyber-bullying	04.48	
10	Findings on teeth-brushing	05.55	These slides discuss differences in teeth brushing and other eating and oral hygiene behaviours by gender and family affluence. You may choose to include or skip these slides.
11	Eating behaviours and oral health: differences by gender and family affluence	06.48	
12	Eating behaviours and oral health	07.42	
13	Behind the findings: design and data collection	08.06	
14	Designing the study	08.40	
15	Deciding what to ask	09.31	
16	Ethics	11.09	
17	Data collection: who completes the survey	12.49	
18	Getting a good sample	13.14	This set of slides have questions posed to the class, so teachers may wish to pause the video for class/group discussion
19	Stratified sampling	14.42	
20	Analysis and reporting	15.56	
21	Survey analyses	16.36	
22	Producing user friendly resources	18.37	
23	Explainer for following slide on health complaint data presentation	19.00	This set of slides have questions posed to the class, so teachers may wish to pause the video for class/group discussion
24	Prevalence of 8 individual health complaints among girls and boys	20.11	
25	Proportion of YP who find their classmates kind and helpful: cross-national findings	21.10	
26	Example page: interactive data visualisations	22.43	
27	Health promoting schools	22.58	This set of slides have questions posed to the class, so teachers may wish to pause the video for class/group discussion
28	Example recommendations	24.30	
29	Whole system recommendations	24.57	
30	Summary	26.14	

31	Quick quiz	27.39	This slide has questions posed to the class, so teachers may wish to pause the video for class/group discussion
32	Thanks	29.53 – 30.18	

Acknowledgements

Our thanks to the SPT Youth PPI Café members for their feedback and to Isabella Wilson, Joshua Pipe, Eva Fitzsimons and Magnus Irwin for voiceover support.

Reports and more information:

- England HBSC website: https://hbscengland.org
- International HBSC website: http://www.hbsc.org
- Interactive: http://www.hbsc.org/publications/datavisualisations/
- Factsheets: http://www.hbsc.org/publications/factsheets/

To access the data: https://www.uib.no/en/hbscdata

HBSC England Team: Prof. Fiona Brooks, Prof. Sally Kendall, Dr Sabina Hulbert, Tamsyn Eida, Erica Ferris.
To contact us: hbsc@kent.ac.uk

[1] Department for Education (2013 [updated 2015]). Science programmes of study: key stage 3 National curriculum in England. Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/335174/SECONDARY_national_curriculum_-_Science_220714.pdf

[2] Department for Education (2014 [updated 2015]). Science programmes of study: key stage 4 National curriculum in England https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/381380/Science_KS4_PoS_7_November_2014.pdf

[3] Department for Education (2013 [updated 2021]). Mathematics programmes of study: key stage 3 National curriculum in England. Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/239058/SECONDARY_national_curriculum_-_Mathematics.pdf

[4] Department for Education (2014 [updated 2021]). Mathematics programmes of study: key stage 4 National curriculum in England https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/331882/KS4_maths_PoS_FINAL_170714.pdf

Objectives

This lesson uses HBSC to connect the curriculum to live research. It sets out to:

- Present the rationale and design of the HBSC study
- Detail how schools in England are sampled for the study
- Explain the challenges and ethical issues of delivering an international study with young people
- Explain the analyses used to examine the data and ways of presenting the findings

The table below provides an overview of links to the Maths and Science curriculum.

The discussion topics in response to HBSC findings also align with the RSE and Health Education curriculum, for example: peer support, bullying and cyberbullying; online risks and opportunities; healthy eating and physical health and fitness. We provide resource links for discussion of further relevant HBSC topics.

Lesson objective	Examples of National curriculum links
Present the rationale and design of the HBSC study	**Science (KS3) Experimental skills and investigations** • ask questions and develop a line of enquiry based on observations of the real world, alongside prior knowledge and experience • select, plan and carry out the most appropriate types of scientific enquiries to test predictions, including identifying independent, dependent and control variables, where appropriate **Science (KS4) Experimental skills and strategies** • planning experiments to make observations, test hypotheses or explore phenomena • applying a knowledge of a range of techniques, apparatus, and materials to select those appropriate both for fieldwork and for experiments • using scientific theories and explanations to develop hypotheses • planning experiments to make observations, test hypotheses or explore phenomena • making and recording observations and measurements using a range of apparatus and methods • evaluating methods and suggesting possible improvements and further investigations.
Detail how schools in England are sampled for the study	**Science (KS3) Experimental skills and investigations** • apply sampling techniques. **Science (KS4) Experimental skills and strategies** • recognising when to apply a knowledge of sampling techniques to ensure any samples collected are representative **Maths (KS4) Statistics** • infer properties of populations or distributions from a sample, whilst knowing the limitations of sampling
Explain the challenges and ethical issues of delivering an	**Science (KS3) Scientific attitudes** • pay attention to objectivity and concern for accuracy, precision, repeatability and reproducibility **Science (KS4) The development of scientific thinking**

international study with young people	• appreciating the power and limitations of science and considering ethical issues which may arise • evaluating risks both in practical science and the wider societal context, including perception of risk
Explain the analyses used to examine the data and ways of presenting findings	**Science (KS3) Analysis and evaluation** • apply mathematical concepts and calculate results • present observations and data using appropriate methods, including tables and graphs • present reasoned explanations, including explaining data in relation to predictions and hypotheses • evaluate data, showing awareness of potential sources of random and systematic error • identify further questions arising from their results **Science (KS4) Analysis and evaluation** • applying the cycle of collecting, presenting and analysing data **Maths (KS3) Working Mathematically** • Reason mathematically **Maths (KS4) Working Mathematically** • Reason mathematically **Maths (KS3) Statistics** • construct and interpret appropriate tables, charts, and diagrams • describe simple mathematical relationships between two variables **Maths (KS4) Statistics** • interpret and construct tables and line graphs for time series data • Interpret, analyse and compare the distributions of data sets from univariate empirical distributions • apply statistics to describe a population • recognise correlation and know that it does not indicate causation; draw estimated lines of best fit; make predictions; interpolate and extrapolate apparent trends whilst knowing the dangers of so doing. **Science (KS3 & KS4) Analysis and evaluation** • communicating the scientific rationale for investigations, including the methods used, the findings and reasoned conclusions, using paper-based and electronic reports and presentations. **Science (KS4) The development of scientific thinking** • recognising the importance of peer review of results and of communication of results to a range of audiences.