

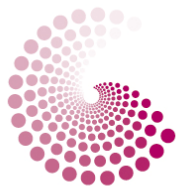


BRITISH SIGN LANGUAGE GLOSSARY FOR MATHEMATICS AND STATISTICS

IMA Conference Glasgow

10th June 2015

With thanks to...



Institute of
mathematics
& its applications



LONDON
MATHEMATICAL
SOCIETY
150 YEARS

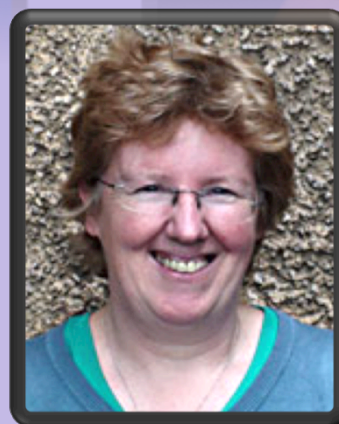
EDINBURGH
MATHEMATICAL
SOCIETY

Wider project

- **Mathematics**
- **Physics**
- **Chemistry**
- **Biology**
- **Astronomy**
- **Geography**
- **History**

- **Linked to national curriculum**

Team



BSL and English are different languages

- BSL is not English on the hands (SEE/ SSE)
- Naturally developing language with own historical ideosyncrasies
- BSL has its own grammar, morphology, phonology – not word for sign – e.g. HAVE NOT SEEN YOU FOR A LONG TIME
- BSL has metaphor, poetry, regional variation (schoolisation)

Historical background to Deaf education

- Milan 1880
- BSL recognition 2003
- BSL Bill Scotland

- 4-15% deaf children use BSL
- Only 9% of ToD have BSL qualifications above Level 2
- Young deaf learners same as young hearing learners in number representation and comparison
- Gap widens as children progress and Maths concepts become more complex, requiring language (Gottardis et al 2011)

Principles

- **Deaf leadership: expertise + fluency in BSL**
- **Broad knowledge in team: mathematics, sign linguistics & teaching**
- **No initialised signs**
- **Real life examples of signs in use**
- **Work from BSL to English not English to BSL**

Methodology

- Review any existing signs
- Collect specialist terms
- Create and develop new signs
- Evaluate the new signs with community focus groups
- Film signs, definitions and examples
- Upload clips to SSC website
- Translate all BSL clips into written English
- Collate feedback

Other considerations

- **Borrowing (capitalisation, other sign languages)**
- **Compounding (mean)**
- **Simultaneity (prime number)**
- **Simplification (quadratic equation)**
- **Iconicity (fraction, denominator, nominator)**
- **Morphological families (mean, mode, median)**

▶ [Home](#) ...

▶ [About the SSC](#)

A-Z Index

| | | |
|-------------------|-------------------|---------------------|
| A | B | C |
| D | E | F |
| G | H | I |
| J | K | L |
| M | N | O |
| P | Q | R |
| S | T | U |
| V | W | XYZ |

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▶ [Introduction](#)

▶ [Maths Glossary](#)

▶ [Physics Glossary](#)

▶ [Chemistry Glossary](#)

▶ [Biology Glossary](#)

▶ [A Biotechnology glossary developed by University of Edinburgh](#) (external link)

▶ [Art glossary by the Tate Galleries](#) (external link)

And for a bit of fun...



SSC Scottish Sensory Centre

Search SSC Website

- News
- Library
- BSL Glossary
- Learning
- Research
- Contact

BSL Maths Glossary - average

Subject level: Foundation

- ▶ Definition
- ▶ Example
- ▶ Fingerspell
- ▶ View this clip in Quicktime

- ▶ Return to Mathematics Home



Future Plans

- Continue to develop signs for key terminology and definitions for full range of national qualifications, including Advanced Higher
- Develop signs for other mathematical areas, such as calculus and analysis
- Track number of Deaf students applying for maths related degree courses
- Collaboration with SQA for centralised exam papers in BSL
- Explore the benefits for hearing learners

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