

DCAL



ESRC DEAFNESS COGNITION AND LANGUAGE RESEARCH CENTRE

Issue 12 | May 2013

Welcome to DCAL's eNewsletter

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MSc in Language Sciences (with
specialisation in Sign Language Studies)



Deafness and long term conditions

DCAL together with Action on Hearing loss have urged NHS England to substantially improve the quality of life experienced by people with dementia and hearing loss – and save taxpayers £28 million each year – by introducing a joined-up approach to the assessment, diagnosis and management of both conditions.

In a new report entitled ‘Joining Up’, both organisations are calling for the National Dementia Strategy for England to be reviewed to ensure that funding is provided to meet the needs of people who are deaf or have hearing loss and also have dementia. This would ensure that there was appropriate assessment and timely diagnosis which would reduce the risk of exacerbating dementia symptoms and the need for expensive residential care.

The report identified that the taxpayer could save millions by making services responsive to the needs Deaf people as well as improving the lives of patients and their families



JOINING UP

Why people with hearing loss or deafness would benefit from an integrated response to long-term conditions

“This report demonstrates why ensuring that Deaf people who have long term conditions have access to services that are designed appropriately to meet their needs makes clear financial sense. Relatively small investment in services, such as using appropriate assessments delivered in sign language can prevent significant costs that occur as a result of late diagnosis, misdiagnosis or ineffective treatment plans.”

Professor Bencie Woll

Case study

John T currently lives in his own home. He moved there following the death of his wife, to be closer to his granddaughter. He has recently been diagnosed with Korsakoff’s syndrome, a form of dementia; this makes him difficult to deal with and forgetful. His preferred language is British Sign Language and, therefore, he needs the right communication support. Ideally, he would be supported by qualified interpreters, receive language and culture-appropriate assessments, be helped by a care assistant with appropriate communication skills, and access to a care setting providing communication and the opportunity to interact with others.

With this support John’s needs would be assessed accurately – and he’d receive the services to meet them. In turn, his needs would be less likely to escalate, delaying the time when he needs more acute services, such as elderly mental illness care. In practice this would mean that he would live at home for longer.

If good language support were provided, John’s care would cost £122,500 over five years. In contrast, if he receives poor language support, John’s care would cost £268,200 over five years. This means that savings of around £145,700 could accrue over a five year period. While the communication support has a cost, this will be much lower than the potential savings.

Recommendations from the Joined Up report

We call on health departments, commissioners and providers of health services throughout the UK to recognise hearing loss and deafness in assessing, diagnosing and managing people with other long-term conditions.

Earlier intervention and prevention

Introduce an adult hearing screening programme for 65 year olds and integrate opportunistic and targeted hearing checks into other services and settings, such as in pharmacies, care homes, during consultations for other conditions, and alongside other health checks at GPs.

Ensure that information and health promotion campaigns are accessible to people with hearing loss and deaf people who sign.



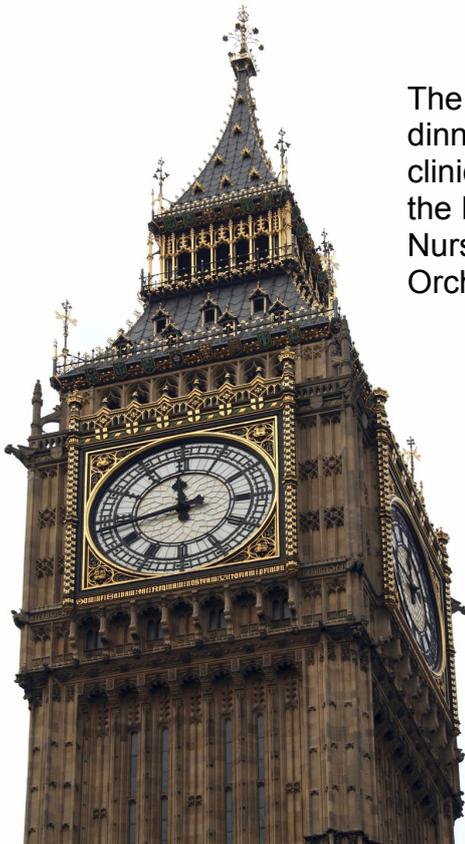
Managing other long-term conditions in people with hearing loss

Services for people with dementia, cardiovascular disease, diabetes and sight loss must take into account the needs of people with hearing loss and deaf people.

Fund research to develop better diagnostic tools, specialist services and guidance to support people with hearing loss and deaf people who also have other long-term conditions; and make sure these are used.

Making cost savings

Ensure that resources are allocated in a cost-effective way by properly managing hearing loss in people with other long-term conditions. For example, the lack of resource allocated to hearing loss within the National Dementia Strategy for England should be reviewed.



The **Joined Up** report was launched at the House of Commons at a dinner hosted by Stephen Lloyd MP. As well as parliamentarians and clinicians there were a number of organisations represented including the Royal College of Physicians, Sign Health, Royal College of Nursing, Care Quality Commission, The Nuffield Trust, Boots and Orchard Care.

Policy background

Health departments across England, Scotland, Wales and Northern Ireland have all introduced plans to improve the management of long term conditions (Department of Health, 2012, NHS outcomes; Department of Health, 2012, The mandate; NHS Scotland, 2009; DHSSPSNI, 2009; Welsh Assembly, 2007).

These plans tend to consider long-term conditions in isolation and do not adequately take account of issues relating to hearing loss and deafness.

Download a full copy of the report at www.ucl.ac.uk/dcal/dcal-news/joining-up

The need for a specialist national neurology service

What currently happens when deaf people acquire a neurological disability as a result of stroke, head injury, tumour or neurodegenerative diseases such as dementia or Parkinson's disease? Our research suggests that they are often subject to under-diagnosis, late diagnosis or misdiagnosis. The consequences of this can be distressing for patient and family and lead to poor health outcomes and inefficient use of valuable NHS resources.

Why is assessment and diagnosis so poor for deaf patients?

- Symptoms are often attributed to impoverished communication or missed by professionals without expertise in British Sign Language (BSL)
- Assessment and diagnosis cannot proceed because communication between healthcare professionals and deaf service-users is poor or absent
- There are few suitable clinical assessment tools or outcome measures that have been developed for use specifically with the deaf population
- There is no research-led system for assessment, intervention or evaluation of treatment outcome

Currently there is no permanent specialist provision. DCAL are however working with National Hospital for Neurology and Neurosurgery to pilot access for deaf patients to their diagnostic Cognitive Disorders Clinic. Newly developed cognition and memory tests for signers are used to support accurate diagnosis within the clinic. It is vital that this clinic is established on a permanent basis to ensure that deaf patients receive appropriate assessment and diagnosis.

“Intervention and community based provision is also desperately needed.”

Dr. Joanna Atkinson

What can be done to improve diagnosis and treatment for deaf patients?

- It is vitally important that a permanent national service for referral of Deaf people with suspected neurological and neuropsychiatric conditions is established. This should give deaf patients access to a specialised multidisciplinary team with expertise in neurology, neuropsychology, psychiatry, deafness and BSL
- Effective and reliable diagnostic, assessment, intervention and evaluation tools using BSL
- Use of technology to enable remote provision to distant and rural communities
- Involving and training professionals in the health service and sign language interpreters
- Developing an advisory service to facilitate the appropriate treatment and increased access to services of deaf patients, where treatment occurs within mainstream NHS services
- Monitoring of referral, assessment, intervention and outcome
- Making support services accessible to Deaf patients and carers

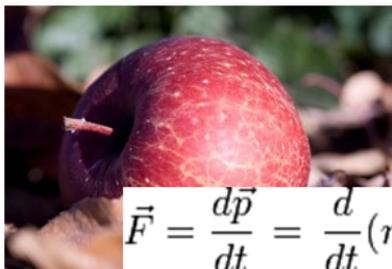


DCAL in Germany



Professor Bencie Woll and Dr Jo Atkinson-Hearn travelled to Germany to present DCAL Deafness with Dementia research findings to a conference organized by the University of Cologne which was funded by the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth.

Will new Signs improve Deaf children's understanding of physics



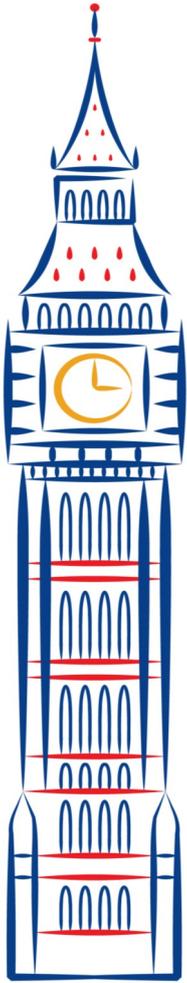
$$\vec{F} = \frac{d\vec{p}}{dt} = \frac{d}{dt}(m\vec{v}) = \vec{v} \frac{dm}{dt} + m \frac{d\vec{v}}{dt}.$$

116 new signs helping to communicate the topics of movement, the Universe, light and sight, and energy and radiation have been developed to give 11-16 year olds signers a better opportunity to engage with Physics and Engineering.

Phrases like light year and x-ray now have their own sign when previously finger-spelling and lip-reading were the most common methods for teachers and translators to communicate the meaning of their lessons.

But will they make a difference to the understanding of physics? Professor Gary Morgan is working with Institute of Physics to identify if they really will make a difference to educational outcomes .

LDN Calling TISLR

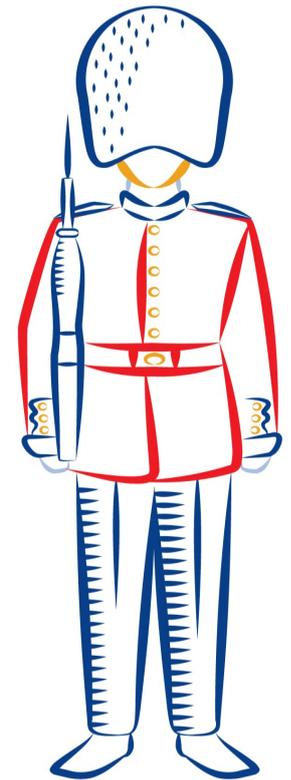


DCAL will this summer be hosting the world's most important international conference for sign language studies. The 'Theoretical Issues in Sign Language Research' conference (known as TISLR for short) is being held from 10th to 13th July. Academics from around the globe will be descending on London to present their latest thinking on a wide range of subjects within the field of sign language research.

TISLR is the research conference of the Sign Language Linguistics Society and is held at a different university every 3 years. Everyone at DCAL is excited about welcoming colleagues from a diverse range of academic institutions.

Peter Hauser from the Rochester Institute of Technology National Technical Institute for the Deaf (NTID) and Lars Wallin from the University of Stockholm are the conference keynote speakers.

The official languages of the conference are English (spoken and via speech-to-text reporting), British Sign Language (BSL) and American Sign Language (ASL) but TISLR is also a great showcase for the multitude of different sign languages that are used throughout the world.



Sign languages that feature at TISLR include

Polish Sign Language, American Sign Language, North Korean Sign language, Quebec Sign Language, Flemish Sign Language, Finnish Sign Language, Israeli Sign Language, German Sign language, Japanese Sign Language, Catalan Sign language, Nicaraguan Sign Language, Croatian Sign language, Hong Kong Sign language, Jakarta Sign Language, Catalan Sign Language, Chinese Sign language, Kenyan Sign Language, Taiwan Sign Language, French Sign Language, Portuguese Sign Language, Brazilian Sign Language, Australian Sign Language, Australian Irish Sign Language, Hungarian Sign Language Swedish Sign Language, Korean Sign Language, Austrian Sign Language, Langue des signes de la Cote d'Ivoire, Sign Language of the Netherlands...

... And of course British Sign Language

For more information on the TSLR conference visit the DCAL website
<http://www.ucl.ac.uk/dcal/TISLR>

BSL Recognition: The Way Ahead

To mark the tenth anniversary of the official recognition of British Sign Language as a UK minority language, the British Deaf Association (BDA) in conjunction with DCAL held a well attended evening seminar titled 'BSL Recognition: The Way Ahead. The seminar considered how recognition has really benefited Deaf people and what needs to happen next to ensure BSL is adequately recognised within political, legal and policy frameworks.

“Ten years after recognition, we need the government to re-engage with the many thousands of people who use British Sign Language, whether as their first language or alongside English. There are still too many barriers that prevent Deaf people from participating and contributing equally in society.”

David Buxton, Chief Executive BDA

Speakers included **Robert Adam**: a Deaf researcher from DCAL; **David Buxton**: Chief Executive of the British Deaf Association; **Dr Paddy Ladd**: Deaf researcher from the Centre for Deaf Studies, University of Bristol, who first proposed the Deafhood framework for analyzing Deaf culture; **Terry Riley**: Chair of the BDA, former editor of BBC “See Hear” and Board Member of the World Federation of the Deaf (WFD); and **Maartje de Meulder**: Deaf researcher from the Department of Languages, University of Jyväskylä, Finland, research sign language recognition legislation and also involved in the successful campaign for the recognition of Flemish Sign Language.

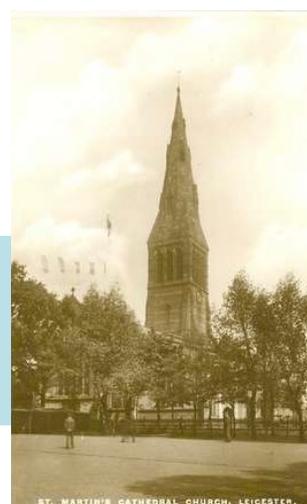
Did you know?

In 1648 John Bulwer publishes the first book on deaf education and language called *Philocophus*



Taking part in the seminar

99 people attended the seminar in person, but 1,333 logged in to watch it on-line



In 1575 Thomas Tillsye marries Ursula Russel at St Martin's in Leicester using signs to take his vows



In 1595 Richard Carew produces the *Survey of Cornwall* and describes how two deaf people communicated in sign language

The History of British Sign Language

DCAL, along with the British Deaf History society and UCL's Action on Hearing Loss Library, is hosting an new exhibition on the history of BSL.

The exhibition contains rare books, pamphlets and the early films that chronicle the origins and history of sign language in Britain. The displays have something to amaze anyone whatever their existing knowledge about sign language of Deaf culture. Open to everyone it will appeal to the expert and someone with a passing interest in history or language development.

Find out about

The earliest sources of British sign language

The history of finger spelling and the beginnings of deaf education

How BSL and Deaf culture changes and continues to change in the 21 century

Which sign languages are related to BSL

The influences of religion, education and royal patronage on BSL

The BDHS was established in 1993 to promote and advance the interest in the discovery, preservation and conservation of the histories of Deaf people, their communities, culture and language. Its activities include the publication of the Deaf History Journal.



An exhibition: The History of British Sign Language

2nd to 20 July
North Cloisters
University College London
Wilkins Building,
Gower Street
WC1E 6BT

Deafness and cognitive neuroscience

Understanding the difference between how the brains of Deaf people and hearing people work is helping researchers at DCAL piece together the building blocks of language. When a person communicates in sign language or a spoken language or when they read a written language specific parts of the brain are used.

This important research is not just of theoretical interest. It is helping DCAL develop new ways of working with deaf children and adults. For example, deaf children often have problems learning to read. By looking at the brain we can understand why and develop educational interventions that are more effective.

One way we can see differences between how the brains of deaf and hearing people work is by using functional Trans-Cranial Doppler (fTCD). This identifies blood flow velocity to the two sides of the brain, showing which parts are more active during certain tasks. DCAL is currently looking at blood flow velocity in hearing and Deaf adults using fTCD and will start studying children next year.'



DCAL researcher Eva Gutierrez Sigut wearing functional transcranial Doppler sonography headset

The plastic brain



The human brain is not, as we once thought, a static organ. It can and does change and adapt throughout life. DCAL research in this area was recently published in the influential on-line journal *Nature Communications*.

Velia Cardin and Bencie Woll, with colleagues from Linköping University and University of Manchester, used functional magnetic resonance imaging (fMRI) to distinguish between changes in the brain resulting from deafness and from sign language use.

The researchers showed that changes in one part of the brains of deaf people reflect the absence of hearing and that changes in another part reflect the learning of sign language. This was shown by identifying differences in the activity of the brain in the superior temporal cortices (STC). These are two areas of the brain that lie on either side of the head close to the ears.

For more information on DCAL research follow us on twitter @DCAL_London or visit the media section of our website

NOW RECRUITING FOR 2013/14

UCL Division of Psychology and Language Sciences

MSc in Language Sciences (with specialisation in Sign Language Studies)

The UCL Division of Psychology & Language Sciences at University College London is proud to announce the offering of a new strand within the MSc in Language Sciences, with a specialisation in Sign Language Studies.

The MSc in Language Sciences is an umbrella degree that provides students with an opportunity for in-depth study of one or more areas of the Language Sciences. Students take a set of mandatory modules and have the opportunity to specialise in one specific area of language sciences through the selection of core and optional modules, and a research project.

Core modules for the new Sign Language Studies specialisation include Linguistics of Sign Languages; Deafness, Cognition and Language; and (for students without signing experience) an introductory course in British Sign Language. Optional modules may include courses on linguistic theory and structure, language development, language disorders, and interpreting, among many others.

Modules will be taught by staff within the Division of Psychology and Language Sciences, including staff at the UCL Deafness Cognition and Language Research Centre (DCAL), a world-renowned centre of excellence for research on language, communication and cognition in deaf adults and children.

This programme is designed for students who want to deepen their knowledge of language sciences prior to registering for a research degree.

The programme also provides a basis for the application of this knowledge in applied settings in a range of areas including teaching, technology, marketing, and consultancy. It is also appropriate for individuals currently working in education, speech and language therapy, sign language teaching, and sign language interpreting/translation who wish to extend their knowledge of this field.

For queries, contact Dr. Kearsy Cormier (k.cormier@ucl.ac.uk).
Further information http://www.ucl.ac.uk/dcal/msc_sign_lg_studies

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Follow DCAL on Twitter
for all the latest information on our research events and activities

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