

Impact case study (REF3)

Institution: Newcastle University		
Unit of Assessment: 26 Modern Languages and Linguistics		
Title of case study: Transforming Children's Services to Promote Robust Language Development in Young Children		
Period when the underpinning research was undertaken: 2009–2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Cristina McKean	Prof. Child Language Development & Disorders	2009 to date
James Law	Prof. of Speech & Language Sciences	2010 to date
Helen Stringer	Head of Speech & Language Sciences	2009 to date
Period when the claimed impact occurred: August 2013 – December 2020		
Is this case study continued from a case study submitted in 2014? N		
<p>1. Summary of the impact International estimates suggest 8% of children experience language difficulties that affect their wellbeing, educational and social functioning, and social and economic life-chances with rates increasing to 40% in the most socially disadvantaged groups. Whilst some children will receive a diagnosis of Developmental Language Disorder many children's difficulties go unrecognised. Our research has led to changes in children's services that affect the life chances of children at risk of poor language development in the UK, Ireland, Australia, and Europe. This has been achieved through changes in policy, professional practice, and service delivery, which have introduced a public health approach to child language disorders. This change replaces traditional medical models, placing greater emphasis on early identification and prevention, on the social determinants of child language and the provision of services that meet the needs of children across the social gradient.</p>		
<p>2. Underpinning research Law, McKean and Stringer have been instrumental in the development of a public health approach to address the needs of children with developmental language disorders. In 2013 Law and colleagues published the first and seminal paper advocating this approach (PUB1; 118 citations) and our extensive research programme has provided the necessary evidence for its implementation in practice and policy. This body of research includes longitudinal analysis of birth and specialist cohorts (e.g. Millennium cohort N=18,800; Early Language in Victoria N=1918), large Randomised Controlled Trials (e.g. Let's Learn Language N=200), systematic reviews and evidence syntheses, surveys of parents and practitioners, analysis of English National Pupil data (N=6,400,000) and development of an international collaborative network of 38 countries. The research findings speak to inequitable distribution of risks, identification and prevention, effective and equitable interventions and service delivery and the use of evidence to inform practice. Key projects have included:</p> <ul style="list-style-type: none"> • The <u>Better Communication Research Programme (BCRP)</u> (GBP1,500,000 Law et al.: GRANT1) – this 3-year research programme (2009–2012), part of the government's response to the Bercow Review of provision for children and young people with speech, language and communication needs (SLCN), was funded by the Department for Education (DfE). BCRP produced 19 reports, published by the Department for Children and Families in December 2012 (e.g. PUB2). <u>The systematic review which formed one component of the study was further funded by The Communication Trust (TCT)</u> (2012–2013, Law et al. GBP40,000; GRANT2) to develop a website which now serves as a one stop repository for evidence of interventions for children with developmental language disorders. • A major grant from the <u>Centre of Research Excellence in Child Language (CRE-CL)</u> (National Health and Medical Research Council (NHMRC), Australia 2012-2017 GBP1,400,000 GRANT3), included Law as Co-Investigator and McKean as Post-doctoral Fellow. Work included describing the nature of the social gradient in language difficulties in the UK, USA and Australia and the predictors of these differences, describing the wider impacts of language difficulties over development and the role of social inequalities. This work resulted in numerous publications by McKean and Law (e.g., PUB4, PUB5). 		

- A Horizon 2020 COST Action IS1406, Enhancing children's oral language skills across Europe and beyond (**Law, McKean** et al. 2015–2019 EUR500,000 GRANT4), supported the creation of a network of researchers across 38 countries in Europe and beyond with expertise in interventions for children with difficulties learning their first language. Work streams focussed on systematic reviews of current intervention evidence cross-cultural considerations for intervention and effective service delivery.
- In 2019 Public Health England and Department for Education funded the study Assessment Tool and Resources to Support Action by Health Visitors and Early Years Practitioners to Identify and Support Children with Early Speech, Language and Communication Needs. (**Law, McKean**, et al. GBP465,000 GRANT5).
- NHMRC funded Randomised Controlled Trial – 'Language for Learning' (2012–2015, GBP112,000) Improving outcomes of preschool language delay in the community (**Law** et al. GRANT6).
- Commissioned evidence syntheses from the Educational Endowment Fund, Public Health England (2017 GBP28,000 GRANT7) and the Early Intervention Foundation (2017 GBP9,900 GRANT8) regarding identification, prevention and interventions for children with poor language development and those living with social disadvantage (**PUB3, PUB6**).

3. References to the research

Several of our research outputs have been drawn upon in the reported impacts. Below we present only the most relevant publications. All appear in rigorously peer reviewed journals excepting PUB3 and PUB6. PUB3 employs systematic review methods, has 42 citations, and was funded following a peer reviewed tender. PUB6 is included as 'Trusted Evidence' on the National Institute for Health and Care Excellence (NICE) Evidence webpages.

- **PUB1.** Law, J., Reilly, S. & Snow, P. (2013) Child speech, language and communication need in the context of public health: A new direction for the speech and language therapy profession. *International Journal of Language and Communication Disorders*. 48(5):486-96 doi: 10.1111/1460-6984.12027
- **PUB2.** Dockrell, J., Lindsay G, Roulstone S, & Law J. (2014) Supporting children with speech language and communication needs: an overview of the results of the Better Communication Research Programme. *International Journal of Language and Communication Disorders*. 49(5), 543–557 doi: 10.1111/1460-6984.12089.
- **PUB3.** Law J., Charlton J., Dockrell J., Gascoigne M., McKean C. & Theakston A. (2017) *Early Language Development: Needs, provision, and intervention for pre-school children from socio-economically disadvantaged backgrounds*. Education Endowment Foundation & Public Health England. (available on request)
- **PUB4.** McKean, C., Mensah, F., Eadie, P., Bavin, E., & Reilly, S. (2015) Levers for language growth: characteristics and predictors of language trajectories between 4 and 7 years, *PLoS One*, 10(8), e0134251 doi: 10.1371/journal.pone.0134251.
- **PUB5.** McKean, C., Reilly, S., Bavin, E. I., Bretherton, L., Cini, E., Conway, L., Cook, F., Eadie, P., Prior, M., Wake, M., & Mensah, F., (2017) Language Outcomes at 7 Years: Early Predictors and Co-occurring Difficulties *Pediatrics*, 139(3), e20161684; doi: 10.1542/peds.2016-1684
- **PUB6.** Law, J., Charlton, J., & Asmussen, K. (2017). *Language as a child wellbeing indicator*. The Early Intervention Foundation. (available on request)
- **PUB7.** McKean, C., Law, J., Laing, K., Cockerill, M., Allon-Smith, J., McCartney, E. & Forbes, J. (2017), A qualitative case study in the social capital of co-professional collaborative co-practice for children with speech, language, and communication needs. *International Journal of Language & Communication Disorders*, 52: 514-527. doi:10.1111/1460-6984.12296

4. Details of the impact

Our research has brought about a sea-change in policy, service delivery, allocation of funding and professional practice across the UK and influenced international policy to promote the best outcomes for all children.

Impact on policy: Our work has ensured that child language development and its pivotal role in school readiness, long term wellbeing and tackling social inequalities is now recognised by key decision-making bodies in education, health and social care policy, and a public health

approach adopted as best practice in the UK, Ireland, and a number of European countries. In the UK, the 2019-2029 NHS Long Term Plan now highlights speech, language and communication services as a key evidence-based intervention with which to address and reduce health inequalities for children and young people (**IMP1a**). The plan draws directly on **PUB6** and on a report commissioned by the Royal College of Speech and Language Therapists (RCSLT) and The Communication Trust (TCT) 'Bercow: 10 years on', which cites **PUB6** and builds on the outputs of **GRANT1** (**IMP2a**).

In 2018 the Department for Education announced their commitment to “halve the number of children reaching reception year without the speech, language and communication skills they need to thrive by 2028” (**IMP3a**). This was backed by GBP18,000,000 of government funding to address children’s early communication development (**IMP4a**). The Deputy Head of Children, Young People & Families, Public Health England (CYPF-PHE) states in her testimonial that **PUB6** “*galvanise(d) support across government*” for this policy initiative (**IMP4a**). This government initiative involved multiple strands including a campaign to improve children’s home learning environment for which Law was an advisor and which also cites **PUB6** (Hungry Little Minds; Chat Play Read **IMP4c; 4d**) and a 10-year BBC education campaign for which McKean was an advisor (Tiny Happy People **IMP4e**). PHE were tasked to lead an important strand of this work and The Deputy Head CYPF-PHE identifies that **PUB3** was a key driver for this decision. She comments that it “*pulled everything together and from that work DfE funded us to develop a whole program of work around speech language and communication*”. This GBP1,800,000 PHE-led strand (2018–2020) included the development and delivery of training for all Health Visitors (HVs) across England in child language development and methods to support its optimal development (**IMP5a**). Between January and December 2019, 3,500 HVs received this training. Furthermore, the team’s research formed the ‘core evidence’ underpinning this training, with **PUB3, and PUB6** central to the design of the programme and with much of the team’s wider work cited in the training materials (**IMP5b**). This work was further developed in GRANT5 resulting in the publication of an Early Language Identification Measure and Intervention (ELIM-I) for children at risk of poor language development for use by HVs across England at children’s 2-2.5-year review (**IMP1c, IMP1d**). McKean and Law delivered training to lead HVs across England in a PHE led program to implement the ELIM-I nationally (**IMP1e**).

Major government initiatives are not achieved overnight but rather through sustained lobbying. The CEO of RCSLT emphasises the importance of our work for RCSLT’s government lobbying leading to this announcement – “*Our relationship and collaboration with Professor Law and colleagues continues to this day. It is the combination of their research, the evidence from practitioners and the work of RCSLT that provides us with the information that we need to influence government and other key decision-makers.*” (**IMP2a**).

Through the testimonials from Deputy Head CYPF-PHE and the CEO of RCSLT and relevant publications (**IMP2a; IMP1b**), it is possible to track the pathway of impact from our work to these vital DfE, PHE and NHS initiatives. The RCSLT lobbied the All-Party Parliamentary group (APPG) for Speech and Language Difficulties from 2013, building on findings from GRANT1 and PUB1 and with the close involvement of Prof. Law (**IMP1b; IMP3a**). These provided the impetus for the commissioning in 2017 of the “galvanising” reports PUB3 and PUB6 published by PHE and the Early Intervention Foundation, respectively (**IMP2a**) and which also cite **PUB4, 5 and 7**. In 2018 Law collaborated with the chair of the APPG to sponsor a Westminster debate – ‘Speech language and communication support for children’ (**IMP3b**). In 2018 RCSLT published and lobbied the government with the 'Bercow: 10 years on' report (**IMP2a**) and the government response identified key initiatives to tackle the issues raised (**IMP3a**). In 2018 the DfE announced their commitment to a focus on communication in the early years (**IMP2a**). In 2019 RCSLT lobbied the newly formed Oracy APPG (**IMP3c**) and the NHS long term plan highlighted speech, language and communication services as a key evidence-based intervention with which to address and reduce health inequalities for children and young people, citing our work (**IMP1a**).

The testimonial from the Head of RCSLT Scotland (**IMP2c**) outlines how **PUB1** and later publications have provided the evidence-base for sustained interactions between RCSLT Scotland and the Scottish Parliament, supporting lobbying and stimulating debate. This lobbying of MSPs raised their awareness of the link between speech, language and

communication disadvantage, outcomes in later life and the intergenerational cycle of disadvantage, leading to the commissioning of a Communication Summit attended by the Deputy First Minister of Scotland (2016). Law was invited to present at this (**IMP2c**). This, in turn, led to debates in the Scottish parliament (26 January 2016), and the contribution of the RCSLT to the development of the Children and Young People (Scotland) (IMP2d).

In Australia our work has also supported the lobbying of government with findings from GRANT3 (Centre of Research Excellence in Child Language) being submitted to a Parliament of Australia Senate Inquiry into the prevalence of speech, language and communication disorders and speech pathology services in Australia (**IMP6a, 6b**).

Our work has also been used to define best practice with respect to public health approaches to child language disorder in the UK in RCSLT guidance disseminated to members through web resources, policy briefing publications and the professional magazine (**IMP2e, 2f; 2g, 2h, PUB1**). Our work is also evident in the position statement in Ireland on Developmental Language Disorder (Irish Association of Speech and Language Therapy position paper **IMP7b**).

Impact on services: In 2018 a survey of UK Speech and Language Therapists (SLT) covering approximately 68% of local authority areas found that approximately 80% of respondents were applying a public health approach to child language (**IMP8a**). In 2019 we conducted interviews with lead SLTs for three services to understand whether and how such approaches were influenced by our research (**IMP8b**). The respondents from Nottingham, Stoke and Hackney report several direct applications of our work: 1) **PUB1** enabled them to create a culture and ethos of a focus on prevention and social inequalities within their services and to spread this ethos with other services and professional groups. 2) **PUB3** is widely used to underpin professional development of the wider children's workforce who work with SLTs to deliver preventative interventions. 3) the Communication Supporting Classroom Observation Tool (GRANT1) - has supported services to develop the quality of the language environments in early-years classrooms (**PUB2**). 4) **PUB7** has motivated and shaped initiatives in developing collaborative practices across schools and SLT services in Nottinghamshire (2017) and the North East of England (2017–2019) (**IMP8b, IMP8c**). 5) **PUB3** is used to inform discussions with commissioners, provide the evidence to back-up decision-making and to engage health promotion teams in NHS trusts to work in partnership. In this way, it is used to protect and develop service provision and workforce deployment. Indeed, the CEO of RCSLT reinforces the importance of our work in protecting services and directing the allocation of funding, stating *"This has the potential to shape the commissioning (and therefore budgets) of speech and language services in Local Authorities over the coming years. This in turn will impact on the ability of Speech and Language Therapists to do the work that they would like and need to do."* (**IMP2b**).

In Ireland, several notable child language public health initiatives which coach families alongside school and other staff in strategies to promote robust oral language and promote effective multi-agency working have been developed. A review of these programmes across Ireland (2013 –2017) and a subsequent evaluation were completed by the Centre for Effectiveness Studies, Dublin (**IMP7a**). They identify 23 such programmes with national coverage and describe the influence of **PUB1, 2 and 3**, GRANT1 and 2 on these programmes and their recommendations for their future development (**IMP7a**). In Europe and further afield, awareness and adoption of public health approaches to child language are less well accepted. However, a survey of members of our COST Action network (GRANT4) (**IMP 9**) found that 76% of the respondents, consisting of academics and speech and language therapists linked to the COST Action, reported that **PUBS 1,2,4 and 5** had an impact on the planning and delivery of services in their country (Croatia, Ireland, UK, Iceland, Finland, Bulgaria, Lebanon, Germany, Greece, Poland, Slovakia, Sweden, Cyprus, and Israel).

Impact on practice: As identified above, our work has catalysed and informed the professional development of 3,500 HVs. IMP6 identifies its influence on the practice of SLTs, SENDCOs, Educational Psychologists, Specialist Teachers and other members of the children's workforce through the 'What Works' website. A key output from GRANT1 was a review of intervention evidence (**PUB2**). The challenge was how to provide this information to practitioners to inform practice. In response, Law worked with The Communication Trust (TCT) (GRANT2) to develop this accessible database of interventions (**IMP11a; 10b**).

(www.thecommunicationtrust.org.uk/whatworks) (2013–to date). In 2017, findings from **PUB3** were also added. To date, approximately 27,000 people have registered to use this resource (**IMP10a**) the majority from the UK and Ireland but also reaching Europe, Australasia, Africa, Asia and Northern America.

IMP6 summarises findings from a survey and linked qualitative interviews of ‘What Works’ users. From the 857 respondents, 76% of respondents said ‘What Works’ influenced their practice, 80% agreed that ‘What Works’ is an essential tool to support evidence-based practice and 67% used the resource at least every 3 months. Interviews and free text responses demonstrate its widespread use to identify underpinning best evidence for 1) professional development of SLTs and Educational staff; 2) provision of evidence to justify current decisions, (for example, for headteachers prioritising resources); 3) to train SLT students in evidence-based practice, to review and develop provision and to identify new evidence-based methods to support children’s language development.

In sum, we can therefore trace the impact of our research on policy, service delivery and practice across the UK, Ireland, Australia and beyond.

5. Sources to corroborate the impact

IMP1. Public Health England (PHE) and NHS: 1a NHS long term plan www.england.nhs.uk/ltphimenu/children-and-young-people/speech-language-and-communication-services/ [2019–2029]; **1b** Testimonial Deputy Head of Children, Young People & Families, PHE [December 2019]; **1c** Early language identification measure and intervention: Guidance handbook; **1d** Identifying and supporting children’s early language needs: Summary report [December 2020]; **1e** ELIM-I HV training to cascade ELIM-I nationally [December 2020].

IMP2. Royal College of Speech and Language Therapists (RCSLT): 2a Report ‘Bercow:10 years on’ [2018]; **2b** Testimonial CEO RCSLT [October 2019]; **2c** Testimonial, RCSLT Scotland [September 2020]; **2d** RCSLT Input to Children & Young People (Scotland) Bill; **2e** RCSLT Public Health ‘best practice’ guidelines (Giving Voice) [2016]; **2f** RCSLT Public Health webpages [October 2020]; **2g** Giving Voice Briefing: Intergenerational Cycle; **2h** RCSLT Bulletin Magazine article.

IMP3. All-Party Parliamentary Group on Speech and Language Difficulties: 3a Committee response to “Bercow: 10 years on” [2018]; **3b** APPG sponsored Westminster Hall debate briefing pack [July 2018]; **3c** RCSLT Submission to Oracy APPG: Speaking for Change [2019].

IMP4. Department for Education (DfE): 4a Announcement by Secretary of State of GDP18,000,000 funding; **4b** ‘Improving the Home learning Environment’ policy document. [November 2018]; **4c** Hungry Little Minds webpage; **4d** ‘Chat Play Read’ resources [April 2019]; **4e** BBC website: Tiny Happy People; **4f** Testimonial from BBC Scotland Content Producer [October 2020].

IMP5. Institute of Health Visitors: 5a PHE announcement of funding for development and delivery of training on Speech, Language and Communication to all HVs; **5b** Institute of Health Visiting ‘Train the trainer’ resources [May 2019].

IMP6. Evidence from Australia: 6a Submission to Australian parliamentary inquiry from CRE-CL (GRANT3); **6b** Senate Committee report.

IMP7. Evidence from Ireland: 7a & 7b Evaluations of Public Health approaches to child language development across Ireland - Centre of Effectiveness Studies, Dublin; **7c** Irish Association of Speech and Language Therapists Position Statement on DLD.

IMP8. Evidence from UK Speech and Language Therapy Services: 8a Survey of NHS SLTs Public Health practices with children; **8b** Interviews with 3 NHS SLT service leads regarding the influence of our work on their services – ‘Stoke Speaks out’ (December 2019), ‘Nottinghamshire Language for Life’ (October 2019), ‘Get Hackney Talking’ (October 2019).

IMP9 Evidence from Horizon 2020 COST Action Network: Survey of public health practices and influence of team’s work in member countries [March-July 2020].

IMP10 The Communication Trust: 10a ‘What Works’ website users’ report – Survey report [May 2020] – results of user survey and qualitative interviews examining use and influence; **10b** Testimonial I CAN Director of Impact (2005-2020) [September 2020].