

<b>Institution:</b> University of Cambridge		
<b>Unit of Assessment:</b> UoA 26		
<b>Title of case study:</b> Cambridge Bilingualism Network: improving education and wellbeing through practice and policy		
<b>Period when the underpinning research was undertaken:</b> June 2010 – October 2020		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
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<b>Period when the claimed impact occurred:</b> August 2013 - October 2020		
<b>Is this case study continued from a case study submitted in 2014?</b> No		
<p><b>1. Summary of the impact</b></p> <p>The Cambridge Bilingualism Network (CBN) draws on state-of-the-art research to champion the evidence-based understanding of benefits of multilingual upbringing. Through partnerships with schoolteachers, speech and language therapists, antenatal course teachers and health visitors, CBN has communicated key messages to over 1,000 professionals, changing teaching practice and school policy, increasing school performance and developing inclusive environments for potentially marginalised children. CBN's work has also led to knowledge gains and changes in delivery of services and national-level professional guidelines, towards inclusive models benefitting multilingual children and parents. Three of CBN's partners in national leadership and training roles have felt empowered to become multilingualism champions in their fields. Family-oriented messages have also reached directly over 8,500 parents and children, raising confidence and enabling informed decisions on home language use and education.</p>		
<p><b>2. Underpinning research</b></p> <p>The UK is increasingly multilingual. Nevertheless, multilingual families often receive outdated advice to stop using their home languages because children may be 'confused' or disadvantaged in their educational attainment. It was this realisation that motivated the formation of the CBN in 2010. Since then, a fundamental principle of the network is that it is a partnership between researchers and the public, and that it engages in public-involved research. For example, the CBN kick-off meeting in 2010, which included researchers, parents and teachers working together to suggest emerging themes in research in multilingualism, highlighted two issues: a gap of research evidence on the role of multilingualism in communication skills ('pragmatics') and an almost complete lack of studies on whether children with neurodevelopmental disorders such as autism can become multilingual. More recently, three ESRC-funded impact workshops held in Cambridge in June-October 2017 generated collaborations with parents and over 30 Early Years professionals. These revealed another two priorities for research. First, a dearth of studies on the role of multilingualism for family and individual wellbeing and mental health; second, what is the best time for families to receive advice about multilingualism. As regards the latter, it emerged through the workshops that the period 'from blue to two' (from pregnancy to two years of a child's age) is a unique 'teachable period', during which providing evidenced-based advice might be most effective in helping parents take decisions about their home language environment. This finding guided a substantial amount of CBN's impact-oriented activities with antenatal course teachers and expecting families.</p> <p>Inspired by the above 'real-life' questions, CBN's research has revealed three more novel findings that inform its impact. First, CBN's research articles and comprehensive reviews suggest that multilingualism has no adverse effect on any aspect of an individual's development, even in children with neurodevelopmental disorders such as autism (<b>R5, R6</b>). Second, they show that multilingual people have strong communication skills, including the ability to infer non-literal meanings (<b>R3, R6</b>, and other articles); this 'pragmatic' skill is a distinct</p>		

type of skill, complementary to the much-debated cognitive benefits that may be associated with multilingualism. As regards the latter, CBN's research was the first to reveal that even speaking two closely related variations of a language, i.e. two dialects, can lead to cognitive advantages (**R4**). Third, in what is a largely under-studied area, CBN gathers and synthesizes evidence that maintaining the use of home languages is beneficial for mental health and specifically for family wellbeing (**R1**, **R2**, and other articles).

Methodologically, a distinctive feature of CBN's body of work is that it uses quantitative evidence (surveys, linguistic and psycholinguistic lab-based testing) as well as qualitative interview data, which lend its messages the gravitas of the lived experience of the individual person combined with the statistically reliable patterns that arise from well-designed group studies.

### 3. References to the research (indicative maximum of six references)

The following research articles in international peer-reviewed journals are underpinning CBN's impact. They are presented in reverse chronological order, with CBN authors highlighted in bold (including Kate Howard, a PhD student member of CBN):

**R1 Müller, L. M., Howard, K., Wilson, E., Gibson, J. L., & Katsos, N.** (2020). Bilingualism in the Family and Child Well-being: A Scoping Review. *International Journal of Bilingualism* [DOI](#)

**R2 Howard, K., Katsos, N., & Gibson, J. L.** (2019). The School Experiences of Bilingual Children on the Autism Spectrum: An Interpretative Phenomenological Analysis. *Research in Developmental Disabilities*, 87, 9-20 [DOI](#)

**R3 Antoniou, K., & Katsos, N.** (2017). The Effect of Childhood Multilingualism and Bilingualism on Implicature Understanding. *Applied Psycholinguistics*, 38 (4): 787-833 [DOI](#)

**R4 Antoniou, K., Grohmann, K., Kambanaros, M., & Katsos, N.** (2016). The Effect of Childhood Bilingualism and Multilingualism on Executive Control. *Cognition*, 149: 18-30. [DOI](#)

**R5 Uljarević, M., Katsos, N., Hudry, K., & Gibson, J.L.** (2016). Multilingualism and Neurodevelopmental Disorders – an Overview of Recent Research and Discussion of Clinical Implications. *Journal of Child Psychology and Psychiatry*, 57(11): 1205-1217, [DOI](#)

**R6 Reetzke, R., Zou, X., Sheng, L., & Katsos, N.** (2015). Communicative Development in Bilingually Exposed Chinese Children with Autism Spectrum Disorders. *Journal of Speech, Language and Hearing Research*, 58(3):813-25, [DOI](#)

### Funding that supported this research and impact:

Bennett, *Multilingualism: empowering individuals and transforming societies*, AHRC, July 2016 – June 2021, RG78116, GBP3,212,706.45 (Strand 6, PIs Gibson, Katsos, *Multilingualism and cognition: implications for motivation, health and well-being*, GBP183,981).

Katsos, Müller, Wilson, *Cambridge Bilingualism Network*, University of Cambridge REF Unit of Assessment Fund, June 2019 – March 2020, GBP6,874.

Gibson, Katsos, *The added value of a bilingual primary education: a cognitive, emotional and communicative perspective*, Cambridge Humanities Research Grant, September 2017 - September 2019, GBP11,796.

Katsos, Tsimpli, Post, *Multilingualism for well-being: defining routes to impact among community language learners*, ESRC Impact Acceleration Account, March 2017 – November 2017, RG76702, GBP7,903, Follow-on funding: March 2018 – December 2018, GBP4,014.

### 4. Details of the impact

#### 1) Changing teaching practice and developing inclusive policies in schools.

CBN has established long-term collaborations with schools and engages teachers with the communicative, cognitive and mental health benefits of multilingualism. Updating and adapting teachers' beliefs, educational service guidelines and delivery towards more inclusive models for students with 'English as an Additional Language' (EAL) is a core outcome.

In 2014, CBN members worked with the Assistant Head and Lead for English as an Additional Language (EAL) at Arbury Primary School, a large primary school in Cambridge with one third of its students on Pupil Premium and one third classed as EAL. The collaboration created a set of recommendations for teachers and advice for parents of EAL children which the school credits in great part for their success with inclusion and for raising teachers' confidence to teach EAL children [E1]. Since 2014, the Assistant Head has also delivered teacher training for the University of Cambridge's Faculty of Education. By her estimate, over 900 prospective primary school teachers/PGCE students have gained knowledge about multilingualism [E1]. She notes that "[t]he slides I use are based on the information I have gained thanks to CBN, and they emphasize the importance of supporting students not only in their English but also on maintaining their home language, because of its important role in family well-being as well as being the springboard for further language learning." Importantly, "many prospective teachers tell me that these sessions have completely changed the way they see EAL pupils, especially as regards the role of their home language in educational settings." [E1]

In another case, in April 2015, the founding team of parents and teachers of St Jérôme CoE Bilingual Primary School (Harrow) sought advice from CBN on setting up a bilingual language curriculum in English and French. The collaboration was cited as key evidence in the application submitted to Ofsted for permission to set up this Free School. The Lead Teacher for French and Bilingualism at St Jérôme writes: "Thanks to the collaboration with CBN the school's founding team presented DfE with a very strong range of evidence about the benefits of learning a second language from a very young age, which was critical in the DfE's positive decision. [...] Thanks to our collaboration, the design of our curriculum and the delivery in the classroom has been at all times informed by research." [E2] For example, after consultation with CBN the school introduced literacy in French in Year 1, one year later than literacy in English is introduced (in Reception) [E2].

CBN also collaborates with a large inner-city secondary school in Peterborough with above average rates of Pupil Premium, where 95% of students speak EAL, including a large proportion of students from the Roma community. The Deputy Principal attended a CBN workshop in June 2017. Following this, six workshops on multilingualism and identity were delivered at the school and CBN (including PhD student member Kate Howard) worked with staff on developing EAL guidelines and curricular and extra-curricular enrichment activities and projects, helping improve the social welfare and inclusion of marginalised students. CBN's partner notes that "the link with [CBN] has been very beneficial in helping to drive forward school improvement, and inspire and support the very diverse and vulnerable school community ..., the Network has supported the school in a wide range of areas including: research and CPD, developing curricular and extra-curricular enrichment and projects and engaging and motivating our EAL and Roma communities" [E3] (p.3).

Since 2018, in collaboration with COMPAS (a Peterborough charity supporting the Roma community), CBN hosts annual visits to Cambridge by Roma students and has organised a training day for the 'Roma of Great Ability' scheme, involving over 60 students. These activities help increase learning in students who then become ambassadors for their language and culture among their peers and champion the participation of Roma students in school and social activities. COMPAS's CEO has "been able to observe very positive changes in the students' and also their parents' attitudes, with a new pride about our Roma language and culture and their abilities." [E4] The students noted the benefits of inclusion and raising aspirations: "This was a great plan to do because Roma people never get into projects, but this one is just for them" and "I felt so calm to know everything about the university and I'm looking forward to going there." [E3] (p.2)

## **2) Increasing understanding and improving practice for Early Years health professionals and education providers.**

CBN works closely with Early Years professionals who have a critical role in advising parents about the multilingual upbringing of their children and in delivering specialist services to children. As a result of the collaborations, CBN's partners have adapted their practice, professional guidelines and key messages, and have often assumed 'multilingualism ambassador' roles in their field.

For example, informed by one of the impact-workshops CBN held in Cambridge in 2017, and following interviews and surveys with antenatal teachers, it became apparent that (i) the best period to impact change in family beliefs and practices is the period 'from blue to two', and (ii) that the majority and certainly the most popular antenatal courses available in the UK do not offer any information on raising a multilingual child. Moreover, antenatal teacher confidence about multilingualism is low. In CBN's first targeted activity (winter 2018/spring 2019), after providing an information toolkit about multilingualism to 13 antenatal teachers, CBN engaged them in one-to-one interviews and pre- and post-interview surveys [E5].

These revealed positive changes in learning and understanding about multilingualism, in confidence about the topic, and in actual practice thanks to the informational toolkit. Indicatively, 90% of participating teachers said that they had been introduced to new concepts about multilingualism (p.1, Q8). As one teacher –who previously discussed language development only from a monolingual perspective– noted, as a result of the intervention '[I] will incorporate languages into my activity on communicating with your baby' (p.3), while another stated that they would now 'feel more confident in offering support and information' on multilingualism (p.3). Participants had used the toolkit in an average of 75.5% of the classes they delivered (p.4) and parents reported that the information was "very useful" (p.4).

Informed by the feedback from these activities, in autumn 2019 CBN members (including PhD student member Mélanie Gréaux) partnered with a senior antenatal teacher at Birmingham Women's NHS Hospital, to create and deliver one-hour 'WeSpeakMulti' webinars to antenatal teachers. A total of 65 participants subscribed to view two webinars (held in January and February 2020), and 32 of them did so live; 18 participating antenatal teachers completed pre- and post-webinar questionnaires. Overall, they reported substantial gains in knowledge and in confidence to apply it in practice (e.g. only 29% were confident or very confident 'to answer parents' questions on multilingual upbringing' before the webinar while 88% were so post-webinar) [E6] (p.7); moreover, 100% rated the seminar's relevance to their antenatal practice, user-friendly materials and quality of the information as 'Good' or 'Excellent' [E6] (p.7-8).

CBN's partner for the webinars is not only Lead Antenatal Teacher at a maternity unit with over 8,500 births per year, but also a trainer of antenatal teachers and a senior consultant for NCT, the largest national charity for childbirth. As she notes in her testimonial, '[t]his collaboration with CBN has changed my professional practice. I incorporate the wellbeing element of multilingualism in my classes and encourage parents to have more of a dialogue about it antenatally. It has also given me the knowledge and the confidence to become an ambassador among my profession' [E7] (p.3). She also acknowledges that '[m]ost importantly a set of activities and resources has been created that can be used by every antenatal teacher training program' (p.4). These impact-bearing webinars, action plans and activities are available on a dedicated website ([www.wespeakmulti.com](http://www.wespeakmulti.com)).

CBN also works closely with professionals who support potentially marginalised EAL children with speech, language and communication needs (SLCN), such as children with autism. Their collaboration has revealed that parents of children with autism regularly receive advice that multilingualism is 'too much' for their children, but CBN's research also shows this is not the case. Instead, multilingual children with autism will function just as well as their monolingual peers. Moreover, the families who maintain their home languages will enjoy advantages in family wellbeing compared to those who do not. In one example of such collaboration, CBN works together with ICAN, the leading national charity supporting language and communication skills in the early years. CBN helped plug a gap in the advice they offer to their staff as well to multilingual families, and produced a set of five key messages that have reached 1,400 families as of March 2020 [E8].

In a related activity, CBN members were invited to peer-review the national guidelines of the Royal College of Speech and Language Therapists in the UK (RCSLT) for multilingual clients. According to the Lead Author, the feedback provided gave the guidelines "a new framework..., emphasising that bilingualism is ... a fundamental human right enshrined in the UN's Convention on the Rights of the Child... This is a completely novel method of viewing bilingualism." [E9]. As a Specialist Adviser to the RCSLT and an award-winning Senior Clinical Lecturer with national recognition, CBN's partner teaches and trains over 150



qualifying SLTs annually. He acknowledges benefits and changes to the teaching and training that he offers (e.g. incorporating the topics of mental health and human rights and findings on language development from CBN member's research), which help spread CBN's impact further among the profession. [E9] CBN members also wrote an article about multilingualism in the RCSLT's professional Bulletin (March 2018, issue 791, pp. 26-29) and hosted two events in Cambridge and one at Reading where they discussed with SLTs the challenges of multilingual clients and the advice that is best offered to parents. A participating SLT, who is also Chair of the Cambridge chapter of the Association of SLTs in Independent Practice, notes the change in her practice "Rather than shying away from the issue, I now address multilingualism head-on by considering the impact of the linguistic environment and language-medium for assessment and therapy"; as well as changes in confidence and learning [E10]. This partner champions the impacts gained from the collaboration "...not only locally with parents, but nationally with colleagues and [using the knowledge gained] to inform discussions with other professionals working directly with parents from diverse backgrounds". [E10]

### **3) Informing decisions and raising confidence in parents, children and young people**

CBN regularly holds events with parents, children and young people directly, through the school partnerships named above but elsewhere too (49 such meetings in total from August 2013-to date, mainly in the East of England and Greater London areas). A major aim is to enable parents and young people to take informed decisions about the language used at home and about academic decisions, as well as raising confidence to persevere with their choices. For example, at Arbury Primary School CBN have increased learning and understanding about EAL by delivering one or more talks per year, generating knowledge change in over 150 parents since 2014. Indicatively, parental impact survey from events on 29.01.2020 [E11] show that for a common misconception that hinders the maintenance of the home language, 'The educational achievement of bilingual students is lower than that of monolingual students at A-level', pre- and post-event comparison reveals a change in knowledge in 18 out of 24 respondents (75%). Of these 18 parents, 100% changed in the right direction, selecting 'I [strongly] disagree', mostly having selected 'I (strongly) agree' or 'I don't know' pre-event. CBN also use online media to reach geographically diverse audiences, such as the online campaign 'Your Languages, Your Future' which informs secondary school EAL students about language learning and encourages them to gain formal qualifications in their home languages at GCSE (7,100 viewers; 39 re-tweets; 371 shares) [E12].

Overall, CBN has communicated key messages to over 1,000 professionals (Section 4.1) and to over 8,500 parents and children (1,400 through ICAN, Section 4.1 and 7,100 through the online campaign above). CBN also write articles for non-specialist audiences such as in *The Conversation* (with 75,301 unique readers) [E12] and the team's research has been reported in national and international media ranging from *Scientific American* to BBC Radio and S4C TV.

### **5. Sources to corroborate the impact** (indicative maximum of 10 references)

- [E1] Arbury Primary School testimonial
- [E2] St Jérôme Primary School testimonial
- [E3] Queen Katharine Academy testimonial
- [E4] COMPAS CEO testimonial
- [E5] Antenatal Information Toolkit project report (pages 1-3)
- [E6] WeSpeakMulti Antenatal Webinar project report (page 6, section 'Reporting Confidence')
- [E7] Birmingham Women's NHS Hospital & NCT testimonial
- [E8] ICAN Impact & Evidence Lead testimonial and ICAN 5 Messages
- [E9] Royal College of Speech and Language Therapists Guidelines on Bilingualism testimonial
- [E10] Chair of Cambridge chapter, Association of SLTs in Independent Practice testimonial
- [E11] Parental feedback questionnaires from talks delivered at Arbury Primary School
- [E12] Screenshots of viewers/readers for online campaign ('Your Languages, Your Future'), and articles in *The Conversation*.