

Institution: University of Cambridge

Unit of Assessment: UoA23

Title of case study: Improving student outcomes through Research Lesson Study and the

Oracy Skills Framework

Period when the underpinning research was undertaken: 2013 to present

Details of staff conducting the underpinning research from the submitting unit:

betails of staff conducting the diderphilling research from the submitting difft.		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by
		submitting HEI:
Ayesha Ahmed	Senior Teaching Associate	09.05.2013 - Present
Pete Dudley	Lecturer	01.10.2017 - Present
Sara Hennessey	Reader	01.12.1999 - Present
Neil Mercer	Director of Research in	01.01.2006 - 31.10.2017
	Education	
Jan Vermunt	Professor of Education	01.10.2012- 30.11.2018
Maria Vrikki	Research Associate	03.02.2014 - 31.12. 2017
Paul Warwick	Senior Lecturer	01.10.2001 - Present

Period when the claimed impact occurred: 2013 to present

Is this case study continued from a case study submitted in 2014? No

### 1. Summary of the impact (indicative maximum 100 words)

Research by the University of Cambridge's Faculty of Education has fundamentally shifted the teaching of oracy (how to use speaking and listening skills effectively) in classrooms across the UK. The Faculty's Oracy Skills Framework (OSF) has significantly informed pedagogical and curriculum development in over 1100 schools in the UK and beyond. The aligned acquisition and mobilisation of teacher learning and development through oracy in Research Lesson Study (RLS), (a Cambridge developed variant of Japanese teacher development that is practiced in around 10,000 schools in the UK and internationally,) has led to demonstrably improved skills-levels, student outcomes (e.g. 4% increased mathematics attainment), and sustained teacher engagement (see sustained voluntary participation by 50 schools in London below). The OSF and RLS have also contributed to significant improvements in the teaching of disadvantaged students. The OSF has underpinned the development of a national network of oracy training in England for teachers and leaders and is supported by the National Oracy Network founded in 2016. It is incorporated into the new national curriculum in Wales.

### **2. Underpinning research** (indicative maximum 500 words)

Research over two decades at Cambridge, including seminal work by Mercer, Howe and colleagues [R5] demonstrating the role of talk, dialogue and spoken language in cognition and learning, conducted during their time as Professors of Education at the Faculty, has underpinned the OSF. Mercer later established Oracy Cambridge in 2015 to continue this work. Its purpose is to further oracy development and practice.

Oracy is the ability to use the oral skills of speaking and listening effectively in a range of contexts. The Organisation for Economic Cooperation and Development (OECD) stressed the importance of oracy skills for individuals' learning and educational outcomes, social and civil involvement, social mobility, employment and well-being; but prior to 2013, no 'teacher-friendly' framework existed that explained the physical, linguistic, cognitive and social skills associated with development of oracy.

Research conducted by the oracy research group at Cambridge over a sustained period has sought to fill this gap through a number of research projects, such as *Oracy, Curriculum, Culture and Assessment Tools* (EEF 2013-14), *Camden/Cambridge RLS teacher learning through dialogue mathematics curriculum project* (London School Excellence Fund (LSEF)



2013-15) and Lessons for Learning: using Lesson Study to innovate and transfer pedagogic practice (2003-10).

In 2013–14 Mercer, Warwick and Ahmed [R3] carried out research focused on the development of an OSF and the assessment of these skills. The research, conducted with School 21 in Stratford, London, was funded by the Educational Endowment Fund (EEF), whose remit relates to practice-based research likely to lead to improved outcomes for students. An independent evaluation by Sheffield University concluded that the OSF was an important tool that should be used in developing school approaches to oracy teaching and learning and for diagnostic and formative assessment of oracy. In line with findings of [R3] and [R5], the OSF acknowledges that students need to be *taught* how to use talk effectively across a range of social contexts in order to think and learn, and that this requires an understanding of the component skills of oracy. Use of the OSF, allied to broad findings about its skills assessment, has become embedded in teacher development approaches nationally and internationally, with programmes such as those created by Voice 21 (see below) founded on the OSF, and also in many UK teacher training programmes employing it in developing beginning teachers' understanding of oracy skills in teaching and learning.

With an imperative to apply research findings directly to teacher development and classroom practice ([S6] [R1]), Cambridge Faculty of Education researchers have pioneered the approach of Research Lesson Study (RLS), a UK variation of its Japanese antecedent. RLS research at Cambridge focuses on understanding what works in the classroom, including how to help teachers bring knowledge of speaking and learning into their day to day practice. [R4, R6]. The approach responds directly to a recent call by the UK Royal Society and British Academy (2018) for greater use of teacher-led, classroom research in the UK education research/policy ecosystem.

As shown below, RLS uses collaborative 'close-to-practice' teacher-led research. The RLS model was developed by researchers at Cambridge to incorporate features of oracy into its 'teacher learning' model and has since become the dominant lesson study model in Britain. Dudley's (2013) research suggested that RLS directly improved student learning in subsequent teaching, and uniquely enabled teachers to access and improve each other's tacit professional knowledge and to forge supportive professional learning communities [S6]. Building on this finding, research conducted by Dudley, Warwick, Mercer, Vermunt and Vrikki [R1] in the 96 school RLS London project (2014-17), found, at scale, that standards in mathematics improved by 4% and that 50 schools then forged self-sustaining, voluntary professional learning communities, at local system level, for raising student achievement [R2].

Together, the teaching of oracy and the RLS approach to teacher development drive curriculum development and advance teacher skills and understanding, with a cascading effect on knowledge improvement beyond the bounds of Mercer's original research. The teams involved in this work comprised both researchers and school improvement leaders of national and international standing [R1, R2].

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

system evolution. European Journal of Education, 54(2), 202-217. [DOI]

[R1] Dudley, P., Warwick, P., Mercer, N., Vrikki, M., Vermunt, J. D., van Halem, N. and Karlsen, A. (2019). Implementing a new mathematics curriculum in England: District Research Lesson Study as a driver for student learning, teacher learning and professional dialogue. In A. Takahashi, R. Huang and J. da Ponte, *Theory and practices of lesson study in mathematics:* An international perspective (pp. 285-315). Springer. ISBN 9783030040314 [R2] Dudley, P., Xu, H., Vermunt, J. D., Lang, J. (2019). Empirical evidence of the impact of lesson study on students' achievement, teachers' professional learning and on institutional and

[R3] Mercer, N., Warwick, P. and Ahmed, A. (2017). An oracy assessment toolkit: Linking research and development in the assessment of students' spoken language skills at age 11-12. *Learning and Instruction*, 48, 51-60. [DOI]

### Impact case study (REF3)



[R4] Vermunt, J. D., Vrikki, M., van Halem, N., Warwick, P. and Mercer, N. (2019). The impact of Lesson Study professional development on the quality of teacher learning. *Teaching and Teacher Education*, 81, 61-73. [DOI]

[R5] Howe, C., Hennessey, S., Mercer, N., Vrikki, M., and Wheatley, L. (2019). Teacher-student dialogue during classroom teaching: Does it really impact on student outcomes? *Journal of the Learning Sciences*, 28(4-5), 462-512. [DOI]

[R6] Warwick, P., Vrikki, M., Færøyvik Karlsen, A. M., Dudley, P. & Vermunt, J. D. (2019). The role of pupil voice as a trigger for teacher learning in Lesson Study professional groups. *Cambridge Journal of Education*, 49(4), 435-455. [DOI]

Cambridge staff are delineated by bold type. Research output [R2] was awarded European Journal of Education Star Article 2019.

### Supporting grants

### Title: Oracy Curriculum, Culture and Assessment Toolkit

Awarded to School 21 / University of Cambridge Faculty of Education

PI: Neil Mercer

Sponsor: Education Endowment Fund (EEF) No grant number - EEF executive summary provided as [S3a]

Period: 1 September 2013 – 31 July 2014

Value: GBP382,000 (GBP100,000 to the Faculty of Education).

# Title: Camden/Cambridge RLS teacher learning through dialogue mathematics curriculum project

Awarded to the London Borough of Camden / University of Cambridge Faculty of Education PI: Jan Vermunt (Project Director: Pete Dudley, Camden)

Sponsor: London School Excellence Fund (Greater London Authority (LSEFR1040)

Period: 2013-15

Value: GBP500,000 (GBP100,000 to the Faculty of Education).

# Title: Lessons for Learning: using Lesson Study to innovate and transfer pedagogic practice

Awarded to Peter Dudley (joint author of this case study), University of Cambridge Faculty of Education

PI: Peter Dudley (Cambridge PhD study: author. Peter later became Director of Education in Camden (2013), and joined the Faculty of Education in Cambridge in 2017).

Sponsor: ESRC Teaching and Learning Research Programme. RTF Grant no. 139-27-0004

Period: 2003–10 Value: GBP40,000

(See evidence of impact S3 below)

# **4. Details of the impact** (Corroborating sources indicated in square brackets below) Impact on national and international education systems and policy

RLS is a popular model of lesson study used in the UK and has the acknowledged support of national organisations such as the Teacher Development Trust [S2] and Chartered College of teaching [S1]. The RLS Handbook is translated into nine languages and widely used in Holland, Belgium, Germany, Switzerland, Greece, Russia, the UAE, Palestine, Turkey and Indonesia. RLS is used in many ITT programmes in the UK and worldwide and has been referenced in numerous Ofsted reports.

RLS has been a central tool in Kazakhstan's national education reforms and adopted by all 7,000 state schools in 2019 to drive its curriculum renewal.

As a result of the 2013-2015 Camden-Cambridge RLS London Project, Camden schools continue to use many RLS-based practices for teacher, curriculum and school development - a factor in their formation of a not-for-profit schools improvement company 'Camden Learning' in

### Impact case study (REF3)



2017 [S11]. Formal incorporation of these highly diverse schools had a significant impact on systems and structures locally by creating an architecture for different forms of state schools to work together and also nationally where it became a model for other new school partnerships [S4] [S11]. In 2017 Camden Learning commissioned the Camden Oracy Hub of schools; this disseminated the OSF, using RLS, to support leadership and development of oracy in Camden. The Hub has since become a strategic partner of School 21's charitable organisation, Voice 21 [S3b]. It models oracy practice and leads training nationally [S3], [S4], [S10].

Oracy Cambridge was developed by Mercer, Dudley, Warwick and Ahmed and launched in 2015. Oracy Cambridge and Voice 21 have collaborated to promote oracy in schools at a national level through the National Oracy Network, founded in 2016, which now includes 1,100 schoolsand helped establish in 2017 an All Party Parliamentary Group on Oracy Education (APPG Oracy – chaired by Emma Hardy MP). In 2017 the Welsh Government commissioned a report from Oracy Cambridge [S7a] that was used in the creation of the 'Literacy and Oracy Across the Curriculum' strand of the 2018 Welsh National Curriculum coming on stream in 2020 [S7b]. This strand embeds the OSF elements into a progressive matrix to inform teacher planning and assessment across the country [S7c].

The Chartered College of Teaching, in its programme for teachers to gain Chartered Teacher status, now supports teachers pursuing their own school-based research utilising tools that promote such 'collaborative, collegial approaches' as RLS and the OSF [S1].

### Impact on schools and teachers

An independent 2016 Department for Education funded study of 800 schools in England recommended RLS for closing attainment gaps for underperforming groups [S9]. RLS is now used across the UK in an estimated 20% of English schools, all schools in Wales and in schools in Northern Ireland. Large-scale RLS research projects demonstrate sustainability of RLS through widespread, voluntary adoption into school improvement processes. The EEF (2017) estimates that 45% of its 140 RLS project 'control group' schools used RLS during the project even though the intention was that they should not. 50 of the 96 schools involved in the RLS London project formed three autonomous RLS hubs across London that continued for over two years (c.f. [R2]) with considerable impact (reported below). By 2019, all 60 schools in the not-for-profit schools company 'Camden Learning' were rated good or outstanding by Ofsted. Such collaboration was triggered by involvement in RLS [S11], which later enabled sustained collaborative school-to-school support communities to lead, develop and embed the OSF [S4].

School 21, which partnered the original OSF study with Cambridge researchers, is now recognised as a national leader in the development of oracy across the 5–18 age range. Ofsted has rated the school as outstanding in all areas [S8], and recently stated: 'A strong focus on oracy, the ability to talk fluently and accurately and express ideas, develops pupils' confidence, self-esteem and communication skills.' Schools across the country are using the OSF as a basis for setting up an oracy curriculum. Oracy curricula are tailored to each school, using benchmarks to guide evaluation.

## Impact on practitioners and practice

In 2019, research ([R1], [R4]) demonstrated that RLS dramatically increased teaching effectiveness in traditionally difficult to teach and to learn elements of the curriculum. Teachers also found RLS professionally fulfilling [R2], [S6]. It fostered strong, bonded teacher learning communities that strive to remove barriers to pupil learning. RLS makes explicit normally unexpressed reserves of *tacit* professional knowledge. This produces sustainable impact on pupil learning and builds system architecture for transferring new professional knowledge and skills across and between classrooms and schools.

### Impact case study (REF3)



Cambridge's collaboration with School 21 has led to large-scale teacher development programmes [R3]. School 21's registered charity, Voice 21, has become lead UK provider of teacher professional development in oracy [S10]. The OSF is central to its teacher professional development and school improvement programmes, designed to support teachers and school leaders to deliver high quality oracy education through the deliberate and sustained development of students' oracy skills. The OSF has been accessed and downloaded by more than 4,000 subscribers to Voice 21's online resources [S3, S10]. To date, Voice 21 has provided professional development and school improvement for 6,000 teachers and over 900 schools across the UK. This includes large-scale, city-wide projects such as Voice Liverpool (96 schools) and Voice Leicester (50 schools). [S3] Voice 21 also partners with school hubs (groups of schools proving oracy CPD), including the Camden Oracy Hub (Voice Camden - 30 schools) [S10].

## Impact on student understanding and learning

Cambridge-Camden RLS London (mathematics curriculum) LSEF project schools, using RLS, increased mathematics 2016 KS2 test results against the national test average, whereas results of similar London schools fell, opening up a four percentage-point gap [R1]. Data subsequently gathered from 50 schools, which continued practising RLS after the project finished, demonstrated sustained impact on mathematics learning [S5]. Eighty-four research lesson studies involving 252 research lessons over two years reported that 18% fewer students than predicted required additional teaching. There were statistically significant increases of 11% and 7% more students than predicted achieving and exceeding expected learning outcomes [R2]. Voice 21 states that 154,000 students have benefited from oracy teaching.[S3b]

Recent Cambridge research examining 72 lessons in primary schools found that in classrooms where key oracy framework skills were emphasised, pupils achieved significantly higher test results in mathematics and English [R5 pp26-27].

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

- [S1] Testimonial from the Chief Executive of the Chartered College of Teaching
- [S2] Testimonial from the Chief Executive of the Teacher Development Trust
- [S3] a) Education Endowment Fund executive summary of OSF research; b) Voice 21 outline of work building on the Oracy Skills Framework
- [S4] Dudley and Mercer (2019) An evaluation of the Camden Oracy Hub University of Cambridge executive summary
- [S5] The Greater London Authority Subject Knowledge Hubs website
- [S6] Dudley, P. (2013) 'Teacher learning in Lesson Study: What interaction-level discourse analysis revealed about how teachers utilised imagination, tacit knowledge of teaching and fresh evidence of pupils learning, to develop practice knowledge and so enhance their pupils' learning', Teaching and Teacher Education 34, 107–121
- [S7] a). Report for the Welsh Government; b). Eleri Goldmith testimonial email to Neil Mercer; c). Corroboration of the use of the OSF is evident in a cross-referencing of the Framework skills with the statements in the Literacy and Oracy across the Welsh Curriculum school year statements
- [S8] School 21 Ofsted report and Richard Cobden Primary School Ofsted report
- [S9] Churches, R. (2016). *Closing the gap: Test and learn.* London, UK: National College for Teaching and Leadership. Link
- [S10] Links to the Voice 21 and Voice Camden websites
- [S11] Dudley P., Pratt, M., Gilbert, C., Abbey, J., Lang, J. and Bruckdorfer, H. (2020) Cross-school 'close to practice' action research, system leadership and local civic partnership reengineering an inner-city learning community. *UCL loE London Review of Education*. https://www.scienceopen.com/document/read?vid=3ca230fa-e361-419a-86c4-225ee9fea454