The loss of teachers in the cross sectional analysis is due to not graduating, leaving the school of their internship for another school or for something else than the teaching job, or no longer willing to participate in this study. So the changes found might be due to sample changes. In the longitudinal analyses we followed the 45 (44) student teachers who remained in the sample during three years. The 45 student teachers reached in the last year of their teacher training on average a score of .83. In the second year of the average score increased with 48% of a standard deviation to 1.65 and decreased in the third year to1.49.

Conclusion

During their first year as a certified teacher, beginning teachers grow almost half a standard deviation in teaching skill. This growth in teaching skill seems to stagnate in de second year.

TE Paper Session

Session:	Parallel Session 3
Session Date and Time:	Thursday 7 January 2016 14.00-15.30
Location:	Hebrides
Chair:	Oscar Odena

PAPER 1 ABSTRACT

The Importance Of Trust To Research Informed School Improvement In England: Findings From A Social Network Analysis Of 43 English Schools, Chris Brown, Alan Daly and Yi-Hwa Liou, UCL Institute of Education, London.

This paper examines what factors support: 1) the use of research evidence in practice by schools in England; and 2) the degree to which the school improvement strategies of English schools are based on research and evidence. To do so, we address three objectives. First we examine the global drivers for schools to now use and share effective practice, including that informed by research and evidence (RE). Second, we outline the Research Learning Communities project and model data from the project to show how trust, organizational learning (OL), and the frequency and quality of teacher professional interactions facilitates research-informed improvement. Our final objective is to examine the implications of our analysis for school leaders and at the system level.

Our study was guided by the following research questions:

- RQ1: what is the relationship between a high trust environment and teachers' perceptions of the RE use climate in their school?
- RQ2: to what extent is the presence of organizational learning within schools associated with teachers' perceptions of the school's RE use climate?
- RQ3: to what extent are perceptions of the RE use climate positively related to the frequency and quality of professional interactions reported by teachers?

To answer these, a social network survey was administered to teaching staff within schools involved in the project. A total of 828 teachers from 43 schools joined the survey, resulting in a response-rate of 75%. The data include perception scales, social network relations, and demographics background.

Our analysis examines the importance of teachers' perceptions their of school's climate of RE use (School's RE Use Climate), as explained by the actual pattern of professional interactions around teaching and learning (TLE Network – frequency and quality of interaction), as well as perceived climate of trust (Climate of Trust) and organizational learning (Climate of OL). We used the UCINET social network software program to calculate degree centrality for both frequency and quality of interaction. Model specifications are provided in the full paper.

Within the paper network sociograms from sample schools will be used as illustrative examples of the study's findings. The sociograms illustrate that the schools with a higher RE Use climate tend to be relatively more dense and of greater average degree of professional connections regarding exchanging expertise in teaching and learning.

Our quantitative findings suggest several positive relationships with teachers' perceptions of RE use climate at their schools. Specifically, our models suggest that teachers who reported their school as having a positive learning climate and high trust environment also possess more frequent (weekly) and useful professional connections with colleagues around teaching and learning. These schools also tended to report higher levels of teaching-related activities that are more research-informed.

Overall our study provides vital new perspectives on the role of trust in achieving school self-improvement as grounded in the use of research. In particular, our results illustrate the importance of trust in facilitating the types of relations needed to provide teachers with access to the research-centered social capital that resides within a school.

PAPER 2 ABSTRACT

Towards as a useful paradigm for teacher-research, Oscar Odena, University of Glasgow

This paper considers some paradigms of educational research, and their relation to teachers' own research in their work settings. The characteristics of the positivist, interpretive and critical paradigms are examined, with reference to three cases of teacher-research projects. A participatory paradigm is considered with reference to the projects' participatory elements. The projects were carried out by teachers who were seconded on a part-time basis to their local authority to carry out research over the academic year 2014-2015. The secondments were funded as part of a successful partnership bid to the Scottish Government Initiative to Facilitate an Increase in Masters-Level Learning, submitted by Education Services, Dumfries and Galloway, Scotland (led by Brydson and Thin) and the School of Interdisciplinary Studies at the University of Glasgow Dumfries Campus (led by Clark and Odena). After the teacher-researchers were recruited through an open competition they organised themselves in a self-directed community of practice calling on the support of others when needed. The teacher-researchers carried out their educational research autonomously, based on their own professional interests but also local authority priorities concerning vulnerable learners and reducing barriers to learning. The outcomes of individual projects with particular reference to looked-after children, early intervention, support needs and parental involvement were discussed in a symposium at the annual conference of the Scottish Educational Research Association (Gauld, Odena, Beck, et al. 2015).

This paper discusses relevant contemporary literature on action research (Heron & Reason, 2009; Odena, 2014) and argues that for teacher-research, the participatory paradigm is more appropriate than others. Following some of the areas suggested by Cain (2011, 2012) the paper considers how teacher-research in this paradigm: (a) includes self-study, (b) involves students, (c) considers the influence of context, and (e) engages with, and contributes to, the development of theory. The paper argues that teacher-research is essentially research for action, although the characteristics of 'action research' as described in the literature are not always evident. The conclusion outlines the benefits of moving towards a participatory paradigm for teacher-research that goes beyond the positivist-interpretive dichotomy, if the aim is to include enquiry as part of teachers' professional learning.

References:

Cain, T. (2011) Teachers' classroom-based action research. *International Journal of Research & Method in Education*, 34(1), 3-16.

Cain, T. (2012) Too hard, too soft or just about right: paradigms in music teachers' action research. *British Journal of Music Education*, 29(3), 409-425.

Gauld, N., Odena, O., Beck, A., Green, J., Huxtable, R., & Johnson Leigh, R. (2015). 'Education as if research mattered'. Symposium at SERA 2015, Aberdeen, Scotland, 18-20 November.

Heron, J., & Reason, P. (2009). Extending epistemology within a cooperative inquiry. In: P. Reason and H. Bradbury (Eds) *The Sage Handbook of Action Research*. London: Sage.

Odena, O. (2014). Some challenges of practice based/centred enquiry. In: Harrison, S. D. (Ed) Research and *Research Education in Music Performance and Pedagogy*. Dordrecht: Springer.

Teacher Professionalisation: Contexts and Priorities - From evidence-based to research informed teacher professionalism, Chris Brown and David Godfrey, University College London Institute of Education, UK

This paper will outline the findings of two extant research projects which advocate and actively engage in approaches to shift educational discourse surrounding research use in practice from an expectation of teacher practice being evidence based, to one where teachers engage in research informed teacher professionalism.

The first half of the session will be used to argue for the need to view teacher professionalism as allowing for a high degree of autonomy and judgement. A dominant discourse exists in England around the relationship between evidence and practice that still prescribes a technical-rational view of professionalism. This sees evidence as producing truth and the professional as a technician whose job is to unquestioningly implement approaches based on 'what works'. Teacher's practice is, and should be, however, informed by different types of overlapping knowledge, professional expertise and judgement, management and pupil data and research evidence. These should all take into account classroom context and the wider needs of learners. Indeed, the term 'evidence' itself can be problematic, as evidence can be produced to support almost any proposed course of action in education. As such, evidence should 'inform' rather than dictate practice, with a better conceptual term being 'research-informed practice' as this also allows for the inclusion of theory, education as a process not simply one of outcomes and enables teachers to find a voice and base their actions on values. In support of this argument, evidence will be outlined from case studies of English secondary schools to show how the right organisational, leadership and professional environment can help promote such research informed practice within the context of a schools eco-system.

Second, to highlight effective ways to achieve research-informed practice, we will report on a two-year knowledge mobilisation project, testing an innovative approach to increasing research use amongst primary school teachers at scale. The project, involving primary schools in England, is a randomised contrail trial: of the 114 schools involved, we are working with 58, grouped into 14 Research Learning Communities (RLCs). RLCs meet four times a year for whole-day workshops, supported by research facilitators. Each school engaged in RLC activity provides both a senior leader and an informal 'opinion-leader' (with the latter identified via social network analysis). Workshops focus on specific issues and introduce research evidence that investigates 'what works' in relation to those issues. In between workshops, practitioners engage in peer-to-peer support with a much greater number of colleagues. An independent evaluation of the approach is assessing its effectiveness in terms of increasing research use amongst teachers within the schools involved. Through its use of learning activity, approaches designed to build practitioner capacity and expertise and a distributed approach to leadership (in terms of its participants), it is envisaged that the RLC project will provide an optimal template for embedding research-informed practice across the school system generally.

TE Paper Session

Session:	Parallel Session 3
Session Date and Time:	Thursday 7 January 2016 14.00-15.30
Location:	Orkney
Chair:	Charlaine Simpson