

Impact case study (REF3)

Institution: University of Aberdeen		
Unit of Assessment: 23 (Education)		
Title of case study: Scottish Teachers for a New Era (STNE)		
Period when the underpinning research was undertaken: 2005-2020		
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:
Laura Colucci-Gray	Senior Lecturer	2005 – 2018
Kirsten Darling McQuistan	Lecturer	2016 – present
Roseanne Fitzpatrick	Senior Lecturer	1978 – 2015
Donald Gray	Professor	2005 – present
Peter Mtika	Senior Lecturer	2009 – present
Dean Robson	Senior Lecturer	2006 – present
Rachel Shanks	Senior Lecturer	2013 - present
Edward Sosu	Lecturer	2009 – 2013
Kevin Stelfox	(P/T) Research Fellow	2017 – present
Period when the claimed impact occurred: 08/2013 to 07/2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact (indicative maximum 100 words)		
<p>The Scottish Teachers for a New Era (STNE) initiative developed and tested a new model for teacher education, researching the effectiveness of novel teaching practices on a B.Ed programme and the professional learning for supporting teacher graduates. Lessons learned from this initiative went on to inform the highly influential Donaldson Report on teacher education policy in Scotland. This led to policy changes by the Scottish Government and thus to improvements in teacher education and, in the culture of professional learning. The work of the STNE has also led to changes in artistic pedagogy in Argentina and has influenced teacher education policy in the Nordic countries.</p>		
2. Underpinning research (indicative maximum 500 words)		
<p>The Scottish Teachers for a New Era (STNE) initiative developed a number of research strands between 2005 and 2011 looking at specific elements of teacher education involving collaborative working with local authority partners. This research and development was led and undertaken by the University of Aberdeen School of Education, with funding from the Scottish Government and the Hunter Foundation.</p> <p>STNE was built on three fundamental design principles: decisions driven by evidence; engagement with arts and sciences and teaching as an academically taught, practice-based, profession. Multiple forms of data gathering were used in the research, including quantitative questionnaires, qualitative in-depth interviews, focus groups, teacher action research and observations. A key element of the STNE initiative was the concept of “evidence-informed practice”; linked to this up to 40 scholarships were made available for teacher practitioner researchers to conduct their own research as part of the initiative. The research conducted by these practitioner researchers was action research aimed directly at their own work-based practices and went on to inform the learning and teaching that took place in their own contexts.</p> <p>One aim of STNE was to provide a coherent continuum of education and support over six years from the beginning of the four-year B.Ed programme, into the beginning teacher’s induction year,</p>		

and continuing to the end of their first year as a fully registered teacher. One key element of this was the development of an effective mentoring system requiring the mentoring of students while on placement. The way in which this mentoring was conducted with students was researched from 2009-2012 [1, 2], subsequently informing mentoring CPD and further research on mentoring of students using a tripartite system of student support with effective collaboration and dialogue amongst the university, the school support teacher and the student, published in 2014 [3]. Research led by Shanks [2] looked specifically at the newly qualified probationer teachers' induction year learning and led on to further work in this area looking at formal and informal mentoring. Mentoring training of supporter teachers is now embedded within local authority practice (see section 4 below).

In addition to considering the mentoring and support required by students and beginning teachers, another element of the research examined the nature of, and any change in, student teachers' epistemological beliefs [4]. This showed that there were significant changes in student teachers' epistemic beliefs over a four year period, and that these beliefs predicted the student teachers' instructional preferences. Thus, as well as providing evidence about support and mentoring practices that were helpful for beginning teachers, the STNE studies also informed pedagogies and practices.

Research on the impact of pedagogies and practices was taken further in 2011 under the umbrella of STNE, with additional funding from the Scottish Arts Council. This research strand examined the use of arts-based collaborations to develop innovative pedagogies, resulting in a new initiative: Arts as a Tool for Learning Across the Curriculum (ATLAC) [5]. The ATLAC initiative involved interdisciplinary partnerships between subject specialists and art specialists to promote creative and participatory approaches in initial teacher education. This was further developed from 2013 to 2016 with British Academy funding, which enabled collaboration with Argentinian colleagues to examine arts based pedagogical approaches in science education. Building on this, funding was obtained from the British Education Research Association to undertake one of their Research Commissions in collaboration with Cambridge and Warwick Universities to undertake a critical review of the idea of STEAM (STEM and Arts) education. This was published in 2017 [6].

Since 2014, reference has been made to the STNE initiative in at least 32 academic publications, many of these beyond the UK. In addition, as a direct result of STNE, Gray was invited to become involved in, and subsequently a council member for, the European based International Forum for Teacher Educator Development (<https://info-ted.eu/profiles-council-members/>), and Shanks has been invited to sit on the GTCS Standards Writing Group.

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

[1] Aderibigbe, S.A., **Colucci-Gray, L.** and **Gray, D.**, 2014. Mentoring as a collaborative learning journey for teachers and student teachers: a critical constructivist perspective. *Teacher Education Advancement Network Journal*, 6(3), pp.17-27: <http://194.81.189.19/ojs/index.php/TEAN/article/view/192>

[2] **Shanks, R.**, **Robson, D.** and **Gray, D.**, 2012. New teachers' individual learning dispositions: a Scottish case study. *International Journal of Training and Development*, 16(3), pp.183-199: <https://doi.org/10.1111/j.1468-2419.2012.00403.x>

[3] **Mtika, P.**, **Robson, D.** and **Fitzpatrick, R.**, 2014. Joint observation of student teaching and related tripartite dialogue during field experience: Partner perspectives. *Teaching and teacher education*, 39, pp.66-76: <https://doi.org/10.1016/j.tate.2013.12.006>

[4] **Sosu, E.M.** and **Gray, D.**, 2012. Investigating change in epistemic beliefs: An evaluation of the impact of student teachers' beliefs on instructional preference and teaching competence. *International Journal of Educational Research*, 53, pp.80-92: <https://doi.org/10.1016/j.ijer.2012.02.002>

[5] Das, S., Dewhurst, Y. and **Gray, D.**, 2011. A Teacher's Repertoire: Developing Creative Pedagogies. *International Journal of Education & the Arts*, 12(15), p.1-39: <http://www.ijea.org/v12n15/>

[6] **Colucci-Gray, L.**, Burnard, P., Cooke, C., Davies, R., **Gray, D.** and Trowsdale, J., 2017. Reviewing the potential and challenges of developing STEAM education through creative pedagogies for 21st learning: how can school curricula be broadened towards a more responsive, dynamic, and inclusive form of education?: <https://jotrowsdale.files.wordpress.com/2017/11/bera-research-commission-report-steam.pdf> (report)

Grants

[P1] Scottish Teachers for a New Era, Scottish Government and Hunter Foundation, 2005-2011; (GBP1,800,000 (GBP900,000 each from Scottish Government and Hunter Foundation); (linked to references 1, 2, 3, 4)

[P2] Arts as a Tool for Learning Across the Curriculum (ATLAC), Scottish Arts Council, 08/2007-10/2009; (GBP28,500) (linked to reference 5)

[P3] Mobility Scheme in collaboration with University of San Andres, Buenos Aires, British Academy International. Creativity in Science Education and Science Teacher Education. 2013-2016 (GBP26,145).

[P4] From Stem to Steam? Reviewing the potential of creative pedagogies for 21st century learning, British Educational Research Association Research Commission, 10/2015- 03/2017 (GBP11,870) (linked to reference 6)

4. Details of the impact (indicative maximum 750 words)

The research outlined in section 2 above informed the highly influential Donaldson Report on teacher education in Scotland, *Teaching Scotland's Future*, in particular in relation to the need for evidence-based practice in teacher education. Donaldson has stated that "*the principle of decisions driven by evidence arising from the STNE initiative was highly influential in my report*". [S1a].

After the report was published, the Scottish Government accepted, in full or in part, all of its recommendations and subsequently established a National Partnership Group to consider them in more detail. This resulted in 20 substantial projects being taken forward by the National Implementation Board for Teacher Education nearly all of which had been completed at the time of the Scottish Government's own evaluation of the impact of the Donaldson Report in 2016 [S1b]. This states that "The evaluation found evidence of real progress in many areas of teacher education and, above all, there has been a significant shift in the culture of professional learning" (p. 6) and "These priorities were to be informed by self-evaluation and research evidence gathered by teachers within their daily practice" (p.11). In order to encourage this cultural shift, the report recommended that the General Teaching Council for Scotland (GTCS) introduce standards that recognise this continuous professional learning (p.11).

Subsequent to the Donaldson Report the GTCS did, indeed, introduce research and enquiry-based practice into the Standards for Teacher Registration in 2012 and this has been retained in the revised Standards for 2021 [S2]. The latest statistics for Scotland (December 2019) had the number of teachers at 52,247 and the number of pupils at 697,989. There are nearly 4000 student teachers in Scotland each year.

Key elements of the STNE research on supporting student and newly qualified teachers are the partnership approach and mentoring. This led to the development of the Joint Observation and Tripartite Dialogue for students on field experience (practicum) in schools [3]. The principles of this partnership approach have subsequently been implemented by other ITE institutions,

including Leeds City College [S3]. The mentoring research informed CPD for teachers and resulted in the development of effective mentoring partnerships with local authorities. Forty-four teachers have undertaken the mentoring CPD in the three years from 2015-2016: 2015/16 – 16 teachers (across Highland, Shetland and Aberdeen City); 2016/17 – 17 teachers (Aberdeen City); 2017/18 – 11 teachers (Aberdeen City).

In addition, the research led by Shanks has led to her involvement in the Norway Teacher Mentoring initiative. She has made significant contributions to the work done in 2017-18 by stakeholders in Norway to build a national framework for mentoring new teachers in kindergartens and schools, and her research and analysis has also been important for the work done by the Nordic Cross-sectorial Network on Induction and Mentoring New Teachers on influencing policymaking for induction and mentoring systems in the Nordic countries [S4].

The continuum of support included the development of Master's level courses initiated by the School of Education. These could be started by students in their final year of study and continued into their first teaching post. This has led to an ongoing collaboration with Aberdeen City council on the Practitioner Enquiry Action Research project taken forward by Robson and Mtika [S5]. Since 2014 there have been a minimum of 218 student teachers in Aberdeen who continued beyond the initial teacher education programme to undertake postgraduate study.

The guiding principles of the ATLAC initiative were adopted by the University of San Andres, which worked in partnership with an arts-based organisation - Crear Vale la Pena – based in Buenos Aires to develop the Arte, Bienestar, e Creatividad en la Comunidad (ABC) project [S6; P3]. This project was funded by Buenos Aires City Council and involved the Ministries of Education and Culture along with the University of San Andres and the Secretariat of Habitat and Inclusion. The ABC project involved 150 artists, 75 teachers and 1663 school pupils in deprived areas in Buenos Aires. The partnership between Aberdeen and Buenos Aires led to a memorandum of understanding between the University of Aberdeen, Aberdeen City Council and the University of San Andres signed in 2010 [S7]. This memorandum of understanding was developed in order for the parties to evaluate the possibility of developing collaborations in the fields of arts education, science education, teacher education, social and environmental justice.

The ABC project was followed up on by the organisation Crear vale la Pena from 2017 with its Creative Environments programme, explicitly recognising the earlier work of ABC and ATLAC [S8]. In 2013, GBP26,145 was awarded by the British Academy to support collaborative work with the University of San Andres in the specific area of creativity in science education, which took place between 2013 and 2016 involving 50 teachers in Argentina [S9].

Continuing with creativity and arts the research gained recognition in 2016 through funding (GBP12,000) awarded by the British Educational Research Association (BERA) for one of its prestigious Research Commissions awards. During the 18 months of the project, the commission involved around 100 participants from different sectors plus high visibility sessions in the programme at the annual BERA conference (attracting around 1000 international delegates each year). The extended technical project report [6] has had more than 2500 reads since it was first uploaded on ResearchGate in August 2017 and was first cited in an international review in November 2017. It has also been added to the EU Erasmus and School Education Gateway website, reaching a much wider European audience and beyond (<https://www.schooleducationgateway.eu/en/pub/resources/publications/developing-steam-education.htm>). This work has influenced STEAM developments in ITE institutions such as the University of West of Scotland and Edinburgh [S10].

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

[S1 (group)]

a: The influence of STNE on particular aspects of the Donaldson Report with particular reference to evidence-based practice is corroborated by a supporting statement from the author of Donaldson Report

b: Evaluation of the Impact of the Implementation of Teaching Scotland's Future, 1 March 2016, ISBN: 9781786521057. Available at <https://www.gov.scot/publications/evaluation-impact-implementation-teaching-scotlands-future/>

[S2] Incorporation of the principles of evidence-based reflective practice into the GTCS Standards in 2012 and 2020, based on the recommendations of the Donaldson Report. <https://www.gtcs.org.uk/professional-standards/standards-for-registration.aspx> and <https://www.gtcs.org.uk/professional-standards/professional-standards-2021-engagement.aspx>

[S3] Leeds City College, Professional Graduate Certificate in Education (Post-16 Education and Training) (English: Literacy and ESOL) (F/T) PROGRAMME HANDBOOK 2018/19. Joint Observation and Tripartite Dialogue specifically stated as part of the programme on pages 27-30 and attributed to Mtika et.al. (R3)

[S4] Supporting statement from the Leader of the National Network for Monitoring NQTs in Norway

[S5] Robson, D., & Mtika, P. (2017). Newly qualified teachers' professional learning through practitioner enquiry: Investigating partnership-based mentoring. *International Journal of Mentoring and Coaching in Education*, 6(3), 242–260. <https://doi.org/10.1108/IJMCE-03-2017-0027>
<https://doi.org/10.1108/IJMCE-03-2017-0027>

[S6] Report on “Art, Well-being And Creativity in the Community” Project (2012-2014) produced by Gabriel Garcia Tavernier of the University of San Andres, August 28th, 2014

[S7] Copy of Memorandum of Understanding between Aberdeen City and the City of Buenos Aires.

[S8] ATLAC and Creare vale la Pena, Crear Vale La Pena, Argentina 2020

[S9] Ines Sanguinetti of Creare vale la Pena. <https://www.crearvalelapena.org.ar/>

[S10] Statement from Dr Stephen Day at University of West of Scotland. Dr Laura Colucci-Gray, lead on the BERA report is leading the science developments at University of Edinburgh.