Developing a Research Engaged School

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University of Strathclyde
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Feel free to tweet through this session #EngageStrath18 @Kate_Wall98 @anna_dbeck @JW_Firth @PhilipTonner
Disclaimer: Radio #EduTalk

- Radio Edu Talk will be recording and conducting a live broadcast of our presentations only. They will not record the question and answer session.
- This is to enable those attending to listen back and to share our sessions with colleagues.
- The live broadcast is for colleagues who work across Scotland (and beyond) who were not able to travel to this event.
- To listen to the recording, please visit: http://www.edutalk.info/
1. Practitioner enquiry is about **learning** how to improve

2. Research should ideally be **integrated** into practice

3. Need to recognise and value different **expertise**

4. Research should be **useful** for teaching and learning

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Engaging in and with research

Engage in (doing) research
• Find out answers to your questions
• Test out own theories in the real world
• Explore an evidence base to practice and innovation

Engage with research (literature and practice)
• New evidence based ideas
• Increase awareness of successful (and not so successful) outcomes
• Codify own practice

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Two Key Perspectives in Scottish Context
(Not in competition. Neither is better than the other.)

Enquiry as Stance
- An epistemology (a world view)
- Tied up with democratic purpose and social justice
- A drive to improve that can be idealistic
- Informed teacher voice
- Research secondary to enquiry

Enquiry as Project
- Project based via programme, masters module, school initiative...
- Often finite and only one cycle of enquiry
- A strategic finding out
- Enquiry secondary to research
- Research model can be dominated by evaluation

Ideas developed in a GTCS think piece available on the GTCS website

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Becoming a Practitioner Enquirer

- I see groups of people approaching practitioner enquiry from both of these perspectives.

- Without access to a sustained, supportive community it can at best breed complacency but at worst it leads to a feeling of dissonance between their ideal and real life experience.

- Research process should be the common ground...

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Misleading dominant model of research

- Evaluation
- Intervention
- Measure
- Impact
- Control
- Input/output
- Generalisation
- “What works”

Baumfield et al. 2012

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The intent of practitioner research

- To address student need (Timperley 2008)
- To improve educational outcomes
- To support practitioners’ insight and understanding of practice (pedagogic and methodological)
- To facilitate practitioners’ reflective and strategic thinking (metacognition as methodology for professional learning: Portilho and Medina 2016)
- To be the foundation for dialogue (with colleagues, students, researchers, policy makers)

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Practitioner Enquiry as cumulative process

Made public

Systematic evidence

‘Systematic enquiry made public’ (Stenhouse 1981)

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Creative approach to evidence

- Start research conversations with a practice base
- See schools and other educational organisations as data rich environments
- Opportunities for quantitative, qualitative and mixed data collection, synthesis and analysis
- Remove barriers to what might be considered as ‘proper’ evidence - what is enough evidence to convince you?

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Opportunities to engage with

Make research accessible
Use of research to explain ‘why’
Research leads
Support further study
Opportunities to share
Special interest groups
Reading groups

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Engaging with research

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Don’t forget other practitioners’ research.

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Overview of value for money – EEF toolkit

Effect Size (months gain)

Cost per pupil

Promising

- Feedback
- Metacognition
- Peer tutoring
- Homework
- AfL
- Individualised learning
- Arts
- Ability grouping
- Summer schools
- Parental involvement
- Sports
- Performance pay
- After school
- ICT
- Pre-school
- 1-1 tutoring
- Smaller classes
- Teaching assistants

May be worth it

Not worth it

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Share the language of critique and enquiry
Creating a Practitioner Enquiry Culture

The Principle of Autonomy: the locus of control should be with the enquirer. They should be able to decide on the topic, the question, the evidence and the findings; however, these choices should be justified in relation to their perceptions of their pupils’ needs regularly within a supportive community.

The Principle of Disturbance: Relevant questions and the process of trying to answer them is likely to cause extra thinking as the complexity and connections within the classroom become more obvious. The enquirer has to be prepared for dissonance.

The Principle of Dialogue: Practitioner enquiry is not effective as a solitary activity, but rather it needs an ongoing process of shared thinking and codification against group understandings.

The Principle of Connectivity: Practitioner enquiry becomes more doable when we see the productive connections it has with normal teaching and learning practice.

Wall and Hall 2017

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Sustainability

Personal and system level

Autonomy
Disturbance
Dialogue
Connectivity

Metacognitive approach

Practice what we preach...

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The policy context for the research engaged agenda

Anna Beck
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Context: A shifting policy landscape

Donaldson’s Vision 2011
Empowered, autonomous, reflective, enquiring, critical, ‘agents of change’

NIF, Governance Reform, Education (Scotland) Bill 2018
Measuring pupil, teacher and school performance
Data, evidence, accountability
Donaldson’s vision: teachers as researchers

“The most successful education systems invest in developing their teachers as reflective, accomplished and enquiring professionals... who have the capacity to engage fully with the complexities of education and to be key actors in shaping and leading educational change” (p. 4).

“[Teachers] need to develop expertise in using research, inquiry and reflection as part of their daily skill set. Outstanding teachers use research and data to identify areas for improvement and take direct action to address underperformance2 (p. 70).
“extended professionals are agents of change, not passive or reluctant receivers of externally-imposed prescription”

Donaldson (2011, p. 18).
There is an **urgent need** to challenge the narrow interpretations of the teacher’s role which have created unhelpful philosophical and structural divides, and have led to **sharp separations of function amongst teachers, teacher educators and researchers.**

If we are to learn from some high-performing systems around the world and foster a **research-informed profession**, more has to be done to facilitate **knowledge exchange between schools and universities.**

**Putting Donaldson’s vision into practice: partnership**
National Improvement Framework (2016-2018)

- “We want all new teachers to develop as enquiring professionals” (2018, p.11)
- Data gathered on children and young people’s progress is essential (2018, p.16)
- This will provide us with information on the effectiveness of moderation processes and therefore the consistency of teacher judgement” (2016, p. 13)
Education Governance (2017, 2018)

• More ‘freedom’ to schools, but more responsibility to head teachers
• Increased data on children’s progress
• Increased school inspection by Education Scotland
• Increased data on teacher performance
• Clear accountability structures
• “We will streamline and enhance professional learning to ensure a coherent package of learning for teachers”
A Research Strategy for Scottish Education (2016) - delivering the NIF

“We will aim to foster greater communication between teachers and researchers.

Potential options include the creation of research champions at a school and local authority level, development of local and national events to share research practice, collaborative research with the teaching profession and establishing a research forum.

This would not only enable the more effective dissemination of research, but allow practitioners to be more effectively engaged in the research process”
Teacher research engagement

FROM RESEARCH AWARENESS TO TEACHER-RESEARCHER

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Teachers & research - background

- As the Donaldson report (2011) stated, “Any expectation that initial teacher education will cover all that a new teacher needs to know and do is clearly unrealistic” (p.34)
- Engagement in research/enquiry can play a CPD role.
- Can lead to better understanding of learning processes which are counterintuitive.
Aim

What is the aim of teacher research?

- To prompt teachers’ reflection on their classroom practice?
- To develop research-related skills?
- To prompt engagement with research more broadly?
- To find things out and share them more widely?
- To develop more effective teachers?
- ...something else?
Viewing research as a process, from initial engagement, via applying research in practice to active research projects.

Teachers are already at various stages in that process.

Group-based peer mentoring approaches.
<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible solution</th>
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<tbody>
<tr>
<td>A. Lack of time</td>
<td>A. Research/enquiry as self-directed CPD</td>
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<tr>
<td>B. Access to ethics procedures</td>
<td>B. School-based board/university partnership</td>
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<td>C. Access to journals</td>
<td>C. GTCS database/university partnership</td>
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<tr>
<td>D. Access to funding</td>
<td>D. List, provide or advise on funding</td>
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<tr>
<td>E. Skills, including planning,</td>
<td>E. Workshops on skills as part of LA-wide CPD</td>
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<tr>
<td>conducting and writing up</td>
<td>processes</td>
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<tr>
<td>F. Publication opportunities</td>
<td>F. Advise on or provide</td>
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One model: “SURE”

- **SURE** or “School and University Research Enquiry” is a research group comprising
- 3 Glasgow-based school teachers
- 4 University of Strathclyde staff

Teacher-initiated

Initial focus on attainment, PEF funding, parental engagement.

Made use of University ethics approval process.

Currently carrying out a research study with intention to publish and follow up.
Establishing Hutchesons’ Centre for Research: a reflection

Dr Philip Tonner FRSA, FSA Scot
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The Hutchesons’ Centre for Research (HCR)

The aim of the HCR was to:

to create of a community of scholars comprised of (our) pupils, staff and external researchers.

Collegiate structure:

► Director, Executive Board,
► Academic Advisory Panel,
► Project Researchers.
Activities

What did the Centre do?

*The HCR drew together existing activities while creating new opportunities.*

Research projects:

- Staff Projects - important CPD implications.
- External Projects - research collaborations (example, Philosophy and Museums project).
Project researchers - pupils


- What our pupils said:

  *I have gained a lot from this process of researching and writing my IRP. It has taught me how to write mathematical papers, something which will help me at University.*

  *As you decide yourself when to work and how much to do it is a feeling of independence which is not usually felt in school, with no parents or teachers pushing you for deadlines.*
Project researchers - staff

- Staff - research projects.

Example: Head of Geography.
Title: Researching the barriers to education globally.

Research aims of project:

1. To engage pupils in their communities in research into local barriers to education.
2. To gather and disseminate pupil research projects online.
3. To present the results of this research as educational resources suitable for schools (so that other schools might follow this example).
4. To identify ways in which these barriers to education might be further broken down.
CPD: My PRD and the HCR

<table>
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<th>Hutchesons' Centre for Research</th>
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<tr>
<td>Research Project Preliminary Proposal</td>
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<tr>
<td>Telephone number</td>
<td>Discussed with HoD</td>
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<td>Title of project</td>
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<td>Research aims of project</td>
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<tr>
<td>Brief description of project</td>
<td>(Up to 500 words)</td>
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<td>Background information</td>
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Project researchers - external

External Researchers

Example:

- Dr Victoria Harrison,
- Philosophy & Education, University of Glasgow.

Project:

**Philosophy and Museums: ethics, aesthetics and ontology** research conference involving external academics, museum curators, Hutchesons’ staff and pupils.
Research Fellowship

- Partnership with the School of Education, University of Strathclyde.

- Established a funded research fellowship enabling a member of university staff to work in school one day a week for a number of months.
School based research

- Research seminar(s)
- Dissemination of research
- Research placements/researchers in residence
- Conference(s)
- University partnerships - Research Fellowship
- Accessing funding and fellowships
- Community of scholars
- Ethos and culture of research
- Staff Continuous Professional Development
- Networking Dissemination of results
Findings: Hutchesons’ Centre for Research (Anna Beck)

Barriers to doing research: time and space

“At the moment it’s quite hard to have enough engaged and interested people who have a bit of time.”

“Time is always going to be a big barrier.”
Teacher research: is it just part of being a teacher?

“If you view teachers as people who just go and deliver content in a classroom, then that’s a very narrow and limited view of what they should be. Not to say that every teacher needs to be a researcher, but I don’t think there should be an assumption that they’re not, and that research can only be done by people in white coats or whatever.”

“I think that [research] fundamentally improves teaching. There’s no question about that in my mind, you can’t really differentiate between the two”

“I don’t necessarily see it as additional and I would love to see it as integral to my job. But the reality is, it would be seen as additional. By other teachers and the system.”
Different understandings of research and enquiry

“To be research, it has to contribute to our understanding more broadly rather than making me a better professional. I think that is a different aim. It might make me a better professional to do it, but I don’t know that that’s the aim.”

“I wouldn’t count myself as a researcher because I’ve read however many articles, studies and databases. No. If I was to take the information I was reading and implement it on a practitioner enquiry basis to widen that out, then yes. But not just having a look.”
Teacher researcher identities: Where do you go?

“If you do a PhD straight after your first degree and then you go into academia, you’ve got a pathway... Whereas if you’re a teacher engaged in research, I don’t think there’s an obvious destination, really. Perhaps that’s a barrier... ”

“Is there enough to hold teachers in a school who are engaged with research, and to feel that they’re actually working towards something? Or do people perhaps feel, oh, well, I will need to make a move, I will need to become university staff.”
Barriers to doing research: agency and structure

“There’s very strong characters in teaching and changing their minds can often be difficult. Even when the evidence is sitting right in front of you... I would want somebody to sit up and pay attention to [my research]. I wouldn’t want to finish that research and then find that five years down the line we’re all just carrying on as we were.

I’m not in a position to make changes. I’m a classroom teacher, I’m not a promotive member of staff, so I don’t have that power.”

“Although there’s individuals on board with the concept of research, I don’t believe they would be on board all the time with the results of that research. They would only be on board if they had already agreed with the results before the research was done.”
Recommendations

- **Time and space: how do we do this?**
  - Greater support for teachers to engage in research
  - Potential for closer relationships with higher education
  - Supportive networks of teachers engaging in research

- Should not be viewed as an ‘add-on’ - part of being a teacher

- A clear pathway to retain teachers within schools

- **Is it for me?** Conversations around what constitutes research and who can do it - shared vision

- **Teacher agency:** the ability to act on enquiry and research
The Learning to Learn Project
England 2003-2011
Case study 3
A School University Partnership practitioner enquiry network

Network dialogue at joint training:
- Research approaches
- Findings
- Theories of practice

Institution dialogue via coaching support:
- Research question development
- Problem solving
- Context specific input
The Learning to Learn Research Project

Phase 1
2000-2001
(Rodd 2001)

Phase 2
2001-2003
(Rodd 2003)

Phase 3
2003-2007
(Higgins et al. 2007)

Phase 4
2007-2011

L2L in Schools

May-Sept 2007

Academic Year 2007/2008

Academic Year 2008/2009

Academic Year 2009/2010

Aug-March 2010/11

L2L in FE
2008-2010

Academic Year 2008/2009

Academic Year 2009/2010

Teachers' Professional Enquiry through Action Research

Cross case study data collection

Cross case study data collection

Cross case study data collection

Final data collection & report

Base line data collection

Do

Plan

Review

Do

Plan

Review

Do

Plan

Review

Final data/report

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A group of people prepared to listen to each other, share experiences and act as critical friends.

A focus on thinking about learning; experiences and perceptions of the learning process.

An emphasis on asking questions and trying to find out the answers.

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Another example: a classroom enquiry moves across the school

- **Wilbury Primary School, Enfield: Phase 3**
- **Formative/peer assessment in Year 2 writing**

**Cycle 1:**

Children in the two intervention classes showed better attitudes and dispositions to writing than children in the four control classes. Their writing scores improved significantly (effect size of 0.76).

**Cycle 2:**

The project extends to one experimental class per year group and while writing scores continue to improve, there is more variability. More fine-grained analysis discovers that there is a clear link between success and classes where there was a greater emphasis on speaking and listening.

**Cycle 3:**

This led to a whole-school focus on children’s speaking and listening skills, centred around giving them the language and ability to talk about their own learning. This led to improved attainment as well as improved classroom interaction and behaviour. A key factor was that teachers were knowledgeable and enthusiastic about L2L approaches.

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Example: Development over time

Camborne Science and Community College, Cornwall: Phase 1, 2, 3 & 4

Multiple L2L innovations implemented and sustained over 10 years:

- Super Learning Day (Year 9)
- Students as Researchers (Year 9-11)
- Form tutor interventions in tutor time (Years 9-11)
- Whole year group interventions on motivation, thinking about the future, planning for success at GCSE (Year 10)
- Whole year interventions on the ‘mechanical’ side of L2L for success at GCSE (Year 10)
- Parents sessions in Year 11 (‘Helping your child through GCSE’)
- A expanded one-to-one mentoring programme (Year 11)
- Embedding of L2L in normal lessons

“...subject areas that actively involve students in thinking about how they learn get better exam results. This is particularly true of this year’s results in French, History and Design Technology, in which the “parents involvement in school” project continues to have an impact.

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I couldn’t have seen me going on to further study without being involved … because it’s challenging, it’s got the constant questioning, constant challenging of what I think about learning and how children learn and it makes me think, it makes me step back and then that makes me think about what I’m doing in the classroom, what we’re doing in school and where our school’s going.

“Learning is fun.”

“Learning is hard but it helps me to do my work.”

“Learning is doing – busy to help you understand.”

“The elephant helps me look after my work and try my best. It gives me confidence to do things I've never done before.”

“The jaguar has helped me because it helps me to be ready to do my work or to do sport or listen and learn.” (H, Y3 girl)
Example: the L2L network

2009 Residential

- 30 L2L in Schools posters
- 36 participants responded
- 29 from schools
- 7 from FE colleges
- 16 from schools
- 10 from colleges
- 26 additional participants who saw the posters
- 10 participated in 2009
- 4 new to the project
- 11 participants from FE
- 19 participants from HE
- 1 new to the project

2010 Residential

- 27 L2L in schools posters
- 10 L2L in FE posters
- 12 EQUATE posters
- 1 poster from Groeningen
- 2 presentations from university team and guest speaker
- 21 participants from schools
- 17 participated in 2009
- 4 new to the project
- 11 participants from FE
- 19 participants from HE
- 1 new to the project

Transfer of professional learning across contexts via Residential conference posters

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Professional learning essential for effective student learning

A time and space to prioritise talk about what works in learning and teaching
Conceptual framework showing relationship between enquiry and learning trajectories

- This relationship is improved if:
  - The focus of the enquiry is learning (increases metacognitive potential)
  - The enquiry intent is shared and jointly owned
  - Dialogue is supported between all participants
  - The tools used are catalytic (Baumfield et al 2009)

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Mirror Effect

- Classroom learning
  - Metacognitive pedagogies
  - Enquiry based learning

- Professional learning
  - Reflective practice cycle
  - Practitioner enquiry cycle
  - Metacognitive as a methodology for professional learning (Porthilo and Medina 2016)

- Coaching/ facilitation
  - Role of university in project
  - Role of teacher in classroom

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Concluding thoughts

- Shared understanding, purpose and vision
- Flexible model: make it ‘fit’ to your context and needs
- Build new networks with HE and other organisations: expertise, time and resource
- Collaboration: within and across schools
- Don’t forget: it is all about learning (teachers and students)

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