Suggested Reference


Copyright

Items in ResearchSpace are protected by copyright, with all rights reserved, unless otherwise indicated. Previously published items are made available in accordance with the copyright policy of the publisher.

https://researchspace.auckland.ac.nz/docs/uoa-docs/rights.htm
Teachers’ Research Engagement as and for Professional Development: The Case of English Teachers in Singapore

Lawrence Jun Zhang  lj.zhang@auckland.ac.nz
University of Auckland, New Zealand
Why Teachers’ Research Engagement

• Involving teachers in research in the wider context of highly publicized arguments about the quality of educational research (e.g., Hargreaves, 1996)

• Why?
  – classroom teachers should make teaching an evidence-based profession.
• Best evidence-based practice (BEBP) has been extensively discussed in the literature (e.g., Thomas & Pring, 2004), and one fundamental argument is that when teachers engage in research, their pedagogical decisions will be informed by sound research evidence, and this will have a beneficial effect on both teaching and learning (Hargreaves, 2001; see also Barkhuizen, 2009).
• It is generally accepted that more informed use of and involvement in research by teachers can help them understand their teaching and students’ learning as a way of their professional development (PD).

• Through engagement with research, teachers become “expert knowers about their own students and Classrooms” (Cochran-Smith & Lytle, 1999, p. 16) and consequently better understand how what they do affects their students’ learning (Freeman, 1996).
In recent years educational authorities in many countries have promoted teacher engagement both in research, by doing, and with research, through reading (Borg, 2009; Wen, 2013; Zhou, 2011).
The benefits of research engagement for teachers are thought to include enhanced capacity to make sound, autonomous professional judgments as well as strengthening their intellectual capabilities, feelings of empowerment, and opportunities for professional development (Lankshear & Knobel 2004; Loughran 2010; Mitchell, Reilly, & Logue 2009).
However, what is entailed in the PD work remains a question.

Unfortunately, despite academics’ interest in examining teacher attitudes towards research, little has been reported on how real classrooms are grounds for fermenting new ideas so that classroom teachers become more competent and professionally more viable as part of the research team.
Key Question

- how did English language teachers perceive changes in the way they taught English in the classroom because of their engagement with a research project that was intended for their PD?
Borg (2010) argues that there is a tension in the field of TESOL between, on the one hand, the transformative potential for teachers of reading and doing research and, on the other, the extent to which such engagement with research actually occurs outside the context of formal study (e.g., MA TESOL or MEd TESOL programmes).
Singapore

“The TALIS data note that some countries, such as Italy, may have a more experienced but aging teaching workforce, while others, such as Singapore, might have a generally younger but somewhat less experienced teaching workforce. There are impacts on and opportunities for policies to help shape the teaching profession in both of these instances. If a country has a young teaching force, as is the case in Singapore, initial teacher education will have a greater influence on the practices occurring in the classroom.” (OECE, 2014, p. 50)
A Teacher Education Model for the 21st Century (TE21)

21st century Learner – the heart of teacher education goals

Programmes
Curriculum
- T-P Nexus
- Pedagogies
- Assessment

Competencies

Values
Skills
Knowledge

New V^3SK
Graduand Teacher Competencies
Strengthening the Theory-Practice Nexus

Extended Pedagogical Repertoire
Assessment Framework for 21st C Teaching & Learning
Enhancing Pathways for PD

MOE
NIE
Partnerships
Schools

21st century Teaching Professionals
Attributes of the 21st C Teacher

Developing Education Professionals

VALUES
- Empathy
- Belief that all children can learn
- Commitment to nurturing the potential in each child
- Valuing of diversity

SKILLS
- Reflective skills & thinking dispositions
- Pedagogical skills
- People management skills
- Self-management skills
- Administrative & management skills
- Communication skills
- Facilitative skills
- Technological skills
- Innovation and entrepreneurship skills
- Social and emotional intelligence

KNOWLEDGE
- Self
- Pupil
- Community
- Subject content
- Pedagogy
- Educational foundation and policies
- Curriculum
- Multicultural literacy
- Global awareness
- Environmental awareness

Attributes of the 21st Century Teaching Professional

<table>
<thead>
<tr>
<th>V1 - Learner-Centered Values</th>
<th>V2 - Teacher Identity</th>
<th>V3 - Service to the Profession and Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>Aims for high standards</td>
<td>Collaborative learning and practice</td>
</tr>
<tr>
<td>Belief that all children can learn</td>
<td>Enquiring nature</td>
<td>Building apprenticeship and mentorship</td>
</tr>
<tr>
<td>Commitment to nurturing the potential in each child</td>
<td>Quest for learning</td>
<td>Social responsibility and engagement</td>
</tr>
<tr>
<td>Valuing of diversity</td>
<td>Strives to improve</td>
<td>Stewardship</td>
</tr>
<tr>
<td></td>
<td>Passionate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adaptive and resilient</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ethical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional</td>
<td></td>
</tr>
</tbody>
</table>

The Faculty of Education

Te Kura Akoranga o Tāmaki Makaurau
Incorporating the Auckland College of Education
Countries are ranked in descending order, based on the percentage of teachers aged 49 or younger.

Source: OECD, TALIS 2013 Database, Table 2.1.
### Sg Teachers’ Work Experience

#### Work experience of teachers

<table>
<thead>
<tr>
<th>Country</th>
<th>Average working experience as a teacher at this school</th>
<th>Average working experience as a teacher in total</th>
<th>Average working experience in other education roles</th>
<th>Average working experience in other jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latvia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Israel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Croatia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flanders (Belgium)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serbia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iceland</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alberta (Canada)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abu Dhabi (UAE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>England (UK)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Countries are ranked in descending order, based on the average years of working experience as a teacher in total.

Source: OECD, TALIS 2013 Database, Table 2.6.

StatLink: http://dx.doi.org/10.1787/888933041155
Teacher PD in Research Project

SBI Procedures

Cohen (2011) recommends the SBI cycle:

- Strategy preparation
- Strategy awareness-raising
- Strategy training
- Strategy practice
- Personalization of strategies
  - start with the established course materials and then determine which strategies might be inserted,
  - start with a set of strategies that they wish to focus on and design activities around them, or
  - insert strategies spontaneously into the lessons whenever it seems appropriate.
Pedagogical Cycle in SBI

**Teacher Responsibility**

**Preparation**
Activate Background Knowledge

**Presentation**
Explain
Model

**Practice**
Prompt Strategies
Give Feedback

**Evaluation**
Assess Strategies

**Expansion**
Support
Transfer

**Student Responsibility**

Attend
Participate
Apply Strategies with Guidance
Assess Strategies
Use Strategies Independently
Transfer Strategies to New Tasks

Chamot, Barnhardt, El-Dinary, & Robbins (1999, p.46)
## Research Design

### Phases of SBI

<table>
<thead>
<tr>
<th>Phases of SBI</th>
<th>General learning objectives</th>
<th>LLS/ tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defining the task</td>
<td>✓ Fostering the growth in metacognition/LLS</td>
<td>❖ LLS-RQ</td>
</tr>
<tr>
<td>Setting goals &amp; planning</td>
<td>✓ Improving biliteracy: reading/writing</td>
<td>❖ LLS-WQ</td>
</tr>
<tr>
<td>Enacting tactics</td>
<td></td>
<td>❖ R-W experiences</td>
</tr>
<tr>
<td>Adapting metacognition/LLS</td>
<td></td>
<td>❖ Teacher interviews</td>
</tr>
<tr>
<td></td>
<td></td>
<td>❖ Learner-Teacher sharing sessions</td>
</tr>
</tbody>
</table>
Effective Self-Regulated Learning Strategies Survey

Chinese Reading 华文阅读

Self-Regulated Biliteracy Learning Research Team

2009-2011

Effective Self-Regulated Learning Strategies Survey

Chinese Writing 华文写作

Self-Regulated Biliteracy Learning Research Team

2009-2011
Effective Self-Regulated Learning Strategies Survey

ENGLISH WRITING

Self-Regulated Biliteracy Learning Research Team
National Institute of Education

NiE Self-Regulated Biliteracy Learning Research Team
2009-2011
RTI: Biliteracy Intervention in Schools

Survey (R+W) • 2 schools

Intervention • 2 schools

Contrast groups Vs Treatment groups • 2:2
• Teachers can intervene to help by teaching students (if they have sufficient pedagogical and content knowledge, Chamot, 2005; Cohen, 2007)
  - specific strategies for planning
  - self-regulate reading/writing processes through SBI
    • Set goals
    • Cope with difficulties
    • Self-evaluate
  - Improve their reading/writing
  - Talk in essential to the process
Intervention in schools

- 2 Singapore primary schools, P4 pupils
- 178 for the experimental group
- 148 for the control group (because only Chinese students are included)
- 1 semester in during semester for each skill (Reading & Writing in English and Chinese)
- A curriculum package was developed by the research team in English and Chinese
# Participant information in the intervention study

<table>
<thead>
<tr>
<th>Age</th>
<th>Intervention group</th>
<th>Comparison group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>18</td>
<td>11</td>
<td>29</td>
</tr>
<tr>
<td>9</td>
<td>157</td>
<td>134</td>
<td>291</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>178</td>
<td>148</td>
<td>326</td>
</tr>
<tr>
<td>Text type /genre</td>
<td>Main purpose/context</td>
<td>Audience</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Narratives</td>
<td>To entertain and please readers/listeners</td>
<td>Anyone who chooses a story to read or listen to the story</td>
<td></td>
</tr>
<tr>
<td>Recounts (Personal and factual/historical)</td>
<td>Personal recounts</td>
<td>To relate events, usually in a chronological order of what the writer personally sees or experiences</td>
<td>Close friends for personal recounts;</td>
</tr>
<tr>
<td></td>
<td>Factual/historical recounts</td>
<td>To record specifics of an incident or event</td>
<td>Any interested reader or listener</td>
</tr>
<tr>
<td>Expositions</td>
<td>To persuade or convince people or to argue for or against a point</td>
<td>Voluntary readers or listeners</td>
<td></td>
</tr>
<tr>
<td>Explanations</td>
<td>To describe or explain how physical entities or phenomena objectively</td>
<td>People who need this knowledge</td>
<td></td>
</tr>
<tr>
<td>Information reports</td>
<td>To document and organize factual information such as news report or an announcement</td>
<td>People who need this information</td>
<td></td>
</tr>
<tr>
<td>Procedures</td>
<td>To direct readers or listeners to carry out a procedure correctly</td>
<td>People who need to know how to do something</td>
<td></td>
</tr>
<tr>
<td>Conversations and Short functional texts</td>
<td>To interact for socialization or academic discussion or to relay messages for transactional purposes</td>
<td>People interested in joining conversations on particular topics or for obtaining messages</td>
<td></td>
</tr>
</tbody>
</table>
SAMPLE OF A NARRATIVE

My wife had said something, but it was well after midnight. I had no idea what it was. I numbled a question of sorts.

"I heard a noise," she hissed.

"What kind of noise?"

"A bump," she whispered. BUMP! "Just like that one," she added, her eyes widening in fear.

We definitely had something in the house. My vertebrae scrambled over one another as they scurried up my spine to hide in my scalp. My hair stood up to make room.

Unlike the other night noises I can recall, that bump had not been of the house-settling sort. And we don’t have a dog or cat. We do have two turtles, but they hardly count as "things that go bump in the night."

I knew my duty, but I was not pleased. Going to look for the something or someone was not what worried me. It was the extremely daunting prospect of meeting that someone. I knew that I could not very well say, "Right, I’ve spotted you. Now you have to leave."

I decided a weapon was in order, then abruptly realized that my bedroom is remarkably bereft of suitable choices. The spoon from late-night supper would not be much help unless the intruder proved to be a large-boiled egg. nor did I have faith in the punch packed by my down-filled pillow.

It came down to a shoe, a lamp or the telephone – all reasonably blunt instruments - or a glass. I dismissed the glass; I might break it.

Another problem occurred to me. No matter what weapon I chose, I’d actually have to use it if it was to do any good. I doubted that the average serial killer would be much deterred by a homeowner brandishing a shoe in his pajamas, no matter how impressively polished it might be. But any violence I might do was, I feared, likely to injure the other fellow, and I didn’t want anyone bleeding all over the carpet and the freshly painted walls. And while I really did not want to hurt anyone, I also did not want anyone to hurt me.

Despite these gloomy thoughts, I knew I must take decisive action to protect my family. Heartened by the lack of any further noises – and I listened hard for a good fifteen minutes – I took shoe in hand and staunchly tiptoed from room to room. I was downstairs in the kitchen before I remembered to breathe.

There was nothing in the kitchen that there shouldn’t have been. The basement held nothing more sinister than a minefield of sharp-edged little plastic toys.

It was in the living room that I finally discovered the source of our bumps. Gravity had apparently prompted a huge book to fall over – at least, I think it was gravity – and another book had imitated its neighbour some moments later.

Back upstairs, feeling justifiably proud of my exertions, I gently laid my shoe on the night table and crawled back into bed. "It’s okay," I said, snuggling under the blankets. "The noise was perfectly harmless."

The woman I love, for whom I had just risked my life, yawned. "What noise?" she mumbled.

Source: Reader’s Digest, April 1996.

Note: The examples given for each of the language features are not exhaustive.
## List of writing strategies taught

<table>
<thead>
<tr>
<th>Awareness-raising</th>
<th>Planning</th>
<th>Execution</th>
<th>Monitoring</th>
<th>Revising</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking about the text-type or text-organisation</td>
<td>Global planning</td>
<td>Thinking about useful text types</td>
<td>Checking appropriateness of organisation</td>
<td>Focusing on ideas</td>
</tr>
<tr>
<td>Considering target audience</td>
<td>Local planning (including language use)</td>
<td>Thinking of specific language features</td>
<td>Checking coherence in ideas</td>
<td>Focusing on text organisation</td>
</tr>
<tr>
<td>Thinking about the purpose of text</td>
<td>Brain-storming in groups</td>
<td>Thinking of effective writing/samples</td>
<td>Checking cohesion in language use (use of connectives, e.g., First, second, last, etc.)</td>
<td>Focusing on voice, choice of words and sentence-level fluency</td>
</tr>
<tr>
<td>Using right tenses</td>
<td>Using graphic organisers</td>
<td>Thinking of using right tenses</td>
<td>Finalising</td>
<td>Checking grammar</td>
</tr>
<tr>
<td>Liking ideas to voice, word choice</td>
<td>Sharing ideas across groups</td>
<td>Thinking of word choice to bring out the writer’s voice</td>
<td>Checking the appropriateness in word choice, etc.</td>
<td>Seeking comments from peers (on ideas)</td>
</tr>
</tbody>
</table>
Research Engagement as PD

- Prior to the research
- During the research
- Upon completion of the research
How Did Teachers Feel about Research Engagement?

- Awareness about importance of research
- Value of research for enhancing understanding of the national curriculum
- Effective instruction based on research experience
“I thought that travelling to NIE would be good for me to fulfil the MoE requirements. I only realised how meaningful it was when I was involved in the research process.” _Jane, English teacher of 7 years teaching experience

“I always thought that teaching English according to the syllabus is to teach text-types. I did not realise the real basis the syllabus was created on.” _Jay, English teacher of three years’ experience (enrolled in the MEd programme after our research)
• “My understanding of genre greatly increased because of my personal involvement in working on the teaching materials used in the experimental study.” _Lee, Chinese teacher of 6 years’ experience

• “I was not totally aware that SRL strategies can be built into our curriculum in my lesson plans.” _Judy, Chinese teacher of two years’ experience

• “I can now tap into the values of the EL Syllabus for teaching English more effectively.” _Sam, English teacher of 1 year experience
Discussion

• The purpose of teacher research engagement is improvement in the quality of teaching through a ‘reflexive, recursive and collaborative’ process (Dudley 2011, 5).

• Such engagement involved small groups of teachers collaboratively planning lessons.
• The process required an investment of time and patience: “Lesson study is a process of improvement that is expected to produce small, incremental improvements in teaching over long periods of time” (Stigler & Hiebert 1999,p.121).
Teachers might have
• increased knowledge of subject matter,
• increased knowledge of instruction,
• increased ability to observe students,
• stronger collegial networks,
• stronger connection of daily practice to long-term goals,
• stronger motivation and sense of efficacy and
• improved quality of available lesson plans.
Overall Benefits

• Greater awareness of existing resources.
• Clearer interpretation of the national English curriculum (syllabus)
• Better understanding of ‘text types’.
• Greater teacher collaboration.
• Clearer realisation of the interconnectedness between the Chinese and English textbooks and pedagogical strategies
• Development of teacher knowledge, practice and professionalism.