Teaching without research – or driving without watching the road

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The Road Ahead

- Expansion of the analogy
- Illustrative anecdotes
- Research and inquiry
- ELIS Research Fund
- Final words



Driving without watching the road...



Oops!



Thesis

- Driving without watching the road:
 - Dangerous
 - Lethal for the driver and pedestrians
- Teaching without research (inquiry)
 - Dangerous
 - Lethal for the teacher and students



Research or inquiry?

- Research
- Action research
- Classroom inquiry
- Lesson study



Defining inquiry

- A process of systematic, rigorous and critical reflection about professional practice, and the contexts in which it occurs, in ways that question taken-for-granted assumptions. (Reid, 2004, p. 4)
 - Reid, A. (2004). Towards a Culture of Inquiry in DECS. Occasional Paper Series, no. 1. Adelaide: South Australian Department of Education and Children's Services.
- In practical terms, the inquiry approach in schools involves identifying what is working well in schools so it can continue, and also identifying what is not working so well in schools, so it can be changed. (Timperley & Parr, 2010, p. 12)

Timperley, H., & Parr, J. (2010). Evidence, inquiry and standards. In H. Timperley & J. Parr (Eds.), Weaving evidence, inquiry and standards to build better schools. (pp. 9-23) Wellington, New Zealand: NZCER.

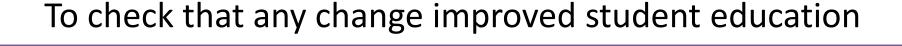
Action research

 Reasoning in the professions, e.g., business, engineering, teaching, or architecture, combines characteristics of both problem solving and critical thinking. In professional practice, problems are ill-defined, but solutions can often be tested, although without scientific or mathematical precision. Faced with complex problems, professionals conduct informal but rigorous "action experiments," evaluate the results of their experiments, and modify their approaches based on the results.

Kurfiss, J. G. (1988). *Critical Thinking: Theory, Research, Practice, and Possibilities.* (ASHE-ERIC Higher Education Report No.2). Washington, DC: Association for the Study of Higher Education.

Aims of research/inquiry

To improve student education To improve teaching To reflect on what is happening in and out of class To look at what works and make it better To look at what doesn't work and replace it





- It involves looking at one's own practice (teaching).
- It involves looking at the context (students, learning, assessment).
- The aim is to make decisions about future action.
- It is systematic, rigorous and critical (Reid, 2004)



When is inquiry done?

- 1.During a lesson as reflection-in-action: thinking on your feet by assessing our situation and engaging in some experimentation
- 2.After a lesson as reflection-on-action: examining an issue, problem or success taking place over a period of time to interrogate data, theorise, formulate strategies and decide when and how to implement those strategies
- 3. Preparing for the future as *reflection-for-action*: bringing together the other two 'moments' as the teacher prepares for future action

- A teacher
 - A teacher may have a particular issue that he/she may want to look at in their own teaching.
- A group of teachers
 - A group of teachers may want to work together on an issue they share. There are some advantages to this:
 - Strength in numbers helps with morale.
 - Mutual support helps in noticing problems, finding solutions and developing materials.
 - Results can be more easily shared and applied.



Teacher inquiry cycle promoting student outcomes

What knowledge and skills do our students need to meet important goals?

What has been the impact of our changed actions on outcomes we value for our students?

What knowledge and skills do we as professionals need to meet the needs of our students?

Engage students in new learning experiences

Deepen professional knowledge and refine professional skills

Timperley, H. S. (2011). Realizing the Power of Professional Learning.
Maidenhead, UK:
McGraw Hill



ELIS Research Fund (ERF) impact study

- 42 ERF teacher-researchers surveyed anonymously
- 24 responded
- Feedback was positive
- Impressive comments



- A sense of mindfulness in teaching after having participated in the ERF process. A greater awareness of the need to refine the teaching process in order that the students benefit from the methods adopted.
- I am more aware of how students learn and being able to get inputs from them about what they want to learn has allowed me to have very focused yet impactful lessons with them. This process has allowed students to take ownership of their learning and because of this, they were very participative.

- The most important takeaway was the awareness of how the language of Science needs to be explicitly taught.
- The process of the quantitative study from the research to the conducting of the research and data collection and analyses to finally drawing conclusions and writing the final report has been insightful as well.
- Better appreciation of the rigour involved in writing up a good paper to request funding. The numerous iterations of the report taught me perseverance.

- I have learned why my pupils did not perform well in comprehension and I have learned strategies to use to help them.
- Data collection is not easy. I need to practise and read more about this. ERF has left an indelible impact on the way I see action research.
- A greater desire to seek clarification from the students that the lesson objectives have been met. Being more reflective in refining the lesson for the next class to ensure that most or all of the lesson objectives will be met in the following classes.

- Not all strategies may have immediate quantitative results.
 It is more viable to look at qualitative results first.
- The process has invited me to relook what I should STOP doing, SIMPLIFY what I am doing, as well as to SHARE this knowledge of ERF with colleagues and the fraternity.
- I am thankful that my mentor was able to walk me through the final report writing as well as interpreting data.



When is inquiry done?

- It's about constantly reflecting on teaching practices and how they can be tweaked better for the students
- It is important to be that reflective practitioner who constantly collects and uses data of student learning so as to inform instruction.
- The research project encourages a fair bit of self reflection and this in turn has helped me keep in check reasons why I do what I do in class. The ERF process has encouraged my teachers and I to work together and own the problem under study together.

- Sessions with consultants have given me more insights into the importance of research in our teaching of English Language in the classroom. Teachers with common interests are able to come together to improve practices with the support of ERF.
- It has helped me in crafting a good research question and investigating the impact of an intervention on the students.
- As we did not utilise the research fund, what we gained was invaluable advice from the consultants at ELIS.
- Meeting the mentor that helped me to see blind spots that I might have missed out in the process.

- I learnt to take cues from my students and change my lessons on a daily basis to suit their progress.
- I think if not for my other 2 group members, I would have struggled to complete the research project. [...] Learning was all the more enriching because of the group effort as we became each other's eyes. Discussions with them made the learning richer.
- In the past, teachers from the department were hesitant in conducting classroom based research as they were uncomfortable with the coming up with the design of the research. Now, the team is equipped with research skills and is able to share with other department teachers.

- The ERF process has encouraged my teachers and me to work together and own the problem under study together.
- Designing lesson plans and the follow-up discussion on these plans with my mentor enabled me to reflect on my teaching strategies and taught me how to improve on my teaching methods.
- The team had the theme in mind but it was the sessions with the consultants with feedback and advice that encouraged the team to complete the research. The consultants have made the process enjoyable as they removed the fear and built confidence in the team.

Final words

- Successes
 - Increasing numbers
 - Teams of reflective teachers talking to each other
 - Number of teachers with experience in inquiry
- Gaps
 - Lack of sharing across teams
 - Insufficient technical support



Final words

Solution

- In 2018, ELIS Research Team will add a cooperative online platform offering an online community that teacher-inquirers can join
- The online platform will include materials on referencing literature, statistical analysis, qualitative analysis will be added for just-in-time learning

