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Evidence use for educational improvement: Integrating Data-based Decision Making with Research Informed Teaching'

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Context

- Increasingly national and district governments: pursuing bottom-up approaches to school improvement
- Schools increasingly establishing PLCs
- DBDM and RITP: two separate fields of PLC activity
- More effective way to approach school improvement in self improving systems: combine 'the best of two worlds'.

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Context

- Increasingly pursuing improved
- Schools
- DBD
- More self-improving worlds?

ments:
A call to integrate data-based decision making and research-informed practice into a comprehensive PLC based approach that designed to enhance teaching quality and, as a result, increased student achievement.

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Structure of the presentation

- History, theories of action and examples
- Aims and goals
- Evidence of effectiveness
- DBDM and RITP comparison and suggestions for one overarching approach to school improvement.

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Data-Based Decision Making

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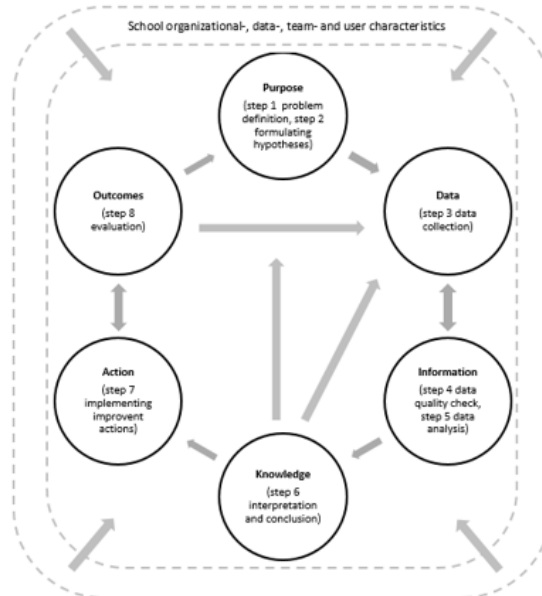


History

- The collection, analysis, and use of qualitative and quantitative data for decision making with the goal of school improvement
- Assessment data, but also surveys, observation, interviews etc.
- Data-driven vs data-informed

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Theory of action and data team example



Schildkamp, Smit, & Blossing, 2016

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Aims and goals

- Data use for accountability
 - E.g., share results with parents, the inspectorate
- Data use for school development
 - E.g., policy and professional development
- Data use for instruction
 - E.g., adaptive education
- Ultimate goal: improve student achievement

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Implementation

- In the Netherlands: less than 30% of schools
- Information overload
- Lack of data literacy
- Invest in teacher education and professional development
- Combine data with expertise of teacher

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Effectiveness

- Can lead to improved student achievement, but support is needed:
 - Data team intervention (Poortman et al., 2016)
 - Focus intervention (Van Geel et al., 2016)
 - Learning schools model intervention (Lai et al., 2014)

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Research Informed Teaching Practice

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History

- Impetus, internationally, for teachers to engage in research activity and with research evidence in order to enhance their practice (Cain, 2015; Greany, 2015; Hammersley-Fletcher & Lewin, 2015).
- Our focus: 'research informed teaching practice' (RITP): teachers employing existing research with the aim of improving or innovating current pedagogic practices.

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History

The Department for Education, define RITP as:

“a combination of practitioner expertise and knowledge of the best external research, and evaluation based evidence”
(www.education.gov.uk, 2014).



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History and theory of action

1. Research can be used to signpost to teachers improvements in the way they can teach and/or their content knowledge (or both).
E.g., research may discuss the efficacy of specific pedagogic approaches such as feedback.
2. Research use enhances teachers' ability to respond in certain situations (both in terms of pedagogic and subject knowledge) which can improve teaching quality.
3. Improved teaching performance will lead to enhanced pupil outcomes.

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Aims and goals

- The aim of RITP is to improve teaching quality and so pupil outcomes. This is nicely illustrated by Goldacre (2013: 7):

“I think there is a huge prize waiting to be claimed by teachers. By collecting better evidence about what works best, and establishing a culture where this evidence is used as a matter of routine, we can improve outcomes for children, and increase professional independence.”

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Implementation

- Little has been written in terms of how teachers might actually become research informed (Godfrey 2014a; Nelson and O’Beirne, 2014; Saunders, 2014). One innovative approach to achieving RITP is provided by Research Learning Communities.

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Effectiveness

- Supovitz (2015): Common characteristic of high performing school systems is they facilitate the collaborative examination of research to identify likely problem areas and potential solutions to these problems.
- Mincu (2013) and Cordingley (2013) report correlational evidence - where research is used as part of high quality initial teacher education and ongoing professional development, related to teacher, school and system performance

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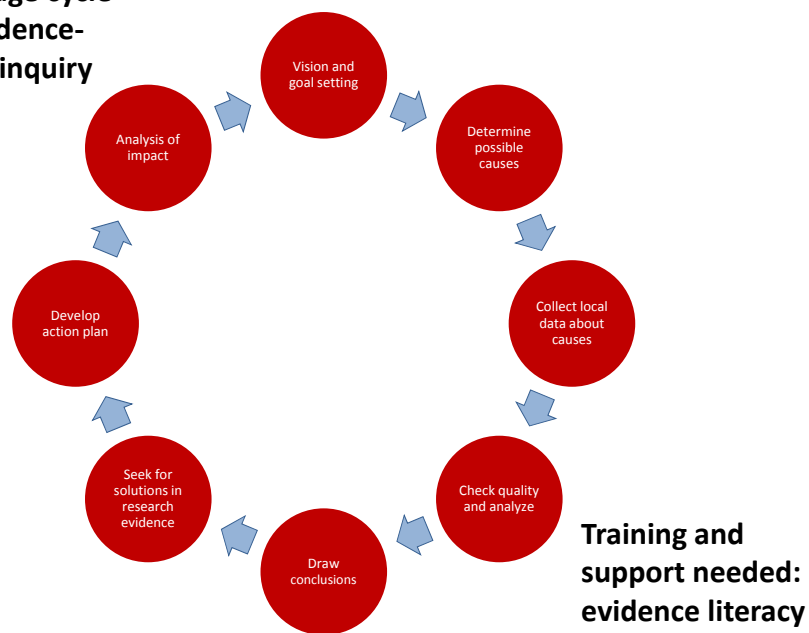
Combining The Best Of Two Worlds...

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Use the strengths of each approach

DBDM	RITP
+ Starts with vision and goals of a school, focusing on a context specific problem	- Not based on a real need in the field
- Data: inform educators about problems in their school, but what causes this problem?	+ Educators can draw upon a variety of effective approaches to school improvement
+ Schools develop a context specific solution	- One size does not fit all
- Data: pinpoint possible causes of a problem, but educators may not know the best available course for school improvement	+ Picking a promising solution, based on an existing evidence base.

Eight-stage cycle of evidence-based inquiry



Thank you for your attention!

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