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Does dissemination mode for research make a difference to reaching in-service primary teachers?

TEAN Conference 2017, Birmingham

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Introduction

- ▶ Research background
- ▶ Theoretical framework
- ▶ Data collection and analysis
- ▶ Discussion
- ▶ Conclusions

Background: assessment policy

- ▶ Abolition of SATs in primary science in 2009
- ▶ Change to assessment policy in primary schools: removal of levelling in 2014; expectation of more use of teacher judgment
- ▶ Schools required to develop “post-levels” assessment frameworks for all subjects (DfE, 2014)
- ▶ Primary science a “low status” subject (CaSE, 2014); subject knowledge and teacher confidence relatively weak (Murphy and Beggs, 2005)

Background: the TAPS pyramid

- ▶ Teacher Assessment in Primary Science (TAPS) project: use research to develop new framework
- ▶ TAPS pyramid (Earle et al., 2015) exemplifies use of teacher judgment within classroom teaching, but also for whole-school reporting
- ▶ For use by individual teachers, as well as schools
- ▶ Disseminated via online download and dissemination events



Theoretical framework: research dissemination

King (2003): three levels of dissemination for academic research outputs:

- ▶ For *awareness* (e.g: poster campaign; website)
- ▶ For *understanding* (e.g: seminar, training, conference)
- ▶ For *action* (e.g: decision taken by an individual)
- ▶ As the amount of effort increases, so does the effectiveness of the dissemination... but the potential audience decreases
- ▶ Dissemination for action linked to embedded change (Southwell et al., 2010)

Aims of the study

- ▶ Do the data show that dissemination events influence resource downloads? (Is it worth the bother of organising them?)
- ▶ To what extent does the mode of discovery for the TAPS pyramid affect its subsequent use?

Methodology

- ▶ Download data and dissemination event data collected over a one year period
- ▶ Downloads coded by country, county and month
- ▶ Dissemination events coded by country, county, month held, and size of audience
- ▶ Non-parametric tests for significance

Findings: raw data

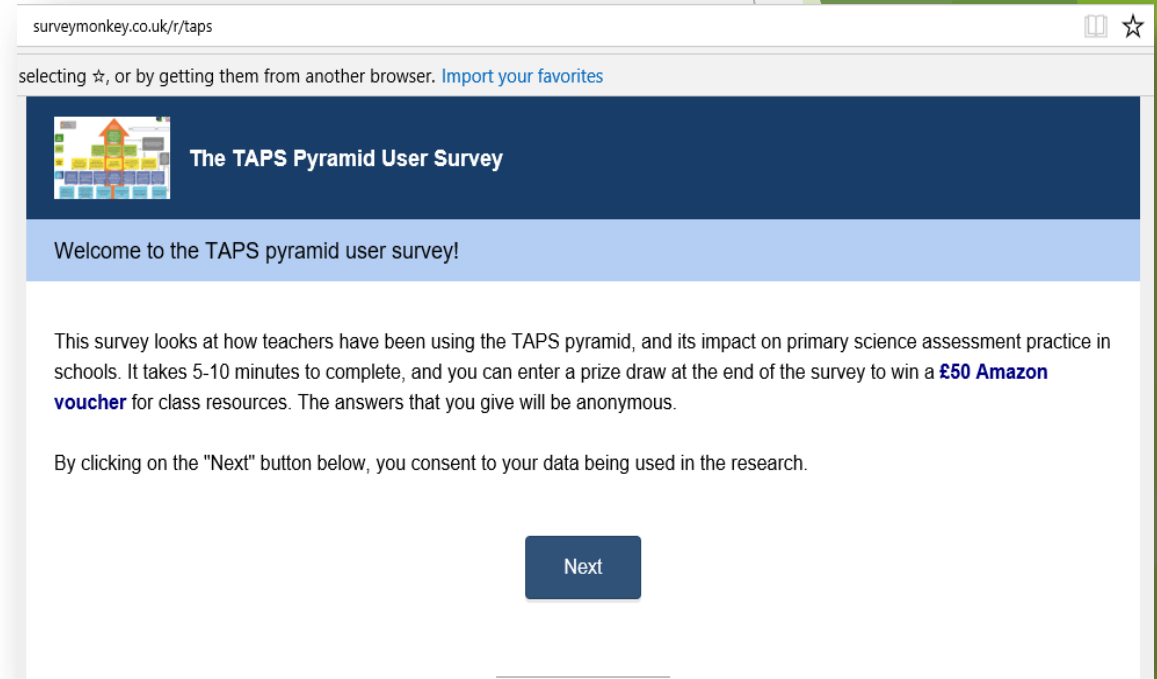
- ▶ 2,898 downloads made during one year
- ▶ This included 134 downloads in 45 countries outside of the United Kingdom
- ▶ UK downloads (n=2,764) grouped by country and county
- ▶ 97% of downloads were made in England; 3% in Scotland, Northern Ireland and Wales combined
- ▶ 51 known dissemination events; 50 of which in England
- ▶ England data analysed by county for relationships

Findings: statistical analysis

- ▶ Total downloads were higher in counties where dissemination events were held (Mdn=49.0) than not (Mdn=27.0), $p=.013$.
- ▶ A significant positive relationship was found between the number of events held in a county, and the total number of downloads made, $p=.010$.
- ▶ No significant relationship found between downloads and counties where largest events also held, $p=.10$.

User survey data

- ▶ Online survey data: 109 respondents
- ▶ Self-selecting sample, via PSTT and PSQM networks
- ▶ Would reported use of the TAPS pyramid be influenced by dissemination mode, i.e: how the teacher discovered it?



Findings: statistical analysis

- ▶ Discovering the TAPS pyramid online or at a dissemination event makes no difference to individual use, $p=.349$
- ▶ But: significant relationship between discovery via dissemination event and use at a whole-school level, $p=.019$
- ▶ Learning opportunities at work also important: teachers who talked to colleagues more likely to report changes in practice, at both an individual level, $p<.001$, and whole school level, $p=.004$



Discussion: download and event data

- ▶ Dissemination events positively influence downloads in same county
- ▶ Teachers learning from their favourite resource (Hood, 1990)
- ▶ Opportunity to discuss and ask questions of presenter (Hutchinson and Huberman, 1994)
- ▶ Consider adaptation to their setting - vital part of dissemination process (Gravestock, 2003)
- ▶ Dissemination events help teachers process some of the emotional aspects of changing practice, e.g: value congruency and motivational dimensions (Korthagen, 2017)
- ▶ But: largest events do not equate largest downloads
- ▶ Klein and Gwaltney (1991): dissemination for *information* or *exchange*

Conclusion: does dissemination mode make a difference to reaching teachers?

- ▶ Online dissemination plays crucial role for awareness, both nationally and internationally
- ▶ Dissemination for awareness seems adequate for reaching lone practitioners, but dissemination for understanding is vital for whole-school change
- ▶ Dissemination events can stimulate understanding, resulting in individuals more likely to attempt to use the research output
- ▶ Dissemination for action thus seems to be achieved through dissemination for understanding: letting teachers talk to each other about their intentions, issues and ideas (Gassenheimer, 2013)

Implications

- ▶ Is the aim to effect systemic change in practice, or to reach a large number of individuals?
- ▶ Does the product require explication or exemplification, and can this be done satisfactorily online?
- ▶ Use survey data to examine barriers and enablers in schools
- ▶ Models for teachers learning to change practice, eg: PLC



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