

Teachers' engagement in online blended course

Interactions between beliefs, knowledge and practice

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Uptake of ICT: Challenges

- Lack of access and support
- Teacher beliefs
- Availability in local language
- Consumers vs. producers of knowledge
- Problem of scale and diversity

Uptake of ICT: What has worked?

- Access to computers for personal use
- Continuous engagement in networks
- Online courses

Research questions

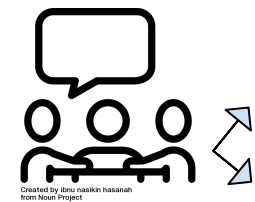
1. In what ways and to what extent did the participating teachers engaged with the different modes of the course?
2. What were the outcomes of the teachers' participation in the blended course?

Theoretical framework

- Technological pedagogical content knowledge (Mishra and Koehler, 2007)
- Mobile based chat groups to support community of practice (Wenger, 1988)
- Teachers learn in and from practice (Ball and Cohen, 1999)

Reflective mathematics teaching course

- Implementation across 4 states for around 600 teachers



Face to face workshop



Online certificate course and Mobile based chat group communities



Blended teaching-learning in schools using LAN

Table 1: Teachers' participation in Chat groups

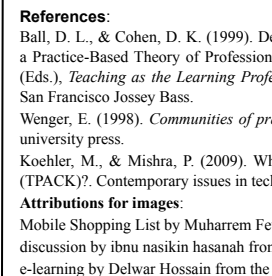
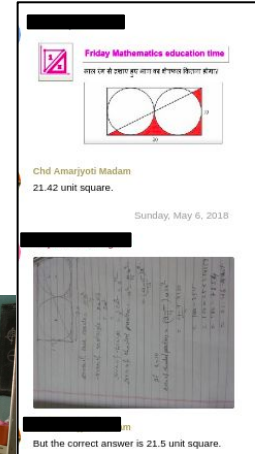
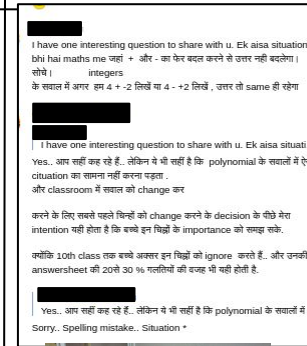
State	Members in chat based communities	Average post/week	Active members (Aug 2017-Mar 2018)
CG	28T + 20C	3.56	25
CG-(NVS)	23T + 25C	1.38	13
MZ	19T + 24C	0.25	13
RJ	64T + 12C	1.69	21
TS	416T + 20C	15.20	71

Table 2: Implementation of module in states

States	CG	CG-NVS	MZ	RJ	TS
Schools with ICT labs ready	30	0	30	51	85
Module run in schools	17	0	26	29	26

Findings: Teachers' engagement

- High participation during the workshop and low participation in online course but greater participation in mobile based communities
- Infrastructure challenges and need for technical support constrained implementation
- Teachers' with high motivation, positive beliefs for use of ICT and high technical knowledge were able to do the online course and some extent of implementation
- Some teachers used ideas from student module in regular classroom teaching
- Teachers posted photos of student engaging with modules, engaged in conversations seeded every week through problems and discussed pedagogical issues



References:

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 - Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge university press.
 - Koehler, M., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)? Contemporary issues in technology and teacher education, 9(1), 60-70.
- Attributions for images:**
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