Realising the potential of online teacher development courses to improve student learning — a brief for eLearning providers

Summary

The Government of Bangladesh and Aspire to Innovate (a2i) are making substantial investments in blended learning for teacher professional development (TPD) through the eLearning platform 'Muktopaath'. This policy brief explores research evidence of primary-level teachers' participation in one such course—Anonde Gonit Shikhi (AGS) by the Directorate of Primary Education—and makes evidence-based recommendations to increase the proportion of teachers and schools realising the potential benefits on teaching and learning.

Some teachers — with encouragement from their head teacher and help from other teachers in the school—regularly put the AGS activities into practice and reported improved experiences of teaching and learning. However, many teachers lacked such encouragement and support at school and did not use the activities regularly or experience the same benefits. To realise greater impact, course designers should emphasise the importance of practical implementation in schools—and should illustrate how head teachers and teachers can work together to support this.

About the research

The research is a collaboration involving The Open University UK, the Institute of Education and Research, University of Dhaka, and forty peer-researchers from rural primary schools in Bangladesh and is funded by the EdTech Hub. Findings come from over 500 interviews with teachers, by teachers. The research took place with teachers from 10 marginalised Upazilas across Char, coastal, Haor and Hill Tract areas of Bangladesh from 2022-2023.

The research explored teachers' access to the online course, their response to the course content, and whether or how schools helped teachers practically adapt or apply the techniques from the course in the classroom. The research also examined the nature of any resulting changes (if any) in the teaching and learning of foundation numeracy skills.

	Research Cycle 1	Research Cycle 2	Total
Teacher peer-researchers	40		40
Teacher participants	200	118	318
Participant interviews	400	118	518

Findings

Access and use:

Even in marginalised rural communities, almost all teachers had been able to access and complete AGS online, predominantly through their own mobile phones and data. Many teachers sought help from others, most often other teachers, to do this.

Although many teachers claimed occasional use of AGS activities in class, very few gave specific examples. Some teachers had made no attempt at using AGS in class.

For many teachers, this lack of classroom use was, because

(i)   It was not clear to them that they were expected to use the activities in class, and
(ii)   They thought they needed technology such as laptops, projectors, and the internet, to use the activities in class.

Enablers of use:

Teachers were more likely to use the AGS activities regularly in class when they have encouragement to do so from their head teacher and support from other teachers.

> "One of his colleagues also teaches with AGS techniques. They help each other. Their head teacher encourages them." (Teacher, Alikadam).

Teachers who use AGS activities regularly in class see positive impacts on student behaviour, student inclusion, student numeracy skills, and teacher motivation.

Teachers, who use AGS regularly, also see positive impacts on teacher development within or between schools by increased sharing of experiences of teaching numeracy and greater collaboration between teachers.
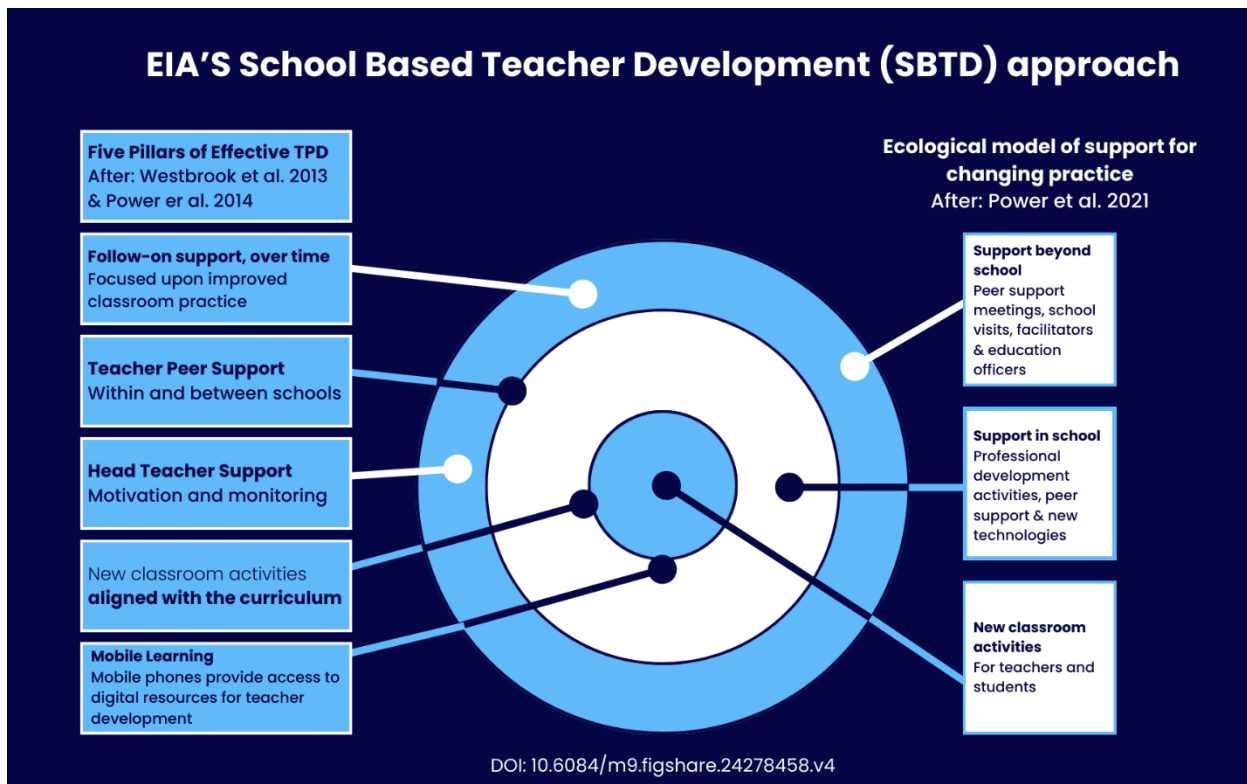

Credit: 3MPower Team

> "Sometimes, when I am in my home area, I meet other teachers near the marketplace and discuss the techniques. We mainly share our experience with these activities, who used what, how one's students were feeling, what challenges they have ...that kind of stuff.' (Teacher, Ruma)

Reflections

These findings affirm the potential of online teacher development courses like AGS to improve teaching and learning in numeracy. However, to realise this potential, teachers need encouragement and support to use the techniques regularly in school.

The figure below sets out an evidence-based model for such effective support, initially developed in Bangladesh through 'English in Action'.

EIA'S School Based Teacher Development (SBTD) approach

Five Pillars of Effective TPD
After: Westbrook et al. 2013 & Power er al. 2014

Follow-on support, over time
Focused upon improved classroom practice

Teacher Peer Support
Within and between schools

Head Teacher Support
Motivation and monitoring

New classroom activities **aligned with the curriculum**

Mobile Learning
Mobile phones provide access to digital resources for teacher development

Ecological model of support for changing practice
After: Power et al. 2021

Support beyond school
Peer support meetings, school visits, facilitators & education officers

Support in school
Professional development activities, peer support & new technologies

New classroom activities
For teachers and students

DOI: 10.6084/m9.figshare.24278458.v4

Recommendations

To maximise the success of future online professional development programmes to improve teaching and learning in marginalised schools, we recommend that course designers adopt the following recommendations:

Harness teachers' high levels of access to online courses

As almost all teachers can access the online courses, including teacher development videos, digital resources should be more tightly integrated into face-to-face training events, for example by writing the resources into printed teacher manuals and guides (for example, with QR codes) or by developing courses for local education officers on how to use the resources in face-to-face sessions.

Develop teachers' understanding of the importance of practical application in class

The online course and any surrounding communications should clearly convey key messages which all teachers (and those working with teachers) should understand. This includes:

(i)   Teachers' professional learning comes not just from completing the online course but from exploring the techniques regularly within their teaching practice.

(ii)   The techniques promoted by the course don't require access to computers, data-projectors, or the internet for use with learners—they are 'no tech' activities.

Promote head teacher support for use of AGS activities in class

Online courses and related communications should clearly convey the importance of head teachers or other school leaders encouraging and supporting teachers' working together on the course in school—and exploring the techniques regularly in their teaching. Online TPD courses should include specific guidance for head teachers on how to do this through:

(i) Promoting and taking part in TPD in the school, using the online resources
(ii) Encouraging and making time for teachers to work together to plan lessons, prepare resources, and share experiences adapting and applying the techniques in class.

Promote support between teachers

Online courses should encourage teachers to work throughout the course, to adapt or apply the techniques together in schools. Online courses should also create opportunities for teachers to work together and share resources and insights from their teaching practice online, either through the learning platform or social media.

Provide follow-up support and monitoring over time

Teachers' engagement with online learning should be imagined as an 'ongoing journey' of 'blended learning' over a period of several weeks or months, rather than a 'one-off' engagement over several hours. This allows for repeated cycles of online learning followed by practical exploration in the classroom, then sharing of experiences and insights before starting the next cycle of learning.

Credits

This brief was written by Tom Power, Hafiz Rahman, and Jacqueline Stevenson in collaboration with the 3MPower Research Leadership Team and Early Career Researchers. The views expressed herein are those of the author(s) and do not necessarily represent those of the Centre for the Study of Global Development or The Open University.

Further reading

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