The potential of mobile phones to transform teacher professional development

Conference or Workshop Item

How to cite:

For guidance on citations see FAQs.

© 2014 The Authors

Version: Version of Record

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data policy on reuse of materials please consult the policies page.
Advancing Open and Distance Learning: Research and Practices

28–31 October 2014
The Open University of Hong Kong • Hong Kong SAR, China

Proceedings

Edited by
Danny Wong, K C Li and K S Yuen

Organizers:

ASIAN ASSOCIATION OF OPEN UNIVERSITIES

Sponsors:

COMMONWEALTH OF LEARNING

Wu Jieh Yee Charitable Foundation
Preface

We are pleased to publish the Proceedings of the 28th Annual Conference of the Asian Association of Open Universities (AAOU 2014).

The theme of the Conference, Advancing Open and Distance Learning: Research and Practices, highlights the common goal of the Asian Association of Open Universities (AAOU) and its member institutions, which is to facilitate and achieve advancements in open and distance education (ODE) on the solid basis of research findings and through sharing best practices. You will find that the papers of these proceedings serve this goal very well. They report research and share practices under at least one of the following sub-themes:

- Multi-mode education
- Student learning support
- Development of instructional materials
- Staff development
- Studies on OCW and MOOCs
- Institutional advancement and innovations
- Development and adoption of OER
- Blended learning
- Planning and management
- Collaboration between institutions
- Use of ICT in course delivery
- Quality assurance
- Assessment and evaluation
- Funding and infrastructure for research and development
- Nurturing an institutional research culture

From more than 300 submissions, the Conference accepted only 107 full papers through a stringent review process by the International Programme Committee. The papers are representative of the latest studies by administrators, academics and researchers in the field and provide a good overview of the most recent developments in ODE.

We would like to thank all authors for their contributions. We are also grateful to members of the AAOU 2014 Academic Programme Sub-committee and the Secretariat for their diligence in securing a
large number of paper submissions from a broad range of countries and completing the review of these many submissions within a tight schedule. We extend our thanks to staff of the Educational Technology and Publishing Unit of the Open University of Hong Kong (OUHK) for their design, administration and production support for these proceedings. We are also obliged to the dedicated staff of the OUHK University Research Centre for their untiring and efficient logistical support in handling the papers. Finally, we would like to express our sincere gratitude to the Commonwealth of Learning (COL) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) for their sponsorship support to many delegates to attend the Conference.

Editors
Danny Wong, K C Li and K S Yuen

October 2014
## Paper Presentations

### Multi-mode education

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological health education based on mobile learning</td>
<td>1</td>
</tr>
<tr>
<td>Shaoling Ye, Jiangying Yu, Dean Litao Zhu and Peiran Chen</td>
<td></td>
</tr>
<tr>
<td>Web-based cooperative learning in distance education</td>
<td>5</td>
</tr>
<tr>
<td>Dean Litao Zhu, Ruisong Wu and Shaoling Ye</td>
<td></td>
</tr>
<tr>
<td>Open distance learning and knowledge management</td>
<td>10</td>
</tr>
<tr>
<td>Teoh Ping Chow</td>
<td></td>
</tr>
<tr>
<td>Development and innovation in distance education approaches in rural China</td>
<td>21</td>
</tr>
<tr>
<td>Hui Chen</td>
<td></td>
</tr>
<tr>
<td>The use of radio media in farmers' education and training</td>
<td>29</td>
</tr>
<tr>
<td>Tian Jing</td>
<td></td>
</tr>
<tr>
<td>Revamping the learning management system to provide a successful learning experience</td>
<td>40</td>
</tr>
<tr>
<td>Hui Thian, Teo and Mansor, Fadzil</td>
<td></td>
</tr>
<tr>
<td>Problems of digital libraries in the age of electronic publications</td>
<td>48</td>
</tr>
<tr>
<td>Hadi Sharif Moghaddam and Ghasem Ali Ehsanian</td>
<td></td>
</tr>
<tr>
<td>Ubiquitous learning theory: A conceptual model of open English education</td>
<td>56</td>
</tr>
<tr>
<td>Ke Chen</td>
<td></td>
</tr>
<tr>
<td>Combining virtual simulation experiments with remote control experiments in distance education</td>
<td>64</td>
</tr>
<tr>
<td>Xiaofang Ruan</td>
<td></td>
</tr>
<tr>
<td>Reflections on blended learning: A case study at the Open University of Hong Kong</td>
<td>72</td>
</tr>
<tr>
<td>Wing Bo Tso</td>
<td></td>
</tr>
<tr>
<td>The contribution of open and distance learning to the development of society in Vietnam: A case study from Hanoi Open University</td>
<td>82</td>
</tr>
<tr>
<td>Le Van Thanh and Hoang Tuyet Minh</td>
<td></td>
</tr>
<tr>
<td>Evaluation of implementing virtual education as an adjunct to the in-service training courses of physical education teachers</td>
<td>90</td>
</tr>
<tr>
<td>Abolfazl Farahani</td>
<td></td>
</tr>
</tbody>
</table>

### Student learning support

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing student learning support for graduate employability through entrepreneurial clinics</td>
<td>98</td>
</tr>
<tr>
<td>Ratna Marta Dhewi, Yoyoh K, Boedhi Oetoyo, Enang Rusyana and Dem Vi Sara</td>
<td></td>
</tr>
<tr>
<td>An exit survey as baseline data for improving the quality of student learning support</td>
<td>106</td>
</tr>
<tr>
<td>Kristanti Ambar Puspitasari, Benny Agus Pribadi and Sudirah</td>
<td></td>
</tr>
</tbody>
</table>
Enhancing the effectiveness of online tutorials for economics education's final assignment to improve student mastery  
Suripto, Sri Sumiyati and Durri Andriani  
116

A study on non-completing students of the Certificate in Pre-school Education programme at the Open University of Sri Lanka  
A Ariyaratne, D M W Munasinghe, P Seneviratne, P L N Randima Rajapaksha and D D I Dediwala  
126

The impact of vicarious failure as a pedagogical strategy in modelling the behaviour of adult learners in open and distance learning  
Nantha Kumar Subramaniam and Maheswari Kandasamy  
135

An analysis of online learning behaviour from a tutor perspectives: Reflections on interactive teaching and learning in the big data era  
Yanhui Han, Shunping Wei and Shaogang Zhang  
146

'Eeny, Meeny, Miny, Moe' — open educational resources selection for English language skills proficiency at the University of the South Pacific  
Neelam Narayan and Alaneta Lesuma-Fatiaki  
160

Learning support service system construction in an agro-ecological engineering course at Jiangsu Open University, and its implications  
Ting Cheng, Chenghui Han, Rong Tang and Zhaoplin Huang  
169

The influence of internal and external factors on student participation in online tutorials at Universitas Terbuka  
Meilani, Any, Kuswanti, Eko and Pujiwati, Ami  
177

Factors affecting adult learners' persistence in e-learning programmes in Ho Chi Minh City, Vietnam — A mediation analysis of learners’ motivation  
Tu Tran Hoang Cam and Khuong Mai Ngoc  
184

Student participation in academic activities  
Sri Kurniati, Durri Andriani and Moh. Muzammil  
196

Students’ satisfaction and perceived attainment in the use of an online discussion forum: A follow-up study in the OUHK  
Henry M F Choi and Eva Y M Tsang  
203

The perceived effectiveness of weekly announcements in the provision of learning support to sociology students  
Sadia jabeen  
215

Virtual collaborative learning using Wiki for adult ODL learners: The case of Wawasan Open University  
Ean-Teng Khor  
221

Mobile applications at a mega university: Anadolu University campus app  
Ozgur Yilmazel and Erk Ekin  
231

Moodle quizzes in the learning environment  
Prakash Arumugam  
240

Student satisfaction and persistence: Imperative features for retention in open and distance learning  
Maximus Gorky Sembiring  
250
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors affecting the drop-out rate on the Engineering degree programme at the Open University of Sri Lanka</td>
<td>259</td>
</tr>
<tr>
<td>Student utilization of UT-Online</td>
<td>271</td>
</tr>
<tr>
<td>Course instructors taking responsibility against the background of MOOCS: From the perspective of responsibilities to students</td>
<td>280</td>
</tr>
<tr>
<td>Development of instructional materials</td>
<td></td>
</tr>
<tr>
<td>Field trial analysis of printed agricultural extension administration learning materials</td>
<td>289</td>
</tr>
<tr>
<td>The design of microlectures based on a mobile learning environment in an electrical commerce course</td>
<td>300</td>
</tr>
<tr>
<td>Online curriculum mapping as a learning analytic tool for collaborative distributed programme and curriculum development: Implications for open and distance learning</td>
<td>308</td>
</tr>
<tr>
<td>Online learning gamification for a course on lawyer affairs</td>
<td>324</td>
</tr>
<tr>
<td>Development of a hybrid system to enhance borderless learning: Challenges and opportunities for the underserved</td>
<td>331</td>
</tr>
<tr>
<td>Using Web 2.0 technologies with special needs students in distance education</td>
<td>345</td>
</tr>
<tr>
<td>The development of an online course on leadership development and change management for nurse executives in ASEAN countries</td>
<td>354</td>
</tr>
<tr>
<td>A cognitive apprenticeship approach to teaching organic chemistry online: Challenges and opportunities</td>
<td>367</td>
</tr>
<tr>
<td>Quiz model for a distance education textbook</td>
<td>373</td>
</tr>
<tr>
<td>Staff development</td>
<td></td>
</tr>
<tr>
<td>Teachers’ team-building from the perspective of personalized education in China’s open universities</td>
<td>382</td>
</tr>
<tr>
<td>The impact of the integration of OER in teacher education programmes at the Open University of Sri Lanka</td>
<td>389</td>
</tr>
</tbody>
</table>
Training needs assessment for teaching staff in open universities and dual-mode higher education institutions in Asia
Ashok Gaba and Sanjaya Mishra

Entrance level challenges of ODL faculty members
Rahila Hanif, Aisha Ismail and Sadaf Chouhdary

Explaining the work of the ODL faculty through a job characteristic model (JCM)
Sadaf Chouhdary, Mehwish Farooqui, Aisha Ismail and Rahila Hanif

An explicit overview on the professional development approach in Nepal’s ODL policy
Bhandari Ghimire Sunita and Bhandari Prakash

Studies on OCW and MOOCs

MOOCsification: Motivations and determents
Billy T M Wong, Kam Cheong Li, Sam Pang and Helen Lam

MODeLing: Reinventing MOOC through a learner-centred approach
Melinda dela Pena Bandalaria

The Open University of Japan’s MOOC platform: Features and outcomes
Tsuneo Yamada, Yoichi Okabe, Masumi Hori and Seishi Ono

Research and analysis of a mobile phone library based on mobile learning
Yang Xiaohuan and Yang Lei

Profiling the characteristics of MOOC platforms
Kam Cheong Li, Billy T M Wong, Esther W S Chok and Terry Lee

Integration of the organizational communication mechanisms of MOOC and ODL institutions
Sicong You

Embarking on MOOCs: The OUM experience
Mansor Fadzil, Tai Kwan Woo, Mazlan Zulkifly, Fathinirna Mohd Arshad and Nur Hisyam Mohd Said

Institutional advancement and innovations

Use of a digital printing system for improving the quality of examinations at Universitas Terbuka
Irma Adnan, Teguh Prakoso, Amalia Sapriati and Aminudin Zuhairi

A study on establishing effective vertical connections between secondary and higher vocational education based on a credit bank framework
Liu Fang and Liu Jing

KNOU smart learning: Beyond the future KNOU learning environment
Kwang Sik Chung, Yeon Sin Kim, Chung Hun Lee and Sang Im Jung

A managerial evaluation of face-to-face tutorials in a distance learning primary education programme
Lusi Rachmiazasi Masduki, Binti Muflikah and Purwaningdyah Murti Wahyuni

Teaching accounting in the distance learning mode and on-campus mode: A comparative study at Wawasan Open University
Choo Hong Loo
Innovative evaluation methodology at SCDL
Swati Mujumdar

Converting traditional distance learning into fully online learning: A case study of practice at the Open University of Jiangsu
Xiangyang Zhang and Shu-chiu Hung

Distance teacher education for a better school Curriculum 2013
Udin S Winataputra and Riza Alrakhman

The interplay between gender, learning approaches and academic performance in Chinese sub-degree and degree students
Chi Nam Andy Kan and Yiu Kong Chan

Reconceptualizing analytics in education: A quest for a common ground
Kam Cheong Li, Beryl Y Y Wong and Esther W S Chok

Instructional technology from the perspective of cultural historical activity theory: A case study of a video-conferencing system in an open and distance university
Park, Yangjoo and Yeon, Eun Kyung

Prototyping a conceptual model for real-time online facilitation of mathematics
Mansor Fadzil and TickMeng Lim

Development and adoption of OER

Development and validation of a scale to measure faculty attitudes towards open educational resources
Meenu Sharma, Sanjaya Mishra and Atul Thakur

Blessing or curse? Open educational resources accessibility: The University of the South Pacific experience
Alanieta Lesuma-Fatiaki and Neelam Narayan

The potential of mobile phones to transform teacher professional development
Christopher S Walsh, Clare Woodward, Mike Solly and Prithvi Shrestha

Learner autonomy through the adoption of open educational resources (OER): Using social network services and multi-media e-textbooks
Masumi Hori, Seishi Ono, Shinzo Kobayashi, Kazutsuna Yamaji, Toshihiro Kita and Tsuneo Yamada

Open educational resources in distance learning: Policies and initiatives in Indian universities
Sujata Santosh and Santosh Panda

Blended learning

Transformation of conventional DL courses into BL courses: Use of multimedia and ID strategies
Eva Y M Tsang and Henry M F Choi

Research on the implementation of the strategy of blended learning in open and distance learning
Zhang Ning

The development of blended learning support for an introductory calculus course at a distance learning institution
Asmara Iriani Tarigan, Sitta Alief and Dina Mustafa
The use of web-based communication tools for enhancing collaborative learning experience 701
Francis Yue

The design of economical blended mobile learning with SMS 716
Kwang Sik Chung, Vincent Chung Sheng Hung and Teoh Ping Chow

An empirical study of flipped classrooms in an open university: A case study on translation theory and practice 725
Xiaoyang Shu

The rise and rise of blended learning 735
Robert Fox

The integration of micro-lectures into the blended learning discourse in tertiary education 742
Jie Xu and Xiangyang Zhang

Planning and management

Leading and managing change in education: Putting transformational leadership into practice 750
Linda Yin King Lee and Joseph Kok Long Lee

Strategic development for advancing ODL institutions: A SWOT analysis from the Open University of China 759
Wei Li, Weniyan Yao and Na Chen

The knowledge creation process in developing academic products and the service system in Universitas Yerbuka 779
Purwanto, Agus Joko and Marisa

Open education initiatives and KM readiness in an ODeL institution 789
Melinda F Lumanta and Alvie Simonette Q Alip

A mobile course rescheduling system with WeChat in Jiangsu Open University 797
Shen Jun

The development of a hybrid learning system model in an academic training programme on instructional materials research 805
Trini Prastati, Benny A Pribadi and Sandra Sukmaning Aji

Survey of external stakeholders’ image of STOU 813
Paiboon Kachentaraphan, Orasa Pankhao and Momwipa Wongrujira

Use of ICT in course delivery

Expanding the frontiers of engineering education in open and distance learning by an online laboratory platform 825
W A Rasika Nandana, W R de Mel and H DNS Priyankara

Analysis and application of social software in online interactive teaching 838
Xuan Zhang

The impact of online tutorials on students’ ability to compose journalistic writing 847
Irsanti Widuri Asih

A social constructivist approach for an online civic education tutorial 862
Made Yudhi Setiani
A survey on the MOOC English course at University Terbuka
Johanna B S Pantow 871

Self-managed learning via Weblog: Design and implementation
Nantha Kumar Subramaniam 882

Making it work: Teaching and learning speech communication at a distance
Ana Katrina T Marcial and Rhonna Marie R Verena 895

Utilizing e-learning for integrative learning: A value innovation at St Paul University Philippines (SPUP)
Giged Tong-Battung 906

Generative dialogue in the distance education programmes of the University of Mumbai, India: Use of ICT and digital technologies
Deshmukh Ashima and Chari Hemlata Ramaswamy 918

WOU mLearning: Widening access to teaching and learning in an ODL environment
Sheng Hung Chung, Ean Teng Khor and Mohandas Balakrishna Menon 924

Skill development in business intelligence for ICT graduate programmes in ODL: A case from Sukhothai Thammathirat Open University STOU
Vipa Jaroenpuntaruk 939

Quality assurance

Quality and service determine the future of the Open University
Wenjing Xu 946

The quality assurance standards system: Research and practice in the Open University of China
Wang Lina, Guo Qingchun and Huang Chuanhui 952

Assessment and evaluation

Developing a teacher evaluation checklist for Payame Noor University
Mousavi, Malihe 959

Determining distance education learners' cognitive processes and levels of reflection using Web blogs
Roja Rivera 964

A survey of current opportunities for developing an automated assessment system for C/C++ programing assignments
Muhammad Salman Khan, Adnan Ahmad and Muhammad Humayoun 977

Evaluation of online English listening and speaking skills courses
Alisa Vanijdee 989

A study on the observation and practical teaching session in the Certificate in Pre-school Education Programme
P L Niroshami Randima Rajapaksha 1000

The possible factors that influence students’ English writing in a distance education context
Yudi Efendi 1010
Assessment of an ODL class based on Thailand’s qualification framework  
Monwipa Wongrujira

The student evaluation process: A comparison of ODL and the traditional learning mode  
Aisha Ismail, Rahila Hanif and Sadaf Chouhdary

Translation portfolio: From a task-based approach to a project-based approach  
Karnedi

Funding and infrastructure for research and development

Correlation analysis on the input and output of scientific research in the Open University of China  
Xinxin Tao and Shunping Wei

Nurturing an institutional research culture

Social network analysis of the research relationships among faculty members of the UP Open University  
Joyce Mae Manalo

Enhancing research on public management through open and distance e-learning  
Juvy Lizette M Gervacio

Fostering an institutional research culture: A case study from the OUM Business School  
Mohamad, W, Zakariah, Z, Afzhan Khan, M and Ruslan, R
The potential of mobile phones
to transform teacher professional development

Christopher S Walsh
Torrens University
Adelaide, Australia

Clare Woodward, Mike Solly and Prithvi Shrestha
The Open University
Milton Keynes, United Kingdom

Abstract

Futures thinking is used by governments to consider long-term strategic approaches and develop policies and practices that are potentially resilient to future uncertainty. English in Action (EIA), arguably the world’s largest English language teacher professional development (TPD) project, used futures thinking to author possible, probable and preferable future scenarios to solve the project’s greatest technological challenge: how to deliver audio-visual TPD materials and hundreds of classroom audio resources to 75,000 teachers by 2017. Authoring future scenarios and engaging in possibility thinking (PT) provided us with a taxonomy of question-posing and question-responding that assisted the project team in being creative. This process informed the successful pilot testing of a mobile phone-based technology kit to deliver TPD resources within an open distance learning (ODL) platform. Taking the risk and having the foresight to trial mobile phones in remote rural areas with teachers and students led to unforeseen innovation. As a result EIA is currently using a mobile phone-based technology kit with 12,500 teachers to improve the English language proficiency of 700,000 students. As the project scales up in its third and final phase, we are using the new technology kit—known as the ‘trainer in your pocket’—to foster a ‘quiet revolution’ in the provision of teacher professional development at scale to an additional 67,500 teachers and 10 million students.

Keywords: Futures thinking, School Based Professional Development (SBPD) model, Teacher Professional Development (TPD), Mobile phones, Open distance learning (ODL)

Introduction

Futures studies has been formalised in educational, industrial and government fields to forecast potential alternative futures to a ‘probable’ future to ensure a higher probability of ‘success’. Futures thinking’s scenario method of postulating different possible futures encourages collaboration to consider plausible alternatives to the status quo, or what is likely ‘probable’ in the future. The approach is fluid and sees the future as a problem to be solved, explicitly linked to actions in the present. Through the authoring and critique of probable, possible and preferable future scenarios, English in Action (EIA) was empowered to explore and pilot mobile phone technologies to build an alternative vision of the future that we could work for in the present. EIA’s vision of the future was unequivocally premised on the implementation of a sustainable and robust large scale School Based Professional Development (SBPD) model capable of improving the English language competence of nearly 10 million Bangladeshi school children and 75,000 English teachers from 2009 to 2017.

There are few examples of international development projects using mobile phones to deliver TPD. Current research around using mobile phones for TPD tends to focus on
development of the awareness of the potential of mobile devices for learning (Schuck et al., 2013), using tablets in challenging educational contexts (Onguko, 2014) or changing teacher attitudes towards the use of mobile phones in teaching (Ekanayake and Wishart, 2014). Presently, EIA is successfully providing an innovative SBPD model that leverages the power of mobile phones to make audio-visual TPD materials and classroom resources available to 12,500 teachers and nearly 700,000 students through an ODL platform (Power et al., 2012; Shrestha, 2013; Walsh et al., 2013). Over the next three years the project will deliver this TPD through the SBPD model to an additional 67,500 teachers and nearly 10 million students.

**English in Action (EIA)**

The importance of using information and communication technologies (ICTs) to learn English and to improve the social and economic prospects of all Bangladeshis—particularly those living in poverty—is a Bangladesh government priority. As a result, English in Action (EIA), a nine-year (2008-2017) English language teaching education program striving to improve the communicative English language skills of 25 million Bangladeshis was launched in 2008. The project is dedicated to changing English language learning by making it more student-centred, thereby potentially changing lives for the better because students will be able to communicate in English at levels enabling them to participate more fully in economic and social opportunities. The collaborative project is funded by UKaid from the Department for International Development (DfID) and works closely with the Government of Bangladesh’s Ministry of Primary and Mass Education (MoPME) and the Ministry of Education (MoE).

![English in Action's (EIA) logo and slogan](image)

**EIA’s School Based Professional Development (SBPD) model**

EIA’s School Based Professional Development (SBPD) model is an innovative form of TPD that assists teachers in learning and applying new English language teaching practices in the classrooms, schools and communities where they work. Through supported school-based ODL supported by a diversity of mediated authentic videos (MAVs) (Woodward et al. 2014) and audio classroom resources accessible on teachers’ mobile phones, or the ‘trainer in your pocket’ (Walsh et al., 2013), the classroom becomes the nexus of learning (Walsh and Power, 2011). EIA’s SBPD model stands out because it is an efficacious mobile learning solution for the field of international development that does not leave teachers on their own to make sense of ODL materials and TPD resources. Teachers learn how to access and use EIA’s resources while receiving support from a teacher-partner within their school, a community of teacher colleagues from their upazilas (sub-districts) and through bi-monthly project cluster meetings across 16 months. This bespoke program assists teachers in developing, supporting and sustaining new

---

1 For more information on EIA’s partners see [http://www.eiabd.com/eia/index.php/abouts/project-partners](http://www.eiabd.com/eia/index.php/abouts/project-partners)
communicative and student-centred pedagogic practices while simultaneously improving their own English language proficiency.

Participation in new classroom activities is at the heart of teachers’ TPD with EIA’s SBPD model. Teachers are able to view, review and tryout new teaching practices exemplified by peer teachers who have themselves been participants in the project. There are two additional layers of support helping teachers in carrying out these new activities: ‘support in school’; and ‘beyond the school’. ‘Support in school’ includes an extensive collection of audio resources for primary students, directly aligned with Bangladesh’s national English textbook *English for Today* books 1 – 5 (NCTB, 2013). In total there are currently 452 audio lessons for the primary classroom. There are 190 audio resources for secondary classroom which include audio recordings of many stories, dialogues, passages and poems from *English for Today* books 6-10. Additional support in school is provided by the head teachers (HT) and through peer support as two teachers from each selected school attends the 16 month cycle of EIA’s SBPD. ‘Support beyond the school’ includes peer support, cluster meetings and wider project support including school visits, knowledge sharing and a FaceBook page².

**EIA’s developmental research**

EIA’s developmental research was carried out with 700 teachers from government schools across 21 of Bangladesh’s upazilas (2008–2011). Two thirds of these teachers worked in primary schools and one-third in secondary. Approximately 80% of all EIA schools were in rural areas with limited or no access to electricity. The developmental research helped the project explore the use of mobile technologies or eLearning for English teachers’ TPD and the delivery of audio resources for classroom use (Walsh, 2011).

EIA’s development research (2009-2010) provided extensive audio and visual resources to primary and secondary English teachers through a technology kit with either

---

² [https://www.facebook.com/EnglishInActionBangladesh](https://www.facebook.com/EnglishInActionBangladesh)
the Apple iPod Nano (for primary teachers) or iPod Touch (for secondary teachers), both with portable rechargeable speakers. The iPods were chosen because the project believed the teachers would find the use of the Apple MP3 players relatively easy. Although iPods were more expensive than other devices available at the time, they were chosen because they had the functionalities the project believed necessary to provide teacher TPD through an ODL platform supported by EIA’s SBPD model. These crucial resources, played on portable rechargeable speakers, were also chosen because they were thought to have the best possible chance of improving the communicative English proficiencies of both students and teachers.

**Challenges**

Although the pilot phase was successful in terms of the iPods used for teachers’ TPD, there were considerable challenges reported. Teachers experienced difficulty trying out and incorporating the new student-centred pedagogy demonstrated in the TPD resources, even though these were also introduced in cluster meetings. A significant technological challenge was that many teachers found it extremely difficult to charge both the iPod and portable speaker—in addition to their own mobile phones—due to the intermittent availability of electricity across Bangladesh. But the most significant technological challenge the project encountered was the high cost of the iPod Nano and Touch. These MP3 players are too expensive to provide to 12,500 teachers in the current upscaling phase (2012–2015) and to an additional 67,500 teachers by 2017.

**Thinking differently about the future**

Mindful of the success of the developmental research EIA knew that its SBPD model that leveraged the powered and flexibility MP3 players within an ODL platform to deliver TPD was viable and responded to the realities of Bangladesh. More importantly the research confirmed the viability of such an approach at scale with tens of thousands of teachers. The project’s initial success was a catalyst that pushed us to creatively think and act ‘outside of the box’ to collaboratively overcome our technological and pedagogical challenges. Futures thinking’s (Bell, 1997; Sardar, 1999; Slaughter, 2005) scenario method alongside foresight exercises (Cascio, 2009) and possibility thinking (Craft, 2001) guided EIA researchers in Dhaka in authoring scenarios for ‘possible’ and ‘preferable’ futures over a ‘probable’ future. This assisted us in solving EIA’s technological challenge within the project’s budget constraints (Monodol and Walsh, 2011).

Using futures thinking alongside possibility thinking (PT) encouraged us to ask ‘what if’ and ‘as if’ questions, “refusing to be stumped by circumstances but being imaginative in order to find a way around a problem” (Craft, 2000, p. 3). By engaging in possibility thinking we drew on our “little ‘c’ creativity” or what Craft (2001) refers to as our ability to cope with change in the 21st century. Our possibility thinking was powerful and helped us to think differently about the future—and to foster our creativity—to find a way to overcome our technological challenge within the project’s budget. We individually asked ‘what if’ questions that were open to different possibilities that we could develop further:

- ‘What if we can’t find MP3 players that have screens to view the TPD resources at cost?’
- ‘What can we do with the mobile phones teachers already have?’
- ‘What if teachers can access the internet on their own mobile phones in 2014? Or 2017?’ and
• ‘What if smart phones with enough storage to hold EIA’s resources were common across Bangladesh by 2017?”

Then we came together to engage in the process of collaboratively sharing our questions and problem-posing and problem-finding to engage in divergent and convergent thinking. To answer our ‘what if questions, we scanned the world for multiple perspectives, past and present, from researchers, teachers, electronic vendors and individuals. These diverse perspectives, essentially factors or drivers of what might happen or come to be in Bangladesh, helped us explore how our ‘what if” questions could be answered to address the challenges we were confronted with.

**Authoring future scenarios**

The collaborative authoring of scenarios—resulting from our possibility thinking—encouraged knowledge exchange and the development of a deeper understanding of the central issues and factors inherent in the technological challenge EIA faced. We authored three future scenarios to help guide the development of a new technology kit pilot study to choose the best possible kit to deliver EIA’s TPD resources to 12,500 teachers through 2015. Below we present our probable and preferable future scenarios. We thought deeply about what actions we would need to achieve in the present, to bring about our preferable future and avoid the probable future. This stance allowed us to reinforce what EIA was already doing well and build on the project’s success in delivering TPD.

**The probable future**

In Bangladesh, particularly from a government perspective (Aziz & Digital Bangladesh) there is an assumption that ICT will benefit everyone, especially teachers and students. People have greater access to mobile phones and other ICT devices. Access to ICT is more ubiquitous, but not everyone has access. Those living in rural areas still struggle to access the Internet and there is not always a nearby reliable source of energy. While more individuals have access to ICT, they are still struggling with ICT literacy, meaning they don’t necessarily have the ICT skills to access and use productively all that is on offer. There is still a ‘digital divide’ in the ways in which society chooses to make technology accessible and usable to the members of society. There are many hopes pinned on this relationship being constructively arranged, but it has not been entirely realised. There are easily accessible OERs that can be accessed on mobile phones to help teachers both improve their English language skills and learn to teach in more communicative ways, but the uptake is not as quick as expected even though many individuals believe learning English will improve their social and economic opportunities.

**The preferable future**

Bangladesh’s schools, through networked teachers, online teacher training programs and affordable/accessible network ubiquity have gained a reputation for being able to deliver English language learning tailored to individual needs. The development of learning networks advanced, no longer subject to time and place constraints. Individualized networks emerged as communities collaboratively redefined the work of schools to better serve local needs. Networks of teachers, learners, parents and professionals responded to a changing society to meet the needs of the expanding internationalized knowledge economy. Pupils leave primary school with high levels of English language proficiency while many secondary pupils emerge bilingual. Mobile phone ownership in urban and rural areas has reached saturation. Many individuals’ own mobile phones, with powerful processors, abundant memory, larger screens, and open operating systems, are used for learning and accessing greater social and economic opportunities.
Low-cost mobile phone pilot study

EIA was conceptualised to intentionally address issues of scale, embedding and quality for the present and future across rural and urban contexts. Budget constraints of 6000 Bangladeshi Taka (BDT) per teacher (£60) mandated that EIA construct multiple kits to field test and pilot for the current upscaling phase (2012-2015), while also thinking post 2015 when there will much less funding available for the approximately 67,500 teachers to whom EIA will still be required to provide a robust program of TPD. Drawing on our preferable future scenario and the result of our possibility thinking, we chose 2 low-cost alphanumeric mobile phones with 4GB micro SD cards and portable rechargeable speakers and an SD card and portable rechargeable speakers to pilot as three separate kits from March to September (2011) in two rural upazilas. The results of the mobile phone based technology kit were extremely successful with pilot study teachers overwhelmingly reporting satisfaction and success using the kits with their students. This resulted in EIA assembling a new technology kit that was distributed to 12,500 teachers (January - June 2014) across Bangladesh. The kit (Figure 2) consists of the Nokia C1-01 (£35) mobile phone, a portable rechargeable Lane amplifier/speaker (£25) and all of EIA’s TPD materials and classroom audio resources on 4 GB micro SD cards (£2). The kit has affectionately become known as the ‘trainer in your pocket’

![Figure 3: EIA’s mobile-phone based technology kit known as “the trainer in your pocket”](image)

EIA’s ‘trainer in your pocket’

Following the success of the pilot studies, all of EIA’s TPD materials were revised for use with the new mobile phone-based ‘trainer in your pocket’. We illustrate how the ‘trainer in your pocket’ is used in two examples of ODL. The first explicitly illustrates how teachers are presented with TPD resources, in the form of mediated authentic videos (MAVs). The second outlines EIA’s bespoke English for Specific Purposes (ESP) program, *English Learning for Teachers (EL4T)* which aims to increase teachers’ communicative English language proficiency and teaching practices by providing ESP instruction directly related to the national textbook..

**Teacher TPD delivered through ODL on low-cost mobile phones**

Each primary and secondary teacher received the new technology kit and an EIA produced Teacher Guide. The teacher TPD materials are centred on the MAVs and supported by the
print Teachers’ Guide. The TPD materials are divided into 8 modules and each emphasises the four skills of listening, speaking, reading and writing. The MAVs are authentic classroom based TPD films illustrating examples of student-centred English teaching lessons that emphasise a communicative approach using the government textbook

Each of the MAVs start with a female narrator, who is the ‘expert’ voice introducing each TPD focus of the module. What makes EIA’s MAV resources for TPD innovative is that the narrator first sets a ‘viewing task’ prior to the teachers watching the video and then poses reflective questions for them to consider and respond to after practising similar techniques in their own classroom. The expert voice of the narrator enables EIA to move away from the default cascade model of large-scale professional development where information is passed down from the original author, through a range of master trainers, eventually reaching the teacher in an often ‘diluted’ form (Robbins and Latchem, 2003).

![Figure 4: EIA’s narrator presenting the TPD through a MAV](image)

To understand how the ‘trainer in your pocket works’ for teacher TPD we provide an example from the EIA produced Secondary Teacher Guide: Secondary Teaching and Learning from Module 8 entitled ‘Looking back and moving forwards’. For Module 8, there are 3 video clips, 4 audio files and a ‘Teachers Talking’ audio file for extended reflection on practice. In the first film, the narrator introduces the module (Figure 3):

*Hello and welcome to Module 8 – Looking back and moving forwards. This is the final module of the English in Action programme. We begin with Part 1 (SM8-V1) – the communicative classroom. As you have read in the module 8 introduction, you are going to watch video clips of a lesson for Class 7, Unit 4, Lesson 10.*

*In the first clip, you are going to watch the first part of the lesson. As you watch the video clip, think about these questions:*

- What is the focus of the first part of the lesson?
- What do the students practise?

*Now watch the clip and take notes.*

This is followed by a film of the classroom with the students reviewing vocabulary from an earlier lesson and the teacher introducing new vocabulary that they will encounter (Figures 4 and 5) in their texts. The teacher then writes 3 questions on the board and asks the students to read a story and look for the answers to these questions. Afterwards
students switch papers and correct their partner’s answers. There are over 60 female students in the classroom.

Afterwards the narrator comes back on and says:

_So what is the focus of this first part of the lesson?_

_The first part of the lesson involves a short reading passage – the first part of a story. The students read the story but before they do, the teacher prepares them for the story by reminding them of the previous lesson, and then introducing them to some words from the story. This is a pre-reading activity. As the students practise these words, they are already thinking about the story and what will happen, and this helps them to understand the story when they read it._

_The students then answer the questions on the board. Do you remember what the teacher said, back in Module 2, when asking students to read a passage and answer questions based on it? “Remember, you don’t have to read every word.” The students here are NOT reading every word; they are scanning the text in order to find the information to answer the 3 questions. The teacher then asks them to switch papers with their partner – why does he do that? Well, think back to Module 5. It helps students to become more independent and to think about their learning and keeps them engaged in the class and in their learning. Did you also notice how the teacher asks students from around the class and always praises the students?_

_Let’s continue watching – why does the teacher ask the students to write their own question about the story?_
The video then continues with students writing their own questions and asking their partners to answer them before the teacher invites selected students to ask their questions to the whole class.

The video narrator then comes back on and summarises what the teachers have viewed and focuses on the idea of ‘recycling language’ and the communicative English language learning activities the students engaged in:

After reading the story, the students each write a question about it. Here they are recycling language, and they are also checking that they understood the key points of the story. They ask each other questions in pairs, and as a whole class. This also helps the teacher to see if the students have understood the passage.

So now for the second question — what do the students practise?

[PAUSE]

The students practise reading of course, but they also practise listening — they listen to the teacher who is speaking in English, and they listen to the other students. They also practise a little speaking and writing — they each write a question about the story, and they answer each other’s questions.

Although this lesson focuses on reading, the teacher uses English as much as possible with his students, and tries to make the lesson as communicative as possible.

Now go to Module 8 ‘Try in the Classroom 1’ in the Teacher Guide where there is a task for you to try so that you can make your own classroom more communicative.

*English Language for Teachers (EL4T)*

English language teachers in Government and non-Government schools in Bangladesh are non-native speakers of English. As a result, their communicative English language proficiency is low. Thus, many English teachers use the Grammar Translation Method of teaching. This method does not focus on teaching students how to communicate in English (Prator and Celce-Murcia, 1979); rather teachers ‘translate’ the text using Bangla focusing on meaning, rather than communication. In order to address this challenge, EIA developed an innovative ODL course called *English Language for Teachers (EL4T)* for both primary and secondary English language teachers (Shrestha, 2012).

*EL4T* is an ODL self-study English for Specific Purposes (ESP) course, with audio files accessible through micro SD cards on teachers’ mobile phones that are used alongside a print guide. *EL4T* was designed to provide teachers with access to the ESP demands of Bangladesh’s national textbook series, *English for Today*. *EL4T* does this by explicitly focusing on speaking and listening skills that take into account functional English language, structures and vocabulary of direct relevance to communicative classroom teaching. *EL4T* contains two sets of bilingual (Bangla and English) audio and print-based materials for to use at their own pace. There is a total of 60 hours of ODL activities for both primary and secondary teachers.
Fostering a ‘quiet revolution’ in the provision of teacher professional development

The previous examples illustrate how EIA is using the ‘trainer in your pocket’ for large-scale teacher professional development within a SBPD model and for self-study within an ODL platform. Paramount to EIA’s TPD is that teachers can revisit the videos to view successful student-centred teaching practices in classrooms similar to their own. Afterwards, they can compare and reflect upon EIA’s TPD resources alongside their uptake of student centred communicative English language teaching practices. We collaboratively problematised the ‘probable’ future on offer because we deeply care about the future of all children, particularly children in Bangladesh. Drawing on our ‘little-c creativity’ we thought differently about how to leverage the power of mobile phones to co-create more sustainable educative futures with the Bangladeshi teachers and students we work with.

We argue the use of the ‘trainer in your pocket’ within the SBPD model—the result of collaborative futures thinking—is working to foster a ‘quiet revolution’ (Chappell et al. 2011, 150) in the provision of TPD at scale in Bangladesh. This is because researchers within EIA engaged in possibility thinking to co-construct possible futures to challenge current assumptions about the technological and pedagogical future of Bangladesh. We did this to provoke other pathways than what was to likely happen in the ‘probable’ future.

We believe our approach is ‘changing learning and changing lives’ because over time, we have witnessed noticeable changes in the creative community of teachers and students we have been lucky enough to work with. For example, Bangladeshi teachers are using their own ‘little c creativity’ to maximise the learning potential of the ‘trainer in your pocket’. As the project scales up in its final phase, we are certain all stakeholders can engage in the collaborative, collective and co-creative endeavour needed—that assumes commitment to excellence and engaged involvement (Chappell, Walsh and Craft, 2013)—to institutionalise all of EIA’s TPD resources, making them open educational resources (OERs). Thus, with the rapid changes in technology, teachers across Bangladesh will have access to the pedagogical resources they need to challenge the status quo as they themselves engage in possibility thinking to transition from what is to what might be through ‘what if?’ and ‘as if’ thinking. (Craft, 2012, p. 182).

References


