International Journal of Science and Research (IJSR)

ISSN (Online): 2319-7064

Index Copernicus Value (2013): 6.14 | Impact Factor (2013): 4.438

'ICT-Periodism' in the Classroom: Lessons Learnt from English in Action

Md. Shajedur Rahman¹, Naznin Akter²

Abstract: This paper illustrates the factors affecting the use of ICT in the classroom in a large scale language development project in Bangladesh. The project, called English in Action (EIA) provides ICT materials along with print based materials for the teachers as well as face-to-face training to bring changes in primary and secondary classroom practices. On-going monitoring data showed that the use of audio materials increases as the intervention progresses through the year, however, the pattern changes when a decrease is observed during the third quarter. The study focused on the factors that have an influence on the use of audio in EIA classrooms during different quarters of the year and explored the underlying causes. The study adopted a mixed method approach and used classroom observations and semi-structured interviews with fifteen primary teachers to gather data. Findings showed that different nature and the pressure of the contents during different quarters of the year and the examination focused education system are the key factors that affect the use of ICT in English classes at the primary level. This raises the concern regarding 'negative back-wash effect' (Pan, 2009) of the exam system, which can stop effective pedagogical changes in the classroom from happening.

Keywords: Periodism, ICT, Audio-Visual materials, Classroom Practice

1. Introduction

In Bangladesh, since the last decade, the primary education system is undergoing a major reform with a focus on the quality of the teaching learning process in the classrooms. Amongst others, digitalization of teacher professional development (TPD) materials and the use of ICT in classrooms are being considered as the means of ensuring quality teaching. In this context, a large scale project, English in Action (EIA) was taken up by the Government of Bangladesh, aiming to enhance English language skills of 25 million learners including, school students and adults. This 9 year-long, UKAid-funded project is being implemented by BMB Mott MacDonald, along with a consortium of partners - the Open University (UK), BBC Media Action and two Non-Governmental Organizations – UCEP and FIVDB. For the school component, the project is currently working with 12,500 primary and secondary teachers across the country to improve their classroom practices.

To enhance English language skills of the primary and secondary students, EIA intervention uses a multimedia supported simple Nokia mobile phone, a Secure Digital (SD) card loaded with classroom and TPD materials and accompanied by a speaker. The primary audio materials on the SD card are built on the content of the national textbooks. A mixture of Bangla (mother tongue) and English is used in these audio lessons to ensure that the children understand the context within which the English dialogues are set (Power et al., 2012). There is a grade-specific activity guide for every lesson in the English for Today (EfT) textbooks. EIA teachers are provided with initial and 8 bimonthly trainings using eight modules based Communicative Language Teaching (CLT) approaches over a period of 16 months. They are expected to make their English classes as communicative and interactive as possible using the audio and print-based materials.

EIA not only provides materials and trainings to the teachers but also tries to ensure the quality of the support services through a rigorous monitoring programme. Classrooms are regularly observed by the government education officers and

Paper ID: SUB151458

project personnel. The classroom observation data revealed that the use of audio increases as the intervention progresses through the year, however, the pattern changes when a decrease is observed during the third quarter. The study focused on the factors that have an influence on the use of audio in EIA classrooms during different quarters of the year and explore the underlying causes.

2. Literature Review

The word 'Periodism' is derived from a biological concept 'Photoperiodism' (Thomas and Vince-Prue, 1996) that establishes the relationship between the responses of plants with the length of sunlight during the year. Similarly, the metaphor 'periodism' is used in the current study which looked at the factors that affect the use of ICT materials in English in Action (EIA) classrooms during different times of the year.

Sunlight is crucial for the plants to grow. Even though the use of ICT is not essential for teaching and learning in the classroom, nevertheless, in an increasingly modern world that is reliant on the use of ICT for wider communication and knowledge sharing, technology is aiding skills development in all sectors including education. Many countries around the world are researching and experimenting with technology to use it as an aid to boost learning (Loveless and Ellis, 2001). Amongst other potentials, to name a few, technology can play a very important role in establishing standardized practices for teacher professional development at a scale. It is also capable of strengthening the effort to improve the quality of pedagogy used in the classroom as an aid to the teaching and learning process.

Despite its usefulness, there are also challenges in the way of using ICT in education, which are not only limited to appropriate physical infrastructure but also, to do with availability of appropriate contents in many contexts. A number of studies have been conducted to investigate the barrier of using ICT in education (e. g. Hennessy and Deaney, 2004, Sang et al., 2009, Cox et al., 2000,

Volume 4 Issue 2, February 2015

Bingimals, 2009). Literature suggests that in spite of the benefits of using different types of technology in the classroom, integrating ICT in the teaching learning methods still remains a complex process (Bingimals, 2009, Salehi and Salehi, 2012, Fujimoto, 1999). There are several barriers of using ICT in classrooms at different levels of education. These are classified as 'extrinsic' and 'intrinsic' barriers by various researchers (Ming et al, 2010). However, the words 'extrinsic' and 'intrinsic' are defined differently in different studies (Bingimals, 2009). Ertmer (1999) referred extrinsic or external barriers as first hand barriers which involve those that are often seen as the key obstacles, e.g. issues of adequate access to the technologies, training and support or as this paper would argue, systemic factors such as a lack of alignment between examination and the intended curriculum. On the other hand, intrinsic or internal barriers are related to a teacher's understanding about teaching and learning which is deeply rooted in daily practices and guided by values.

Secondly, some writers distinguish between 'school level' and 'teacher level' barriers (BECTA, 2003) where 'teacher level' factors includes teacher's lack of confidence, pedagogical beliefs, attitude and motivation, knowledge and awareness about the use of ICT as an aid to learning (Cubukcuoglu, 2013), resistance to change, technical skills etc. Though some of these barriers are difficult to remove, as they are intrinsic to the teachers, once removed, the outcome can greatly benefit the effort to use ICT in the classroom. In contrast, school or institutional level barrier is defined as a lack of effective training to solve problem related to the use of technology (Mumtaz, 2000) or conditions and facilities supplied for the teachers to enable them to use technology (Veen, 1993). Having access to the right kind of materials through ICT and being able to use the skills required help teachers to feel motivated i. e. overcome some of the intrinsic barriers, which in turn encourages the use of ICT in education. Moreover, there is evidence that highly motivated teachers are more likely to engage in professional development and implement innovative programmes to increase student learning (Cave and Mulloy, 2010). Balanskat et al. (2006) came up with similar types of issues and labeled those as micro and macro level barriers respectively. Access to online or offline materials may fall into the latter category but not knowing how to use them for classroom teaching and learning i. e. not having the appropriate skills will not help to remove the former micro level barrier related to teacher's motivation.

Though many studies explored the above factors, literature could hardly be found that shows relationship between different periods of the year and the factors that prevent or support teachers to use ICT in their classrooms. This paper argues that the proportion of the use of ICT differs during different periods of the year in EIA classrooms and thus investigates the factors which cause this to happen. The paper also discusses some aspects of the external factors related to the teacher level which affect their practices differently.

Paper ID: SUB151458

3. Methodology

To explore the factors responsible for influencing the use of ICT materials in EIA classrooms, a mixed method approach including quantitative and qualitative data collection techniques were used for this study. The approach was chosen because qualitative data often shows 'what happened' and quantitative says 'why it happened' (Robson, 2002). Quantitative monitoring data was used to see the trend of the amount of using audio lessons, while teachers were interviewed using a semi-structured schedule to investigate the factors which contributed to that trend.Robson (2002) suggests interview is appropriate where quantitative study has been carried out and qualitative data is needed to clarify and illustrate the findings. In this study, interview data were collected to clarify the cause of the trend revealed by the quantitative monitoring data. In addition, the academic calendar of primary education was also analyzed to explore those factors and triangulate data collected through the above methods.

Five teachers (one from each grade 1-5) from each of the three divisions were purposively selected as the study sample. Thus three teachers were interviewed from each grade. Among the sample, there were 10 female and 5 male teachers. The ratio was proportionate to the national figure of female teachers which is about 59%(Bangladesh Bureau of Educational Information & Statistics (BANBEIS), 2012).

In addition, an analysis of the national syllabus and the academic calendar was used to examine the relationship between the workload/type of work and the use of ICT materials in EIA classrooms.

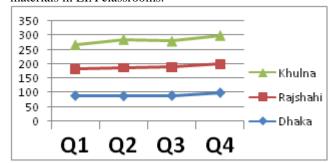


Figure 1: Amount of the use of audio during different quarters and according to divisions

4. Findings

The classroom observation data (2526 classrooms were observed by the government education officers from 3 different divisions) from three sample divisions show that the use of audio increases as the intervention progresses through the year, however, the pattern changes in each three divisions when a decrease is observed during the third quarter.

Literature suggests that a number of factors can contribute to such pattern. For instance, teachers' attitude contributes towards using audio in the classrooms, so does the nature and amount of work along with many other factors(Bingimals, 2009;Mumtaz, 2000;Ertmer, 1999).

Data from this study indicates that teachers are showing mostly very positive views towards using audio in their classroom throughout the year. About 99% of the teachers are either happy (32%) or very happy (67%) to use audio lessons in their classrooms during the first quarter. Similarly, in the second quarter, 27% of the teachers reported that they are very happy and 72% of them said that they are happy to use audio lessons. Whereas, during the third quarter, 27% of the respondents are very happy and 52% of them are happy to use the audio lessons. The rest of the respondents (11%), were neither positive nor negative in their responses about the use of audio lessons in their classrooms. However, during the fourth quarter, 33% of the teacher said that they are very happy and 66% of them said that they are happy to use the audio lessons in their classroom during that period.

There are several reasons behind the less positive attitude of using the audio during the third quarter. Among the commonly mentioned reasons are:

- Nature of contents: In the third quarter, according to the respondents, the contents are less appropriate for using audio lessons. During that period, a major portion of grammar is usually taught in most of the grades (I to V). Pressure of contents: According to the respondents, during the third quarter, the pressure of teaching content is the highest in most of the classes and during this pressure time, teachers more likely use traditional lecture method to go through the lessons quickly. They said, "when there is much content to cover, we are less likely use audio to save time." However, there were contradictory responses as well in this regard. In contrast, some of the respondents said, "... Audio helps us to manage content pressure."
- Exam focused system: Usually the third quarter is the peak time to prepare for the examinations as this is the last period before the final test. In this situation, teachers have to focus on exercising exam test items as it is expected by the guardians and other stakeholders.
 - "...we must focus more on exercises for exam preparations during this period than doing any other things."
- Tight class schedule: Some of the respondents said that sometimes the schedule of the classes in the third quarter is too tight and they need to take even 10 classes a day. Under such pressure, they are less likely to use audio lessons.
 - Among the factors that are mentioned as reasons of using less audio lessons during the third quarter of the year, 'examination preparation' is the most common. About 98% of the respondents mentioned this factor that makes them use less audio in their classroom, followed by 'the pressure of the content and tight schedule of classes'. around 80% of the respondents mentioned this factors. About 73% of the respondents said that during revision period they are less likely use audio.
- About 30-55% of the respondents mentioned some hardware and software problems that made them use less audio during the past year. For example, the SD card provided to the teachers was a bit problematic in terms of the 'play and pause' feature. However, this SD card was replaced promptly in June 2013 by a new one that eliminated the problem. Most of the respondents

Paper ID: SUB151458

said that "After examination, there is not too much pressure of the content and we use the audio lessons".

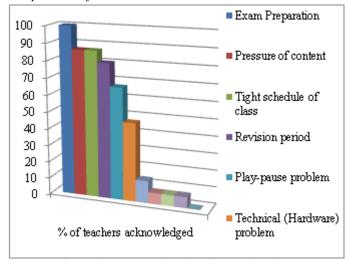
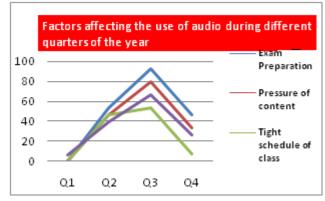


Figure 2: Factors affecting the use of audio



- EIA selects two teachers from each school and provide them equipment and training. It should be noted that no negative pressure from peers was mentioned by the respondents.
- Most of the factors discussed above affect the use of ICT materials mostly during the third quarter.

5. Discussion

The findings of this study suggest that use of audio in primary classrooms drops slightly during the third quarter of the year and there are several reasons for that. In this section those reasons will be discussed using evidence from the study and relevant literature.

Teacher's motivation: The study found that the teachers are less likely to be motivated to use audio materials during the third quarter. The amount of the respondents who are motivated (reported either happy or very happy) to use audio materials in their classrooms is 20-22% less than other quarters of the year. However, there are a number of reasons behind this finding which are discussed below.

Nature of contents: Findings from this study suggested that grammar is taught throughout the year in almost every class. Specially, in the new textbooks, grammar components are inbuilt in every lesson. Teachers usually find it difficult to handle grammar teaching as they are least interested in this area of language teaching (Ahmed, 2013). Hence, during the first and second quarter, they focus less on this component.

International Journal of Science and Research (IJSR)

ISSN (Online): 2319-7064

Index Copernicus Value (2013): 6.14 | Impact Factor (2013): 4.438

However, during the third quarter, teachers must teach grammar, as the final examination comes near. The teachers also reported that sometimes they do not feel comfortable to use any other techniques other than opting for the traditional top-down approach to teaching grammar focused on 'drilling' and rote learning instead of the interactive activities based in meaningful contexts. Lack of this type of confidence is one of the barriers of integrating ICT materials in the classroom pedagogy as studied by different researchers (Bingimlas, 2009). Since during the third quarter, the teacher teaches more grammar components compared to the other quarters, they use less audio during this time. These issues can be further emphasized in EIA trainings and TPD materials, which can help to build teachers' confidence more and enable the 'intrinsic' factors discussed earlier. Furthermore, because students enjoy learning from the audio lessons in the classroom, teachers should be helped to find a way to adapt the use of this technology in a manner that serves the purpose of teaching grammar easily.

Pressure of content: Although the amount of contents is well distributed in the syllabus for the whole year, nevertheless, teachers need to cover relatively more content over a shorter period of time during the third quarter. This is partly due to the scheduled school holidays at this time of the year, including, Eid vacation, Ramadan and other cultural occasions. Moreover, this quarter is the preparation time for the final examination. Apart from regular curricular activities, teachers attempt to revise previous contents and thus they suffer from lack of time, which makes them revert to traditional lecture based methods rather than using ICTenhanced interactive pedagogy in their classrooms (Bingimlas, 2009). Also, the final exam contents are usually focused on reading and writing skills. Hence, a balanced focus on the four language skills development in the audio lessons tends to become less of a priority. This negative 'back-wash effect' and a mismatch between the intended curriculum and exam contents automatically hinder the progress of the learners' language skills development in the classrooms (Das et al, 2013).

Project Related Issues: Respondents were asked several questions about any hardware or software related problems they might have encountered and any negative approaches from their peers that made them use the audio materials less. Very few cases were found where the mobile or the speaker was not working or there were some problems related to navigation of the contents in the mobile. Except only one respondent, none reported any negative pressure from either Head teacher or any of their colleagues that discouraged them to use audio lessons in their classes. It is possible that the design of the EIA programme including the Headteacher in a mentoring role helped to gain support for the EIA teacher inside the school. This scenario suggested that issues in relation to the project model or materials had very minimal negative influence on the use of the audio lessons during the third quarter of the year.

6. Conclusion

Paper ID: SUB151458

Although different factors affecting the amount of use of audio lessons in the classrooms during different times of the year were explored, deeper understanding about these through qualitative evidence revealed a link amongst all. Data showed that the amount of using audio in the classroom dropped during the third quarter of the year. During this period of time, teachers suggested that usually there is more pressure of teaching contents compared to the other quarters, especially because of the preparation for the pre-scheduled examination at the end of the year. For similar reasons, teachers teach more grammar components (predominantly with a focus on reading and writing skills) during this quarter, than in any other period of the year. All those efforts are to obtain good results in the final examination of the students as it is the demand of the parents and the school authority. This issue is noticed by various researchers and scholars and labeled as 'Negative Back-wash' effect of an exam focused system (Pan, 2009). Literature suggests that the teachers tend to ignore subjects and activities that are not directly related to passing the exam, and the tests accordingly alter the curriculum in a negative way.

The aim of this study was to identify time specific factors that affect the use of ICT-enhanced materials in the EIA primary classrooms. The results suggest that the amount of using audio materials in primary English classrooms decreases slightly during the third quarter (July-September) of the year. Data gathered from 15 teachers indicate that due to lack of time to cover huge content, and long holidays make teachers less motivated to use audio lessons in the classrooms during this period. As there is a demand from the parents and the government to show high achievements in terms of exam results, teachers are more likely to focus on examination preparation rather than making the English classroom communicative and interactive using ICTenhanced audio lessons during this particular period of the year. The teacher training and support system should highlight the fact that the third quarter practices can benefit more from using the audio lessons to achieve the four language skills development even if the exam primarily focuses on two skills.

References

- [1] Ahmed, S. (2013) The Current Practices of Teaching Grammar in CLT at Secondary School Level in Bangladesh: Problems and Probable Solutions. Theory & Practice in Language Studies, 3.
- [2] Balanskat, A., Blamire, R. and Kefala, S. (2006) The ICT impact report. European Schoolnet.
- [3] Bangladesh Bureau Of Educational Information & Statistics (BANBEIS). 2012. Basic Education Statistics, 2010 [Online]. [Accessed 27-04-14 2014].
- [4] Bingimals, K. A. 2009. Barriers to the Successful Integration of ICT in Teaching and Learning Environments: A Review of the Literature Eurasia Journal of Mathematics, Science and Technology Education, 5, 235-245.
- [5] Bingimals, K. A. (2009) Barriers to the Successful Integration of ICT in Teaching and Learning Environments: A Review of the Literature. Eurasia Journal of Mathematics, Science & Technology Education, 5.

International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064

Index Copernicus Value (2013): 6.14 | Impact Factor (2013): 4.438

- [6] British Educational Communications And Technology Agency (Becta) (2003) Primary School- ICT and Standard.
- [7] Cave, A. And Mulloy, M.(2010) How do cognitive and motivational factors influence teachers' degree of program implementation?: A qualitative examination of teacher perspectives. National Forum of Educational Administration and Supervision Journal, 1-26.
- [8] Cubukcuoglu, B. (2013) Factors enabling the use of technology in subject teaching, International Journal of Education and Development using Information Communication and Technology (IJEDICT), Volume 9, Issue 3, pp. 50-60.
- [9] Cox, M. J., Cox, K. & Preston, C. (2000) What factors support or prevent teachers from using ICT in their classrooms?
- [10] Das, S., Sreshtha, P., Shaheen, R, Rahman, A. and Khan, R. (2014) Policy versus ground reality. The Curriculum Journal.
- [11] Ertmer, P. (1999) Addressing first and second order barrieds to change: Strategies for technology Integration. Educational Technology Research and Development, 47, 47-61.
- [12] Fujimoto, H. (1999) The examination backwash effect on English language education in Japan. The Japanese Learner, 19, 101-119.
- [13] Hennessy, S. And Deaney, R.(2004) Sustainability and evolution of ICT-supported classroom practice. Final Report,(Coventry: Becta).
- [14] Loveless, A. and Ellis, V (2001) ICT, pedagogy and the curriculum: Subject to chance, London: Routledge, Falmer.
- [15] Mumtaz, S. (2000) Factors affecting teachers' use of information and communications technology: a review of the literature. Journal of information technology for teacher education, 9, 319-342.
- [16] Ming, T. S., Hall, C., Azman, H. and Joyes, G. (2010) Supporting Smart School Teachers' Continuing Professional Development in and through ICT: A model for change, International Journal of Education and Development using Information Communication and Technology (IJEDICT), Volume 6, Issue 2, pp. 5-20.
- [17] Pan, Y.C.(2009) A review of washback and its pedagogical implications. VNU Journal of Science, Foreign Languages, 25, 257-263.
- [18] Power, T., Shaheen, R., Solly, M., Woodward, C. and Burton, S. (2012) English in action: school based teacher development in Bangladesh. The Curriculum Journal, 23, 503-529.
- [19] Robson, C. (2002) Real World Research, Oxford, Blackwell.
- [20] Salehi, H. And Salehi, Z. (20120 Challenges of Using ICT in Education: Teacher's Insight. International Journal of e-Education, e-Business, e-Management and e-Learning, 2, 40-43.
- [21] Sang, G., Valcke, M., Van Braak, J. and Tondeur, J. (2009) Factors support or prevent teachers from integrating ICT into classroom teaching: A Chinese perspective. Proceedings of the 17th International Conference on Computers in Education [CDROM](808-815), Hong Kong: Asia-Pacific Society for Computers in Education. http://www.icce2009.ied.edu.hk/pdf/c6/proceedings808-815.pdf.

- [22] Thomas, B. And Vince-Prue, D.(1996) Photoperiodism in plants, Academic Press.
- [23] Veen, W. (1993) How eachers use computers in instructional practice: Four case studies in Dutch secondary school, Computers and Education, Volume 21, No. 1/2, pp. 1-8.